CITY OF BALTIMORE

ONE HUNDRED AND TWENTY-FIFTH

ANNUAL REPORT

OF THE

DEPARTMENT OF HEALTH

1939

To the Mayor and City Council of Baltimore for the Year Ended December 31, 1939

Two contrary laws seem to be wrestling with each other nowadays; the one, a law of blood and of death, ever imagining new means of destruction and forcing nations to be constantly ready for the battlefield —the other, a law of peace, work and health, ever evolving new means of delivering man from the scourges which beset him.

The one seeks violent conquests, the other the relief of humanity. The latter places one human life above any victory; while the former would sacrifice hundreds and thousands of lives. . . .

Louis Pasteur,
at the opening of the
Pasteur Institute, November 14, 1888

I believe that it is good to desire, but that the exploitation of desire in terms of greed for profit is the fatal disease of which our civilization is dying.

I believe that the recurrent crisis of this disease is War.

James Hilton

DEPARTMENT OF HEALTH

Commissioner, HUNTINGTON WILLIAMS, M.D., Dr.P.H.

Assistant Commissioner, WILLIAM H. F. WARTHEN, M.D.

Secretary, REED GAITHER

ADMINISTRATIVE SECTION

Administration	HUNTINGTON WILLIAMS, M.D., Dr.P.H.
Vital Statistics	W. THURBER FALES, Sc.D.
Health Information	DOROTHY YOE KALBEN
	ESTHER S. HORINE
Laboratories	C. LEROY EWING
Eastern Health District	C. HOWE ELLER, M.D., Dr.P.H.
Western Health District	GEORGE W. HEMMETER, M.D.
Druid Health Center	H. MACEO WILLIAMS, M.D., M.P.H.
Southeastern Health District	JOHN A. SKLADOWSKY, M.D.

MEDICAL SECTION

Communicable Diseases	DAVID H. ANDREW, M.D., C.P.H.
Sydenham Hospital	MYRON G. TULL, M.D.
	HORACE L. HODES, M.D.
Tuberculosis	PHINEAS J. SPARER, M.D., M.P.H.
Venereal Diseases	FERDINAND O. REINHARD, M.D., M.P.H.
Occupational Diseases	JOHN M. McDONALD, M.D., D.P.H.
Child Hygiene	WILLIAM K. SKILLING, M.D.
School Hygiene	H. WARREN BUCKLER, M.D.
Public Health Nursing	JANE B. LAIB, R.N.

SANITARY SECTION

R. S. CRAIG, Director

Milk Control	IVAN M. MARTY
Food Control	FERDINAND A. KORFF
Meat Inspection	WILLIAM BRENNER, D.V.S.
Environmental Hygiene	WILMER H. SCHULZE, Phar.D.

Learn to Do Your Part in the Prevention of Disease

St. John's Court

United States Housing Authority Photograph

A Slum That Is No More

CONSULTANTS

DR. THOMAS S. CULLEN,
Member, Maryland State Board of Health.

DR. ARTHUR G. BARRETT,
President, Maryland Academy of Medicine and Surgery.

DR. J. M. T. FINNEY,
Professor Emeritus of Surgery, Johns Hopkins Medical School.

DR. ALLEN W. FREEMAN,
Professor of Public Health Administration,
Johns Hopkins School of Hygiene and Public Health.

DR. ANDREW C. GILLIS,
Professor of Neurology, School of Medicine, University of Maryland.

DR. LOUIS HAMBURGER,
Associate in Medicine, Johns Hopkins Medical School.

DR. ARTHUR J. LOMAS,
Superintendent, University Hospital.

DR. MAURICE C. PINCOFFS,
Professor of Medicine, School of Medicine, University of Maryland.

DR. ROBERT H. RILEY,
Director, Maryland State Department of Health.

DR. JAMES M. H. ROWLAND,
Dean, School of Medicine, University of Maryland.

DR. ARTHUR M. SHIPLEY,
Professor of Surgery, School of Medicine, University of Maryland.

DR. SAMUEL WOLMAN,
President, Maryland Tuberculosis Association.

ADVISORY COMMITTEE ON SANITATION

DR. WILLIAM H. HOWELL, *Chairman,*
Director Emeritus, Johns Hopkins School of Hygiene and Public Health.

DR. ANNA M. BAETJER,
Associate in Physiology, Johns Hopkins School of Hygiene and Public Health.

DR. C. B. SPENCER,
Passed Assistant Surgeon, United States Public Health Service,
in charge of the Baltimore Quarantine Station.

MR. GEORGE COBB,
Chief Engineer of Baltimore.

DR. JAMES E. IVES,
Senior Physicist of the Office of Industrial Hygiene and Sanitation, retired,
United States Public Health Service.

DR. ROY R. JONES,
Passed Assistant Surgeon, United States Public Health Service.

DR. ABEL WOLMAN,
Professor of Sanitary Engineering,
Johns Hopkins School of Hygiene and Public Health.

MEDICAL STAFF

Conrad Acton, M.D. p
Maurice L. Adams, M.D. v
Bartus T. Baggott, M.D. t
Francis L. Bagli, M.D. t
John R. Black, Jr., M.D. s
M. L. Breitstein, M.D. ea
Harry Francis Brown, M.D. c
G. Rayner Browne, M.D. v
Henry F. Buettner, M.D. h o
George W. Burnett, M.D. s
W. Berkley Butler, M.D. v
Charles R. Campbell, M.D. v
Earle P. Clemson, M.D. v
J. W. V. Clift, M.D. c
Henry T. Collenberg, M.D. v
Roscoe Z. G. Cross, M.D. h o
W. Allen Deckert, M.D. m
Harry S. Gimbel, M.D. s
Samuel S. Glick, M.D. h o
Harris Goldman, M.D. v
Charles R. Goldsborough, M.D. h o
H. Clifford Grant, M.D. h o
Walter E. Grempler, M.D. c
Louis E. Harmon, M.D. v
James B. Hawkins, M.D. h o
John M. Haws, M.D. m
Bowman J. Hood, M.D. v
Leon S. Horka, M.D. h o
Hugh P. Hughes, M.D. h o
Albert Jaffe, M.D. c
B. M. Jaffe, M.D. h o
James S. Julian, Jr., M.D. v
Lawrence Katzenstein, M.D. v
Henry B. Kolb, M.D. h o
Charles D. Lee, M.D. v
Isidore I. Levy, M.D. t
Lucille Liberles, M.D. h o
H. R. Lickle, M.D. h o
Jacob Schiff Light, M.D. s
O. L. Long, M.D. h o
Francis J-B. Luke, M.D. v
George McDonald, M.D. v
Jay G. McRae, M.D. h o
Howard J. Maldeis, M.D. p
Israel P. Meranski, M.D. v
Meyer Miller, M.D. c
M. Alexander Novey, M.D. m
Thomas R. O'Rourk, M.D. ey
George C. Page, M.D. v
George H. Pendleton, M.D. v
J. A. F. Pfeiffer, M.D. v
D. McKinley Reesby, M.D. h o
A. L. Rettaliata, M.D. h o
Lewis J. Rosenthal, M.D. h o
Albert Scagnetti, M.D. c
J. Douglass Sheppard, M.D. v
Ernest W. Shervington, M.D. v
Isadore A. Siegel, M.D. m
William A. Sinton, M.D. h o
George A. Strauss, M.D. v
J. Walker Thomas, M.D. h o
Howard H. Warner, M.D. h o
Samuel Weinberg, M.D. h o
Alexander A. Weinstock, M.D. t
H. Whitney Wheaton, M.D. h o
Henry Lyman Whittle, M.D. c
Mary Cook Willis, M.D. c
Howard E. Wooden, M.D. v
Charles T. Woodland, M.D. v
Ralph J. Young, M.D. v

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c = child hygiene, ea = ear clinic, ey = eye clinic, h o = health officer for communicable disease control and school hygiene, m = maternity hygiene, p = post mortem physician, s = Sydenham Hospital, t = tuberculosis clinic, v = venereal disease clinic, **bold type = full time.**

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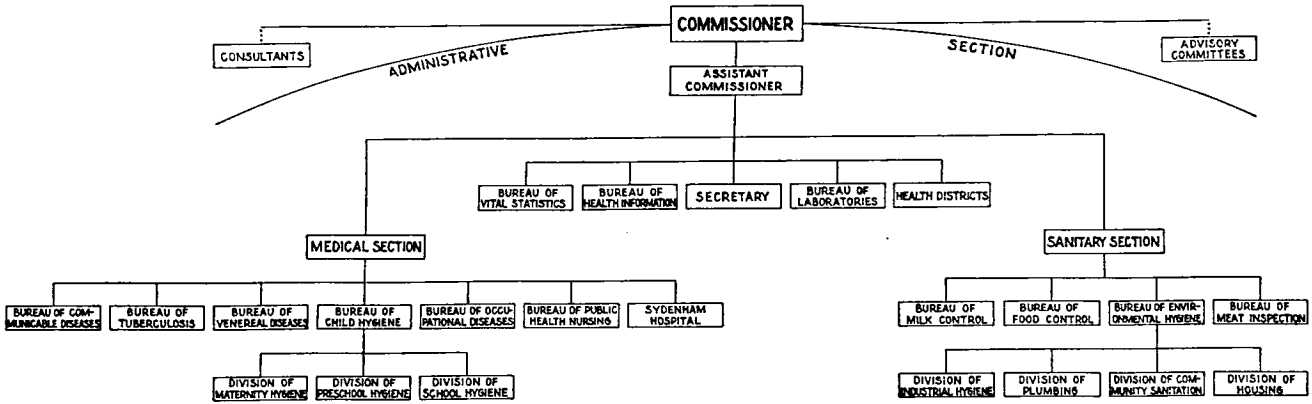
ORGANIZATION CHART

BALTIMORE CITY HEALTH DEPARTMENT



ONE HUNDRED AND TWENTY-FIFTH ANNUAL REPORT OF THE BALTIMORE CITY HEALTH DEPARTMENT

1939

REPORT OF THE COMMISSIONER OF HEALTH

The Honorable,

THE MAYOR AND CITY COUNCIL OF BALTIMORE

GENTLEMEN:

Pursuant to the provisions of Section 91 of the 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 the one hundred and twenty-fifth annual report of the work done by the Baltimore City Health Department, and by the several bureaus thereof, for the year ended December 31, 1939.

Introduction

Baltimore enjoyed a strikingly healthful year during 1939 as may be seen by a perusal of the section of this report next following entitled "The Health of the City." Here it may be mentioned that the infant mortality for the year was 40.8 and this figure had never before been below 50, that there was less than one-half as much typhoid fever in the city (24 cases) as compared with any previous year, in spite of shocking inadequacies in the city sewer facilities in certain outlying areas; and likewise that the prevalence of diphtheria during 1939 was almost cut in half over the record for any prior year.

Probably the most important health event of 1939 was the opening for public use on October 30 of the new Druid Health Center in the Western Health District where it is most needed, with very active health clinics for Negroes and administrative and educational services under a full time Negro health officer and a corps of public health nurses. Late in the year the Negro medical society accepted the invitation of the City Health Department to hold its regular monthly meetings in the assembly room of this new health center building.

During the period from July through December, the City Health Department was engaged in its first major approach to the housing problem of the city. During December there was completed the demolishment of a small slum known as St. John's Court and located in one of the blighted areas east of the Fallsway. A picture of this slum, as it was, appears on page 4. The fact is important for, as far as can be learned, this is the first instance in which the Commissioner of Health of Baltimore has

recommended that the City Buildings Engineer proceed, under city ordinance, in the matter of slum eradication. This recommendation was given in a letter to the Buildings Engineer under date of July 20, and the letter closed with the following sentence: "It is our opinion that the dwellings are unfit for human habitation from a sanitary and health standpoint and it is recommended that they be condemned for demolishment."

During 1939 the City Health Department and the City Housing Authority and the Johns Hopkins School of Hygiene and Public Health established a closely knit organization for the conduct of special research studies in and adjacent to the slum clearance projects of the City Housing Authority which happened to be located within the Eastern Health District. One such study conducted during the year dealt with the types of people and families in and near the slum clearance areas, and this will be followed up by a survey after the slums have been torn down and the new buildings are erected and occupied. It is hoped that these and similar research studies will make possible a critical evaluation of the effects of slum clearance and the rehabilitation of blighted areas on the health and welfare of a city like Baltimore.

The Commissioner of Health participated in the All Maryland Health Conference which was held on May 27 and 28 and presented a discussion of the question of the control of tuberculosis in Baltimore. Following this conference which dealt largely with the matter of providing more adequate medical care for the people of the city and the State, the City Health Department gave wide publicity to the historic letter which was sent by the Medical and Chirurgical Faculty of Maryland on August 23 to the State Planning Commission in which it requested the Commission to establish a special continuing committee on medical care. In this striking letter the term "medical care" was specifically designated as referring to a broad scope which would cover all agencies for the safeguarding and improving of the health of the people and for the treatment of disease, comprising therefore all lay and professional medical education, sanitation, preventive medicine, curative medicine, dental and nursing care and pharmacy. Later in the year the State Planning Commission approved the suggestion and appointed its Committee on Medical Care under the chairmanship of Dr. Maurice C. Pincoffs and consisting of a membership of thirty-three persons. These included representatives of the official State and city health and welfare authorities, the State and city medical, dental, nursing and pharmaceutical associations and representatives of the medical schools, the Johns Hopkins School of Hygiene and Public Health, the mental hygiene and social welfare and tuberculosis and hospital conference groups and the lay public. As a result of very considerable ground work accomplished during 1939, there can be no

doubt that the important problem of adequate medical care will be studied in a sound manner which should result in lasting benefits, that can hardly now be measured, for the people of Baltimore City and the State of Maryland.

Another event of vital health importance was the passage of the new State Occupational Disease Law by the 1939 session of the Maryland Legislature (Article 101, Sections 34–43, 66, 70 and 80 in the Annotated Code of the Public General Laws of Maryland, 1939 Edition). This new legislation became effective on June 1 and resulted from four years of constant effort and study on the part of the State Commission for the Study of Occupational Diseases, of which Theodore C. Waters was the chairman. The striking features of the new Maryland law are the Medical Board with the legal protection for its non-political selection and its broad duties, and the contents of Section 32J which assigned to the Commissioner of Health of Baltimore and to the Maryland State Department of Health new broad powers and responsibilities in the matter of controlling and regulating the occupational diseases in this State. It is fair to say that this basic new legislation opens an entirely new vista in preventive medicine in Baltimore, and was, in large part, the result of stimulation from the Medical and Chirurgical Faculty of Maryland and its Committee on Industrial Health. The latter committee, on October 24, inaugurated a series of sixteen fortnightly seminars on industrial hygiene and the prevention of occupational diseases. These events led to a considerable public awakening to the entire problem of industrial health in Baltimore and one result was the creation of a new committee on occupational diseases which was established during the year by the Baltimore Association of Commerce.

Again the guiding influence of the Medical and Chirurgical Faculty led to the passage of new State legislation in 1939 which discontinued the positions of all the coroners in Baltimore City and in each county with the exception of Cecil County. In their place was established the Maryland Post Mortem Examiners Commission which held its first meeting on May 11 in accordance with the provisions of the new law (Article 22 in the Annotated Code of the Public General Laws of Maryland, 1939 Edition). The law provides for the appointment of a Chief Medical Examiner and Assistant Medical Examiners and deputies in the several counties and is based fundamentally on the experience of the Medical Examiner's Offices in New York City and Essex County, New Jersey. The City Health Department was naturally interested in this important change because approximately 22 per cent of all death certificates filed in its Bureau of Vital Statistics had been for coroner cases in which there had been inadequate opportunity for the accurate and scientific establishment of the causes of death. Here, as in the case of the occupational disease law, new

duties and responsibilities were assigned to the chief administrative officers of the City and State Health Departments. Both of these officials, under the law, are *ex officio* members of the new Post Mortem Examiners Commission, together with the Professors of Pathology at the University of Maryland Medical School and the Johns Hopkins Medical School and the Attorney General of Maryland.

Other significant public health happenings during 1939 included the following: A vital advance in syphilis control with the assignment of trained medical supervisors to the Health Department clinics and with improved epidemiological and case-finding services, and the start of a State-wide syphilis serology study; the opening of about 200 additional beds for colored tuberculosis patients in the State sanatoria and an extension of the pneumothorax work in the City Health Department clinics, the inauguration of the monthly Physicians Conference on Maternal Mortality under the auspices of the City Medical Society, the extension of fundamental research in the care of certain communicable diseases at Sydenham Hospital, particularly by the use of sulfapyridine in primary pneumococcic pneumonia, pneumonia associated with measles, and pneumococcic meningitis; new State-wide legislation for the prevention of psittacosis, new city milk regulations governing dairy farms, goat milk and the handling of bulk milk; the shift of the "Keeping Well" broadcast service from health talks to short dramas by "The Baltimore Health Players," the publication by the Commonwealth Fund of a volume entitled "Ways to Community Health Education" for which valuable collaboration was provided by the Assistant Commissioner of Health, and the active participation by the Director of the Bureau of Vital Statistics in the work of the Mayor's Special Committee on population trends within the city in connection with the program for the building and rebuilding of public schools.

Dr. Kenneth F. Maxcy, Professor of Epidemiology at the Johns Hopkins School of Hygiene and Public Health, and the Commissioner of Health served on a special Board to which they were appointed by Dr. Thomas Parran, Surgeon General of the U. S. Public Health Service, to report to Mr. Justice Wasservogel of the Supreme Court of Bronx County, New York in the matter of the sanitary land-fill operations for the disposal of garbage and refuse in the Burrough of Queens, New York. Again in 1939 Baltimore received through the Baltimore Association of Commerce the Special Certificate of Merit in the Health Conservation Contest of the Chamber of Commerce of the United States.

The Health of the City

The estimated population of Baltimore City as of July 1, 1939 and as used in this report was 868,990. The sixteenth decennial census will be

taken as of April 1, 1940. With the new census figures it will be possible, in the next ANNUAL REPORT, to publish a revision of the present tentative rates and this will give a more accurate and satisfactory record. In the meanwhile the estimated white population for 1939 is computed to have been 695,508 and the colored population, 173,482, proportions of 80.0 per cent and 20.0 per cent respectively. The birth and death rates included in this report are based on these figures.

As has been stated, several new health records were established for Baltimore during the year 1939. Typhoid fever was more than cut in half as compared with any previous year. Only 24 cases of this disease occurred compared to the previous minimum of 49 cases in 1936. Fifty-one cases were reported in 1938. Only 1 resident death from this disease was reported during the year, a record which had been equalled only in one previous year, 1932.

Another new low record was established with only 67 cases of diphtheria reported during the entire year. The low record for all previous years was 108 cases reported in 1934. As recently as 1927 there were 1,619 Baltimoreans, mostly children, stricken with this disease in one year. In 1938 there were 125 cases of diphtheria reported and in 1937 there were 257 cases. Apparently there is no precedent for any such striking relative decreases in these two diseases in their residual stages.

A city-wide outbreak of measles commenced in September, 1938 and the peak of this outbreak was reached during the week which ended February 17, 1939 when 1,085 cases were reported. Altogether during 1939 a total of 11,833 cases of measles was reported. Although the maximum number of cases of this disease was reached earlier in the year than is usual for a measles outbreak in Baltimore and at a season when pneumonia is widely prevalent, only 9 resident deaths from measles were reported during the year. In the 1934 outbreak of measles there were 18,612 cases and 91 resident deaths of this disease. The major factor in the reduction of measles deaths during the 1939 outbreak is believed to have been the use of the new drug sulfapyridine in the treatment of cases of measles-pneumonia at Sydenham Hospital. For the eleventh successive year no case of smallpox occurred in Baltimore. This record has continued unbroken since the last case of smallpox was reported on March 9, 1928.

There were 20 cases of poliomyelitis reported in the city during 1939 as compared with 3 cases for the previous year. There was also a considerable increase in the number of cases of tularemia reported during the latter months of the year. For 1939, 31 cases and 8 deaths of this disease were reported as compared with 13 cases and 3 deaths during the preceding year. Tularemia should be prevented by a suitable ordinance

to ban the sale of imported wild rabbits, the source of this entirely unnecessary disease.

RESIDENT BIRTHS AND DEATHS WITH CORRESPONDING RATES FOR TOTAL WHITE AND COLORED POPULATIONS, 1932-1939

Year	Number			Rate per 1,000 Population		
	Total	White	Colored	Total	White	Colored
			BIRTHS			
1939	12,525	9,211	3,314	14.4	13.2	19.1
1938	13,208	9,892	3,316	15.3	14.3	19.5
1937	12,516	9,370	3,146	14.6	13.6	18.9
1936	11,801	8,956	2,845	13.9	13.1	17.4
1935	12,332	9,363	2,969	14.7	13.7	18.5
1934	12,201	9,196	3,005	14.6	13.6	19.2
1933	12,189	9,130	3,059	14.7	13.5	19.9
1932	12,785	9,737	3,048	15.6	14.5	20.3
			DEATHS			
1939	10,386	7,907	2,479	12.0	11.4	14.3
1938	10,618	8,034	2,584	12.3	11.6	15.2
1937	11,244	8,415	2,829	13.1	12.2	17.0
1936	11,058	8,134	2,924	13.0	11.9	17.9
1935	10,707	7,917	2,790	12.7	11.6	17.4
1934	10,764	8,049	2,715	12.9	11.9	17.3
1933	10,505	7,923	2,582	12.7	11.7	16.8
1932	10,309	7,622	2,687	12.6	11.4	17.9

Infant and Maternal Mortality

A striking decline in the resident infant mortality rate from 51.7 per 1,000 live births in 1938 to 40.8 in 1939 marked up another gratifying new low record for the year. This is the first time that this important health index has ever been in the "40s" in the history of Baltimore. Low mortalities were recorded for both white and Negro infants; the rate for the former was 32.8 and for the latter 63.1. More than one-third of the reduction was due to the decrease in the number of deaths under one month of age, and plans are being made to save the lives of premature babies, like the Dionne quintuplets, which should eventually still further lower the city's infant mortality. The resident death rate for puerperal or maternal causes was 3.6 per 1,000 live births as compared with 3.3 for 1938. The maternal death rate for white mothers was 3.0 and for colored mothers 5.1 per 1,000 live births as compared with 2.9 and 4.5 respectively in 1938.

RESIDENT MATERNAL, NEONATAL AND INFANT MORTALITY, 1932-1939

Year	Number			Rate per 1,000 Live Births		
	Total	White	Colored	Total	White	Colored
MATERNAL DEATHS						
1939	45	28	17	3.6	3.0	5.1
1938	44	29	15	3.3	2.9	4.5
1937	42	28	14	3.4	3.0	4.4
1936	49	35	14	4.2	3.9	4.9
1935	67	40	27	5.4	4.3	9.1
1934	71	52	19	5.8	5.7	6.3
1933	59	39	20	4.8	4.3	6.5
1932	62	46	16	4.8	4.7	5.2
DEATHS UNDER ONE MONTH OF AGE						
1939	300	194	106	24.0	21.1	32.0
1938	364	239	125	27.6	24.2	37.7
1937	348	223	125	27.8	23.8	39.7
1936	381	250	131	32.3	27.9	46.0
1935	392	273	119	31.8	29.2	40.1
1934	419	307	112	34.3	33.4	37.3
1933	429	286	143	35.2	31.3	46.7
1932	464	320	144	36.3	32.9	47.2
DEATHS UNDER ONE YEAR OF AGE						
1939	511	302	209	40.8	32.8	63.1
1938	683	429	254	51.7	43.4	76.6
1937	664	393	271	53.1	41.9	86.1
1936	763	461	302	64.7	51.5	106.2
1935	673	432	241	54.6	46.1	81.2
1934	803	536	267	65.8	58.3	88.9
1933	749	484	265	61.4	53.0	86.6
1932	805	528	277	63.0	54.2	90.9

Other Death Rates

The recorded or crude death rate for 1939 was 12.5 per 1,000 population as compared with 12.9 in 1938. When corrected for residence the total death rate for 1939 was 12.0 per 1,000 population; 11.4 for white persons and 14.3 for colored persons. The corresponding resident death rates for 1938 were: Total population 12.3, white population 11.6 and colored population 15.2. The highest death rate for any month was in February when the rate was 15.8 per 1,000 population. The death rate was low throughout the summer months. The rate of 10.2 was recorded for the months of June, August and September and 10.8 for July.

Principal Causes of Death

Heart disease as in the past continued to be the principal cause of death for the whole population and also for both the white and colored segments

of the population. Cancer continued to be the second most frequent cause of death in the entire population and in the white population but was the seventh cause of death among Negroes. The accompanying table shows the death rate for each of the seven leading causes of death for the total, white and colored populations for 1939 with comparative figures for the previous year.

RESIDENT DEATH RATES PER 100,000 POPULATION FOR THE SEVEN LEADING CAUSES OF DEATH; TOTAL, WHITE AND COLORED POPULATION; BALTIMORE, 1938-1939

Total Population			White Population			Colored Population		
Cause	Death Rate per 100,000		Cause	Death Rate per 100,000		Cause	Death Rate per 100,000	
	1939	1938		1939	1938		1939	1938
Diseases of heart	341.8	338.2	Diseases of heart	364.6	355.7	Diseases of heart	250.2	267.4
Cancer, all forms	142.3	141.2	Cancer, all forms	152.4	152.3	Tuberculosis, all forms	194.3	195.1
Nephritis	117.5	121.9	Nephritis	114.0	112.3	Pneumonia	136.6	158.1
Cerebral hemorrhage	91.4	99.9	Cerebral hemorrhage	85.5	90.3	Nephritis	131.4	161.0
Tuberculosis, all forms	77.4	82.5	Pneumonia	62.0	71.5	Cerebral hemorrhage	114.7	138.7
Pneumonia	76.9	88.6	Accidental causes	61.5	57.2	Syphilis	113.0	111.7
Accidental causes	62.8	60.7	Tuberculosis, all forms	48.3	54.8	Cancer, all forms	102.0	95.8

The resident death rate for tuberculosis decreased from 82.5 per 100,000 population for 1938 to 77.4 in 1939 for the city as a whole. The decrease in the mortality from this disease was principally in the white population where the death rate fell from 54.8 to 48.3 per 100,000 population. Among Negroes, tuberculosis was the second cause of death numerically; the death rate for 1939 was 194.3 as compared with 195.1 for 1938.

Syphilis

There was a decrease of 10 per cent in the number of cases of syphilis reported for the first time during 1939 as compared with the number reported for the previous year. The figures were 7,507 cases reported in 1939 as against 8,236 cases reported during 1938. As counted in the past, syphilis was the sixth cause of death in the colored population. If deaths from locomotor ataxia and general paralysis of the insane are included, it is the fifth cause of death among the colored population. The death rate for this cause in this population group was 113.0 per 100,000 population or if locomotor ataxia and general paralysis of the insane are included, the death rate was 133.8 per 100,000 population.

Administration

There follows a financial statement for the Health Department for the fiscal year ended December 31, 1939.

FINANCIAL STATEMENT

As of December 31, 1939

Expenditures of the Baltimore City Health Department

Total City Appropriations		$845,730.33
Total City Expenditures		845,116.83

ADMINISTRATIVE SECTION

Administration	$ 23,561.32	
Vital Statistics	22,560.50	
Health Information	4,325.08	
Laboratories	67,550.07	
Eastern Health District	31,024.56	
Western Health District	40,882.98	
Druid Health Center	43,872.52	
Southeastern Health District	32,989.33	
		$266,766.36

MEDICAL SECTION

Communicable Diseases	$ 21,825.07	
Tuberculosis	6,494.29	
Venereal Diseases	53,533.35	
Occupational Diseases	5,656.48	
Child Hygiene	27,020.43	
School Hygiene	11,724.93	
Public Health Nursing	120,528.01	
		$246,782.56

SANITARY SECTION

General	$ 6,686.96	
Milk Control	40,514.61	
Food Control	17,256.08	
Meat Inspection	52,933.96	
Environmental Hygiene	46,748.29	
		$164,139.90
Morgue and Public Cemetery		12,732.33
Sydenham Hospital		154,695.68
Total, Salaries and Expenses		$845,116.83

Receipts

Administration	258.00	
Vital Statistics	8,658.00	
Child Hygiene	485.00	
Milk Control	12,668.00	
Meat Inspection	23,524.00	
Environmental Hygiene	17,364.75	
Sydenham Hospital, Pay Patients	2,913.74	
Total Receipts		$65,871.49

The item for total city expenditures, $845,116.83, is significantly larger than the figure for the year 1938 which was $738,262.37. In explanation it should be said that of this difference (a) $45,000 was a capital sum used for reconditioning the large building above referred to as the Druid Health Center; (b) an additional $20,000 was the cost for the motor transportation of the Health Department's public health nurses, dairy farm inspectors and other field workers which a year ago had not appeared in the financial statement but had been recorded by the city as a charge against the Bureau of Transportation; and (c) a further $15,000 approximately was for supplementary allotments during 1939, chiefly for the maintenance of the third floor of Sydenham Hospital for several months during the mid-winter season, a charge which in recent years the Health Department had been able to meet out of unexpended departmental balances.

In addition to the total city expenditures as given above, a further sum of $15,057.39 was expended by the City Health Department from Federal Social Security funds, made available through the Maryland State Department of Health; another sum of $5,088.00 of State funds was also spent in routine work by the Bureau of Venereal Diseases, and $71,062.23 from the Works Progress Administration were likewise used in public health work in the city.

Personnel

Dr. George W. Hemmeter, the dean of health officers on the department staff, died on July 12 after an uninterrupted service of the utmost value to the city which began on May 1, 1903. Dr. Hemmeter became a full time health officer in 1933 and was in charge of the Western Health District practically from the time of its organization in 1935 until his death. In this work he was succeeded by Dr. Henry F. Buettner on July 31.

Mr. R. S. Craig, Director of the Sanitary Section since its establishment in 1932, died on September 3. Mr. Craig had served the Baltimore City Health Department faithfully and well since January 15, 1913 and because of his wisdom and initiative was largely responsible for many of the major advances in the nonmedical branches of the Health Department program in Baltimore, and particularly in the essential matter of milk sanitation. Dr. Wilmer H. Schulze, one of the numerous bureau directors that Mr. Craig had trained, succeeded him as section director on October 23.

Dr. Howard J. Maldeis and Dr. Conrad Acton, post-mortem physicians, left the City Health Department on May 31 to be appointed Chief Medical Examiner and Assistant Medical Examiner, respectively, by the newly established Maryland Post Mortem Examiners Commission. Esther S. Horine became editorial assistant in the Bureau of Health Information on June 1. Dr. H. Maceo Williams was appointed the first full time

Negro health officer on July 27 and was later assigned to the new Druid Health Center.

Dr. Roy R. Jones, Passed Assistant Surgeon of the U. S. Public Health Service, who was a valued member of the Advisory Committee on Sanitation, died on June 13. Dr. Jones had contributed materially in guiding the development of the industrial hygiene program of the City Health Department from his wide experience as a staff member of the Industrial Hygiene Division of the National Institute of Health.

Dr. Bartus T. Baggott, who had been largely responsible for building up the Health Department tuberculosis clinic service since his appointment to the staff late in 1919 and particularly since he became chief clinic physician at the close of 1925, found it necessary to resign on April 30. Dr. H. R. Lickle, health officer, died on September 13.

Vital Statistics

One of the most striking developments in the work of the Bureau of Vital Statistics during the past five years has been the rapid growth in the number of requests for copies of the permanent records of births and deaths in the archives of the City Health Department. In 1935 there were 29,950 such requests during the year, as compared with 63,540 during 1939, an increase of 112 per cent. This illustrates the growing recognition of the importance of these records as legal and social documents. About one-half of the added work is accounted for by requests of the Department of Public Welfare for the verification of the eligibility of clients for material relief. The remainder results from the growing demand for verification of birth data in order to establish age and citizenship in connection with employment.

During the legislative session of 1939 the director of the bureau participated actively in securing the passage of the law which established the Maryland Post Mortem Examiners Commission. This provides an up-to-date method for the medical and pathological investigation of deaths from violence and deaths without medical attendance. Since the establishment of the office of Chief Medical Examiner under the new Commission there has been a distinct improvement in the medical certification of causes of death in this group of cases.

The statistical work of the bureau expanded during 1939 and as soon as the data from the 1940 census are available the bureau contemplates the issuance of a series of bulletins which will show the distribution of various demographic characteristics of the population, including death rates for various causes, geographically within the city.

During the summer months, the director represented the City Health Department in a census-survey of the Eastern Health District which was

conducted by the Johns Hopkins School of Hygiene and Public Health with the assistance of the public health nurses of the city. Forty-five public health nurses participated in this survey and valuable assistance was also given by Dr. H. Maceo Williams, Health Officer. More than 27,000 schedules were secured during the process of the survey which was under the general direction of Dr. George S. Badger of the Department of Biostatistics of the School of Hygiene and Public Health.

W. THURBER FALES, Sc.D.

Director of the Bureau of Vital Statistics
Since September 13, 1934

The director of the bureau conferred several times during the year with the Division of Vital Statistics of the United States Bureau of the Census in connection with the revised manual of the International List of Causes of Death. In February he attended the Regional Meeting of State and Municipal Registration Officials at Raleigh, North Carolina, and during the last four months of the year he served as consultant to the Bureau of Old-Age and Survivors Insurance of the Social Security Board in assisting that Federal agency in working out a uniform national system so that it might receive proofs of death from the various vital statistics offices in a manner that would apply satisfactorily to all parts of the country.

Health Information

A notable advance in the Department's health information program occurred on March 4 when the "Keeping Well" radio broadcasts which have been sponsored since 1932 by the Baltimore City Health Department and the Medical and Chirurgical Faculty of Maryland were changed from five minute health talks to fifteen minute dramas. These health dramas are not only entertaining, but also have proved to be one of the most effective means of teaching health to the people of the city. Another excellent opportunity for health education was also afforded with the opening of the Druid Health Center in the heart of Baltimore's colored section.

Other Health Department activities in connection with the dissemination of health information during 1939 included the following:

1. Practically every bureau of the City Health Department was responsible for valuable press publicity. There were 400 newspaper articles for the year with a total of 3,773 column inches.
2. The "Keeping Well" radio program was broadcast weekly over Station WFBR. There were nine five minute talks and forty-two dramas presented during the year. Special dramas were presented in cooperation with other agencies for National Hearing Week, the Christmas Seal Sale, National Social Hygiene Day, the control of cancer and the Baltimore Housing Program.
3. *Baltimore Health News* was issued regularly as the official monthly publication of the Department. It carried news items concerning the more important current public health events, new health ordinances and regulations, summaries of vital statistics, and other articles of general health interest.
4. Members of the Health Department staff gave 373 health addresses to civic, school and lay groups which was an increase of more than 37 per cent as compared with 1938. Films and slides were used at forty-two of the addresses and every opportunity was taken to dramatize for the public the Department motto: *Learn to Do Your Part in the Prevention of Disease.*
5. Much important health information has been spread about by the public health nurses who gave approximately 500 classroom talks in public and parochial schools, in addition to the health teaching which is associated with their daily rounds of home visits.
6. There were 305 seminars and field demonstrations given for students, sanitarians and others interested in public health procedures. Three hundred and twenty-three classes and planned courses were held for the training of Health Department personnel.
7. The Department cooperated with other agencies in the local observance of Negro Health Week, Child Health Day, National Hearing Week, National Social Hygiene Day and the Christmas Seal Sale.
8. Ten exhibits were presented and twenty-three articles for visual education were loaned.
9. The Bureau of Milk Control conducted the Sanitary Milk Production Contest for the eighth consecutive year among the vocational high schools on the city's milk shed.

10. The Department mailed 321,869 pieces of printed material of which *Baltimore Health News* furnished the greatest single item. The Department handled 3,199 requests for health information and 656 special letters were written in response to such inquiries.
11. Twenty reprints and seventeen new publications were issued which included mimeographed and bound *Public Health Laws*, a mimeographed Public Health Bibliography for student instruction, printed regulations and ordinances of both city and State, and various communicable disease leaflets.

Laboratories

A new type of laboratory service was inaugurated on May 20 when technical assistance was furnished the Pan American Airways as an aid in the development of a sanitary program for transatlantic air flights. Through the cooperation of the Port Quarantine Officer of the U. S. Public Health Service, the Commissioner of Health, the Director of the Bureau of Laboratories and representatives of Pan American Airways satisfactory arrangements had been completed and the first samples were collected during the historic round-trip flight of the Yankee Clipper from Baltimore to Southampton, England, and return during the week from May 20 to 27. A total of forty-five samples, obtained at the various ports on this and subsequent ocean flights, consisting of butter, ice, milk and water, was submitted and tested in 1939.

Plans were developed for conducting a Maryland State-Wide Study of Syphilis Serology in order to evaluate the efficiency of the tests used by the laboratories within the State. The survey, patterned after the studies of the U. S. Public Health Service, was begun on December 13 when the first batch of specimens was sent to the participating laboratories. Donors of normal and syphilitic blood were selected on the basis of careful clinical analyses. Twenty-six cooperating laboratories, sixteen of which are located in Baltimore and ten in the counties of the State, had tested fifty-six specimens by the end of December. The laboratories of the State and City Health Departments and the U. S. Public Health Service Venereal Disease Research Laboratory at Staten Island, New York, participated in addition as the check units. The study will be completed when 100 normal and 100 syphilitic blood specimens have been examined and reported by the twenty-nine laboratories.

Serodiagnostic tests were performed on specimens of blood submitted to the City Health Department as part of a study conducted in the Eastern Health District in order to ascertain the prevalence of syphilis in the pupils of a Negro Junior-Senior High School. Beginning on May 9 and con-

tinuing through May 31, a total of 1,254 specimens was received from 1,189 individuals. Of the blood samples collected, 52 or 4.1 per cent were positive, 52 or 4.1 per cent were doubtful, 1,148 or 91.6 per cent were negative and 2 or 0.2 per cent were unsatisfactory for testing.

C. LEROY EWING

Laboratory Assistant
August 11, 1915–December 31, 1916

Senior Bacteriologist
January 1, 1917–February 14, 1921
September 18, 1922–September 24, 1926

Assistant Director of the Bureau
of Bacteriology
September 25, 1926–June 22, 1930

Director of the Bureau of Laboratories
Since June 23, 1930

In 1939 there was received and tested for syphilis in the Health Department laboratory the largest number of specimens of blood and spinal fluid ever examined in any one year since serologic testing was instituted as a service in 1916. Of the 55,514 specimens examined, 595 different private physicians submitted 18,961 or 34.1 per cent, 13,145 or 23.7 per cent came from the City Health Department venereal disease clinics and 23,408 or 42.2 per cent were received from other agencies such as industrial plants or hospitals and dispensaries, or in connection with special studies.

The distribution of pneumonia serum was larger in 1939 than in 1938 when serum was first made available for treating medically indigent patients in hospitals. There were 10,290,000 units for 65 cases distributed from January through December in 1938, at a cost of $3,700.00, whereas a total of 15,420,000 units was requested by the hospitals in 1939 for use in 66 cases at an approximate cost of $4,243.00. On May 1 a start was made in the distribution of rabbit serum in addition to the horse serum. Records on hand at the close of the year indicated an increase of more than 100 per cent as compared with 1938 in the number of pneumococcus differentiation tests made in the bureau and in approved hospital laboratories in the city.

Eastern Health District

The outstanding event of 1939 in the Eastern Health District was the third triennial census-survey made during the spring and summer under the immediate direction of the Department of Biostatistics of the Johns

Hopkins School of Hygiene and Public Health. This is the first time that the entire population of the district has been surveyed since its enlargement late in 1938 and the majority of the actual field work was done, as in the 1933 and 1936 surveys, by regular Health Department public health nurses. The information which was obtained from the 27,191 households enumerated will be of very great value in improving the health services for the area.

ANTHONY L. RETTALIATA, M.D.
Health Warden
January 1, 1911-December 31, 1920
Health Officer, Part Time
January 1, 1921-May 18, 1933
Health Officer, Full Time
Since May 19, 1933

A rearrangement of infant and preschool hygiene clinics was made in February when it was found that the conference for white children in Public School No. 97A was serving a decreasing number of youngsters because of a shifting of the white population from the area covered. The white clinic was therefore closed and replaced by a needed colored clinic at Public School No. 116A. Arrangements were completed for the assignment of one pediatrician, rather than several, to each of the City Health Department clinics in the Eastern Health District.

On February 6 an exhibit was held at the Eastern Health District office in connection with a visit which the Board of Trustees of the Johns Hopkins University made to review the work in this district. The Trustees have, in the past, shown considerable interest in the district activities and the exhibit was planned to acquaint them more completely with its purposes and program.

A periodic meeting of physicians who practise in the Eastern Health District was held at the district headquarters on November 1. Dr. Roscoe Hyde, Professor of Immunology of the Johns Hopkins School of Hygiene and Public Health, gave a very interesting talk on influenza to the fifty who attended.

Of particular interest and importance was a hearing study that was begun in 1939 in the Eastern Health District by Dr. Samuel J. Crowe

of the Johns Hopkins Hospital. In this it is planned to study more than 1,000 white school children by audiometric tests which will detect the slightest hearing loss. As a part of the project, facilities were made available during the year for the treatment of remediable ear defects that were found in the children examined. For a trial period a public health nurse was assigned for bringing the children to the special ear clinic, and the district health officer arranged for the necessary home contacts.

Western Health District

The contemplated enlargement of the district was made on September 1 when Wards 11 and 14, with census tract 1 of Ward 15 and census tracts 1, 2 and 3 of Ward 16 were added to the original area. As first established in 1935 the Western Health District had a population of 94,092 of which 46 per cent were Negro. The enlarged Western Health District will serve 161,880 persons, of which 55 per cent are colored. In order to bring neighborhood clinic facilities to this large increase in colored population the Druid Health Center, at 1313 Druid Hill Avenue, began functioning on October 30 with the opening of a prenatal clinic. During the following months and before the close of the year clinics were opened for venereal diseases, congenital syphilis and infant and preschool hygiene.

Educational activities were featured in the district throughout the year. Affiliate instruction in public health nursing was given to a total of thirty-eight graduate and student nurses, both white and colored. Many talks on health topics were given to school children and to parent-teacher associations. Seminars for the sophomore class of the University of Maryland School of Medicine were held by the Commissioner of Health in the district office and the health officer conducted all sections of the senior class through a bakery, a milk pasteurization plant, and the city water filtration and sewage disposal plants. An eighty-five page, mimeographed book entitled *An Outline for Affiliate Instruction in Public Health Nursing* was prepared by the teaching supervising nurse and was used as a syllabus in the theory of public health nursing for undergraduates by instructors in five affiliated hospital schools of nursing. The distribution of over 2,000 Health Department pamphlets on the communicable diseases and on the prevention of disease and the maintenance of health, gave evidence of the interest of the people of the district in securing reliable health information.

Southeastern Health District

Early in January, at the onset of the city-wide measles outbreak, investigation of measles cases and placental extract administration to susceptible contacts under three years of age assumed priority over all other district work. One of the stated objectives which the district aimed to reach was

the prevention of deaths in children of this age who contracted the disease. A team composed of the district health officer and a public health nurse visited the cases who had no physician in attendance, those cases to whom visits were requested by family physicians, and others, for the specific purpose of inoculating contacts with placental extract. The subsequent follow-up and observation procedures in these cases conformed to those established by the Health Department for the entire city. At the termination of the outbreak, an analysis of what had been done showed that there had been a striking modification of the disease in nearly every case inoculated and that there had been an even greater effect in the prevention of complications.

Several important steps were taken early in the year in order to strengthen the district maternity, child, and school hygiene and communicable disease and tuberculosis control programs. A new diphtheria prevention and vaccination clinic was established in the Servants of Mary Immaculate Day Nursery at 102 South Patterson Park Avenue. A new service of investigation and selection of tuberculosis cases was begun in order to expedite admission to and follow-up of discharged cases from the Maryland tuberculosis sanatoria. The district nursing staff distributed in connection with their field visits the new sanitary packet and wax tissue paper bags to tuberculosis cases instead of metal cups with cardboard liners as heretofore; this procedure was in the nature of an experiment for gauging its value for the city as a whole. The Director of the Bureau of Tuberculosis reviewed once each month current cases on the district visiting list and gave instructions for their appropriate follow-up. The district health officer reviewed each recommendation and physically examined each school-child applicant for admission to classes for the physically handicapped, thus shortening the period of waiting. On June 21 the district public health nurses began visiting obstetrical cases not eligible for hospitalization by the Department of Public Welfare in order to determine what prenatal care they were to receive and to urge serologic blood tests for all such individuals.

The weekly mothers' classes begun in July, 1938 for group instruction of the expectant mothers registered in the regular district prenatal clinic continued to be an important educational function and showed steady growth and progress throughout the year 1939. Ninety-four classes in mothercraft were conducted with a total enrollment of 508 mothers. An interesting innovation in this connection was the issuance of certificates to the mothers who attended a complete course or series of eight classes. The supervising nurses from the Bureau of Public Health Nursing attended these classes in order to familiarize themselves with the procedure with a view to the future inauguration of similar projects in their respective

districts. With uniformity of procedure as the objective and to help prevent confusion in the minds of the new mothers, agreement was reached between the supervising nurse of the Southeastern Health District and the obstetrical department of the Baltimore City Hospitals upon the type of information to be given as regards postnatal and infant care for cases registered at the prenatal clinic and subsequently delivered at this hospital.

The district began the Health Department program of affiliate instruction in public health nursing in collaboration with the Schools of Nursing of the Mercy, St. Agnes and Union Memorial Hospitals. Two separate groups of two undergraduate students from each of these institutions were assigned during the latter part of the year for practical instruction and experience in field work under the guidance of the district public health nurses for periods of eight weeks.

Communicable Diseases

A total of 32,117 cases of communicable diseases was reported in 1939 as compared with 23,111 cases in 1938. The increase was due largely to the prevalence of measles during the first part of the year, but several other important communicable diseases, such as poliomyelitis and tularemia, showed increases. Larger numbers of cases of pneumonia and of mumps were reported although diphtheria and typhoid fever showed marked decreases in 1939 as compared with 1938.

Diphtheria

There was a total of 67 cases and 3 deaths of diphtheria reported during 1939 with a slight increase in the incidence of the disease during the last two months of the year. The number of cases of diphtheria reported was lower than for any other single year on record in Baltimore.

CITY DIPHTHERIA RECORD, 1927-1939

Year	Cases	Resident Deaths
1939	67	3
1938	125	3
1937	257	7
1936	146	8
1935	119	2
1934	108	6
1933	137	6
1932	254	10
1931	416	18
1930	522	18
1929	547	25
1928	829	59
1927	1,619	87

Diphtheria Prevention

THE EVENING SUN

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Thought For Parents

The Health Department's latest bulletin reports two cases of infantile paralysis in the city. In telling of one of those cases a comment is made that deserves the attention of parents. We quote two sentences:

> This family has, indeed, been stricken with misfortune from the point of view of communicable diseases, for a 6-year-old child in the same family was one of the three fatal cases of diphtheria to occur in Baltimore during the year 1938. *That child had never received the preventive toxoid inoculation.*

Until medical science knows more about infantile paralysis than it does now its visitation is indeed a misfortune. But diphtheria is a preventable disease. The fact that children can be protected against it has been repeated endlessly. Parents of children stricken with it, in consequence, can find small comfort in describing it as a misfortune. The plain truth of the matter is, if they fail to see to it that their children are protected by toxoid inoculation they are being very careless with their lives.

TOXOID PREVENTS DIPHTHERIA

The new city-wide program for more widespread protection against diphtheria, which was inaugurated in 1938, was continued during 1939 although no intensive diphtheria prevention campaign was held during the year. The essence of the new program is that any child more than a year old who has not been given toxoid by the family physician should be taken to a clinic for this service. The details of the program and the methods of recording inoculations with one dose alum precipitated toxoid were made clear to the medical profession before the changes in plan were inaugurated; and no other program appeared to give promise of any substantial increase in the percentage of inoculated children.

It is noteworthy that there was a total of 8,786 children under one year of age recorded as having received diphtheria toxoid inoculation during 1939 as compared with 7,349 in 1938 and 5,534 in 1937. Private physicians reported 4,000 children as having received diphtheria toxoid in 1939 as compared with 2,774 in 1938.

The following table shows by years the number of children in the city reported as inoculated against diphtheria by various agencies for the period 1935 through 1939:

CHILDREN RECORDED AS INOCULATED AGAINST DIPHTHERIA
BALTIMORE, 1935-1939

AGENCY	1939	1938	1937	1936	1935
Physicians' Practice	4,000	2,774	1,688	2,210	1,522
Preschool Clinics	7,437	7,805	7,393	10,120	6,755
School Clinics	4,780	9,746	8,853	3,156	3,776
Totals	16,217	19,325	17,934	15,486	12,053

The estimated percentage of the child population of Baltimore under five years of age recorded as inoculated against diphtheria at the close of 1939 was 69 as compared with 63 at the end of 1938. For the group five to nine years old this percentage was 64 as compared with 63 at the end of 1938.

Special check studies were made on the Schick status of children in selected areas and a careful analysis was made of diphtheria which is known to have occurred in a handful of individuals among the many thousands of inoculated children. Reference to this as an administrative problem will be found in the May, 1938 issue of *Baltimore Health News.*

Typhoid Fever and Typhoid Carriers

Only 24 cases of typhoid fever were reported in 1939 as compared with 51 cases in 1938. This is the smallest number of cases of typhoid fever ever reported in Baltimore during any given year. The next lowest number of cases to be reported for a single year occurred in 1936 when there were 49. In 1939 the cases were widely distributed throughout the city. They occurred at fairly regular intervals and averaged about 2 each month. Two cases were traced to carriers who had been previously known to the City Health Department. As a result of investigating each reported case 5 new typhoid carriers were found. There was a total of 60 carriers under the supervision of the Health Department at the end of the year.

Tularemia

There were 31 cases and 8 deaths of tularemia reported in 1939 as compared with 13 cases and 3 deaths during 1938. The year 1939 showed the

largest number of cases and deaths of this disease ever reported in Baltimore in a twelve-month period. Although Maryland wild rabbits are frequently infected with tularemia they are not sold within the city because of the provisions of the State conservation laws. Investigation revealed that in the great majority of instances the rabbits which caused the Baltimore cases came from Missouri and neighboring States.

Poliomyelitis

A total of 20 cases of paralytic anterior poliomyelitis was reported in Baltimore during 1939 as compared with 3 cases in 1938. The majority of these cases occurred during the latter part of 1939. Contrary to usual experience all were among persons of low economic status who were living in fairly congested areas to the west and south of the business section of the city.

Measles

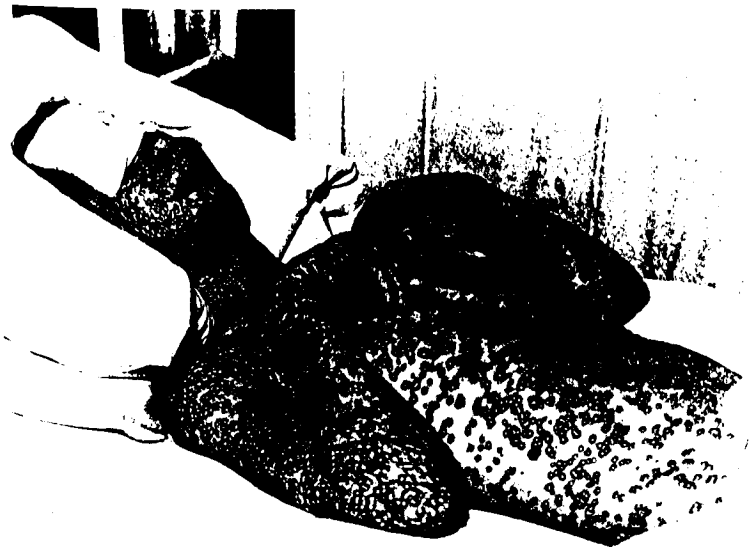
During 1939 there was a total of 11,833 cases of measles reported as compared with 1,119 cases in 1938. Throughout the outbreak placental extract was given to all children possible under three years of age who had been in contact with a case of measles. The placental extract was also made available without charge to private physicians for their patients under three years of age regardless of their economic status. Extra follow-up visits were made to the homes of those children who were given placental extract by Health Department representatives in order to study the efficacy of this biological product. Practically all children known to be ill with pneumonia following measles were hospitalized immediately at Sydenham Hospital. Only 9 children died from measles and its complications in 1939, a much smaller number of deaths than is usually experienced in an outbreak of this magnitude.

Smallpox

Once more an entire year elapsed without the occurrence of a case of smallpox in Baltimore. The last known case of the disease in the city was reported on March 9, 1928.

In this connection special review studies were made in 1939 to determine accurately the status of vaccination of the school population, and considerable stimulation in this matter resulted from the publication in the November issue of *Baltimore Health News* of the accompanying illustration.

The patient here shown as suffering with smallpox had by chance been a co-passenger on a steamer which had arrived in New York late in July from Europe and had therefore been a possible contact with a Baltimorean who returned to this city directly after landing. A telegram received shortly thereafter by the Baltimore City Health Department from the



New York State Department of Health Photograph

THIS MAN WAS NEVER VACCINATED
AGAINST SMALLPOX

Port Quarantine Officer in New York made it possible to locate, quarantine, and vaccinate successfully the contact passenger who was by then in Baltimore. There had, however, been a period of several days during which this contact had been serving in his usual occupation, that of working in a flower shop in a large public institution in this city. Fortunately this public exposure turned out to have been without risk as the worker never actually developed smallpox.

However, it should never be forgotten that in the year 1872 a total of 1,043 persons died of smallpox in the city of Baltimore.

Sydenham Hospital

Additional appropriations approved by Mayor Jackson and granted by the Board of Estimates during the year made it possible to inaugurate a series of much needed improvements in the medical and nursing services at Sydenham Hospital, and in the physical structure of the institution. In connection with the latter the City Buildings Engineer has been of invaluable assistance.

The work of the laboratory at the hospital increased in 1939 to such an extent that it became necessary to remodel and equip additional rooms, one of which has been air-conditioned and made dust-proof for tissue

culture work. A comparative study, begun in 1938, on the value of sulfanilamide and of antitoxin for the prevention of the complications in scarlet fever was continued in 1939 although at the close of the year there had not been a sufficient number of cases to complete the evaluation of these therapeutic agents.

Weekly staff conferences in the office of the Superintendent of Sydenham Hospital were inaugurated on September 15 and were attended regularly by the Commissioner of Health, the Assistant Commissioner of Health, the Superintendent, the Director of Medical Research and the Superintendent of Nurses. These meetings, an outgrowth of weekly conferences between the Assistant Commissioner of Health and the Superintendent begun in 1937, have strengthened the administrative relationships between the hospital and the central Health Department office.

During 1939, as in previous years, the third floor of the hospital was in operation for a limited period only, from January 14 to May 9. The additional beds so provided were necessary to meet the demand for the hospitalization of children suffering from measles and especially when pneumonia was present as a complication. The total number of patients during the year was 1,218, a decrease of 47 as compared with 1938. There were 67 deaths from all diseases, or a death rate of 5.5 per cent as against 6.8 per cent for 1938. Deducting 26 deaths which occurred within twenty-four hours after admission, the mortality rate was 3.4 per cent as compared with 5.0 per cent calculated on a similar basis for 1938. The patient days decreased from 22,002 in 1938 to 18,977 in 1939.

There was a marked decrease in the number of cases of scarlet fever that were admitted to the hospital. Only 278 cases of this disease were treated at Sydenham Hospital as compared with 471 in 1938. On the other hand there was an increase in the measles cases, especially during the first four months of 1939. There were 237 patients with this disease admitted during the year and of this number 93 also had pneumonia. Of this group 80 patients were shown to have some type of pneumococcus pneumonia and were treated with sulfapyridine with complete recovery in every case. As far as is known, this is the first time this drug has been used in the treatment of pneumonia complicating measles. The response to the drug was dramatic and the toxic symptoms produced were not sufficiently serious nor frequent to counterbalance its tremendous therapeutic and life-saving value. Most of these 80 patients were children under three years of age and in the past the mortality in this age group for measles and pneumonia has been between 25 and 30 per cent.

In November a study was begun on the immunity which develops against pneumococci in patients suffering from pertussis pneumonia. This type of pneumonia is usually interstitial in character and presents a different

clinical picture from the primary pneumonias of childhood. By the close of the year several interesting differences between the immune response of patients having pertussis pneumonia and those suffering from lobar pneumonia had been demonstrated.

A virus was also isolated from the spinal fluid of four patients suffering from so-called sterile meningitis. This virus was shown by various immunological tests to be identical with the virus of lymphocytic meningitis which was first isolated and described by Armstrong, Scott and Rivers in 1934 and 1935.

There were 5 patients admitted in 1939 with the laryngeal type of diphtheria requiring intubation as compared with 4 during the previous year. In 1939 there were 5 deaths from diphtheria, none of which occurred in the intubated laryngeal group; of these 5 deaths one was a Baltimore resident and the other 4 were admitted from the counties of Maryland.

Tuberculosis

Thirty years of service to the public by the Bureau of Tuberculosis were completed when the year 1939 ended. In planning an imperative expansion of this work the Health Department, in October, was able to persuade Dr. Allen W. Freeman, Professor of Public Health Administration in the Johns Hopkins School of Hygiene and Public Health, to undertake a survey of the tuberculosis control problem and needs in Baltimore City. One of the basic achievements as part of the reorganization of the bureau in 1939 was the preliminary preparation of records for the inauguration of a new visible register to improve the administrative handling and care of reported cases.

The clinics continued to operate beyond their capacity throughout the year. There were 3,173 new clinic admissions of patients of whom 1,895 were white and 1,278 were colored. Private physicians referred, on a consultation basis, 1,680 of these cases or 52.9 per cent. There were 4,748 persons in attendance at the clinics with a total of 9,307 visits as compared with 4,736 persons and a total of 8,845 visits in 1938. Tuberculin tests were made on 830 persons, predominantly children. There were 3,145 patients who received chest X-rays, including fluoroscopic examinations. The clinic physicians reported 565 cases of tuberculosis which represent 37.3 per cent of all the cases of tuberculosis reported to the Health Department during 1939. Treatment at a sanatorium was recommended for 366 patients, but only 206 of these were admitted during the year; the remainder were chiefly colored patients who were still on the waiting list for admission at the close of the year. There were 939 pneumothorax treatments given to 64 patients. Beginning March 13 the clinic staff was relieved of the pneumothorax work when two physicians and a nurse were

assigned to the Health Department clinics by the State Tuberculosis Sanatorium Commission through funds generously made available by the Maryland Tuberculosis Association. One of the pneumothorax physicians, Dr. Meyer W. Jacobson, served as a volunteer clinic physician from June 13 to the end of the year.

For the second successive year the tuberculosis mortality established a new all-time low record. The total number of resident deaths in 1939 from all forms of tuberculosis was 673 as compared with 711 for the previous year. The resident death rate for the total population was 77.4 per 100,000 population as against 82.5 for 1938. The white and colored death rates were 48.3 and 194.3 respectively as contrasted with 54.8 and 195.1 in 1938. Thus, in the case of the white population, the mortality rate showed a decline of more than six points and there was also a slight drop in the rate for the colored population. During the year, primary reports of cases of tuberculosis to the Health Department numbered 1,515, of which 703 were white and 812 were colored as against 1,670 cases, 898 white and 772 colored, for 1938.

Construction of a building to house 128 additional beds was completed and opened for colored patients at the Henryton State Sanatorium on December 26. The State Sanatorium building program for 1940 provides for an additional structure to accommodate 100 beds at Henryton. It also provides for an appropriation of $60,000.00 from the State budget for construction and equipment of a twenty-seven bed hospital unit for surgical collapse therapy for white and colored cases as an addition to the Mount Wilson Sanatorium, with maintenance money to start October 1, 1940.

Following the resignation of the Chief of the Tuberculosis Clinics on April 30, the director of the bureau was requested to supervise all Health Department tuberculosis clinic activities. The bureau work during the year also included the following: Preparation of lists of tuberculous persons living in houses included in areas selected for slum clearance by the Baltimore Housing Authority; a study of the tuberculosis quarantine laws in other cities with a view to drafting similar control measures for Baltimore; conferring and cooperating with members of the Health Department staff and representatives of other official and non-official agencies in regard to tuberculosis problems; preparation for the new visible-index tuberculosis register in the bureau; and the presentation of talks on tuberculosis to professional, lay, civic, religious and other groups.

Among the projects contemplated for 1940 are the following: (1) Completion of records for the new tuberculosis register, (2) revision of present record forms and educational leaflets and drafting of new ones, (3) relocation of the Madison Avenue clinic with transfer of the Negro portion

to the new Druid Health Center as soon as needed appropriations become available to increase the bureau staff.

Venereal Diseases

Early in the year the city began reconditioning the five-story building at 1313 Druid Hill Avenue for use as the Druid Health Center in the Negro section of the city. Two floors and part of a third floor were made available for syphilis clinics with private examining rooms and a laboratory in each clinic. On November 6, the first diagnostic and treatment clinic was moved to the fourth floor and has continued under the direction of a medical supervisor with special training. As a result, ten clinic sessions per week were enabled to do better work both from the standpoint of diagnosis and treatment. The group of clinic sessions held at the Druid Health Center has been responsible for a marked increase in the number of infectious cases discovered, in the number of infectious contacts brought under treatment and in the number of treatments given.

The congenital syphilis clinic was also relocated in the new Druid Health Center on November 6 and since then has functioned smoothly in conjunction with the prenatal clinic of the Bureau of Child Hygiene. This clinic for the treatment of congenital syphilis had already been expanded by the addition of a third weekly session on February 1, in order to meet an increasing load of work.

There was a decrease in the number of new patients admitted to Health Department clinics during 1939 but there was a large increase in the number of visits made for treatment, examination or advice. This indicates that many of the serologic tests and examinations made were given to individuals who proved not to have syphilis. There was also an increase in the average number of treatments per patient. There were about 10 per cent fewer cases of syphilis reported in 1939 as compared with the previous year, 7,507 and 8,236 respectively, although the number of cases reported by private physicians was practically the same for the two years. Over 5,000 more specimens of blood were examined by the Bureau of Laboratories in 1939 than in the previous year.

The Health Department during 1939 continued to make progress in advancing the Baltimore Plan for Syphilis Control in Industry. This plan, as described in the July, 1938 issue of *Baltimore Health News*, emphasizes the fact that employees or prospective employees should not be deprived of gainful occupation merely on the basis of a positive blood test when they are otherwise physically fit for the employment which they have or seek. At the close of 1939 nine industrial plants employing a total of 8,557 persons were participating in the plan.

While definite progress in the control of syphilis was made in 1939 it

is hoped that the work in the colored clinic in East Baltimore which is handicapped by inadequate quarters and insufficient personnel can be improved, and that the need for added diagnostic facilities in the remaining Health Department clinics can be met without undue delay.

Occupational Diseases

There was a marked increase of public interest in the control of occupational diseases following the passage of the new State law providing compensation for disability due to these diseases by the 1939 session of the State Legislature. Perhaps this new interest is best exemplified by the fact that 133 reports of alleged occupational diseases came to the attention of the City Health Department in 1939 as compared with 38 such reports in 1938. Investigations of all the reported cases were made jointly by the Bureau of Environmental Hygiene and the Bureau of Occupational Diseases and 106 of the illnesses investigated were found to be occupational in origin. Among them were 62 cases of dermatitis, many of which were the result of contact with poison ivy. In addition, reports of blood-lead determinations done by the Bureau of Laboratories at the request of physicians in the city indicated that 23 cases of lead poisoning occurred among adults in Baltimore during the year. Of these 23 cases, 3 are included among the 133 cases mentioned above. Occupational exposure accounted for all the 23 known cases of lead poisoning in adults. Diagnosis of other lead poisoning cases was also made in 13 children of whom 4 died.

The Director of the Bureau of Occupational Diseases made 102 visits to industrial establishments during 1939. Most of the visits were to investigate cases of disease alleged to have been occupational in origin. Another group of visits was made in connection with the teaching of medical students and other persons assigned for instruction. As in former years, excellent cooperation was received from the industrial plants which were visited.

The Health Department consultation services have grown slowly but steadily. A great variety of topics was covered in the thirty-eight requests received from industrial physicians and this was in contrast with former years, when most of the inquiries referred solely to occupational dermatitis. Lead poisoning and carbon monoxide poisoning were the most common subjects for consultation during 1939. The number of requests for consultation from lay persons increased slightly over 1938 and covered a much wider range of subjects than previously when many of the calls had been as to whether or not certain paints were safe for use on children's furniture.

The investigations of lead poisoning in children were continued and studies were made with the assistance of Dr. Emanuel Kaplan, Chief of

the Division of Chemistry, on the lead content of blackboard chalk, and on lead in enamel paints used for repainting furniture.

An attempt was made to further the keeping of records of industrial absenteeism in local plants and assistance was rendered in promoting the Baltimore Plan for Syphilis Control in Industry. In collaboration with the Bureau of Food Control a study of dermatitis among dishwashers at soda fountains was also initiated.

Courses of lectures and demonstrations were given to the senior medical students of the University of Maryland School of Medicine and to students in the Johns Hopkins School of Hygiene and Public Health. Addresses were also made to various groups interested in the prevention of occupational diseases and accidents. The bureau director contributed a discussion on health department work in industrial hygiene at the Second National Conference of Governmental Industrial Hygienists which was held in Washington in April. The bureau, jointly with the Bureau of Environmental Hygiene, displayed an exhibit on the Maryland Occupational Disease Law at the Fourth Annual Manufacturers' Products Exhibit in Baltimore during October. The director of the bureau attended the Third Annual Mid-West Conference on Occupational Diseases held in Cleveland in June, the Fourth Silicosis Symposium held at Saranac Lake in June and the Annual Meeting of the Air Hygiene Foundation which was held in Pittsburgh in November. Assistance was also given to the Committee on Industrial Health of the Medical and Chirurgical Faculty of Maryland when the director delivered an address on "Occupational Health Hazards of the Industries in Maryland" at the first meeting of the Industrial Health and Welfare Study Group in Osler Hall on October 24.

Child Hygiene

Maternity Hygiene

The relatively low maternal mortality rate of 3.6 and the lowest recorded infant mortality rate of 40.8 for 1939 are both encouraging, but the continued occurrence of both maternal and infant deaths which are admittedly preventable is a real stimulus for a continuing effort to improve these conditions. One new prenatal clinic for white patients was established at the Hospital for the Women of Maryland beginning on October 26 and the clinic for white patients formerly held at 1516 Madison Avenue was simultaneously discontinued. On October 30 the prenatal clinic for colored patients at 1516 Madison Avenue was moved to the new Druid Health Center. The number of patients given prenatal care has increased slightly during the year.

The Baltimore Physicians' Conference on Maternal Mortality was organized in April for the purpose of giving the physicians of the city an

opportunity to participate actively in the work of the Joint Committee on Maternal Mortality of the City Medical Society and the City Health Department. This committee has been studying the causes of maternal deaths in Baltimore during the past several years. Plans are being developed for an intensive study with regard to the extent of the premature infant situation in Baltimore and what can be done about it. Deaths from prematurity and injuries associated with childbirth are two factors responsible for a higher infant mortality rate than is desirable and it is hoped that an active professional and lay interest in this important problem will help improve the general health of the city in these special fields.

Infant and Child Hygiene

In spite of the fact that a major outbreak of measles prevailed throughout the first few months of the year the infant mortality rate reached its all-time low record in 1939. It is interesting to compare the rate of 40.8 for 1939 with 147.7 which was the rate for the year 1918, just prior to the organization of the Bureau of Child Hygiene.

WILLIAM K. SKILLING, M.D.

Health Officer in Pediatrics
October 1, 1924–April 23, 1934

Director of the Bureau of Child Hygiene
Since April 24, 1934

The number of infant and preschool hygiene clinics for colored children was increased. One for white children located in the Eastern Health District was discontinued and a small number of children registered there were transferred to a Babies' Milk Fund Association clinic. The equipment was moved to Public School No. 116A where an additional clinic for colored children was opened on February 15. On July 31 an appointment system for patients was inaugurated in the clinics of the Western Health District and a new clinic with two weekly sessions was opened in the Druid Health Center on November 27.

Both the number of toxoid inoculations reported by private physicians and the number of physicians reporting these inoculations were almost

twice as large in 1939 as in 1938. There was a marked increase in children under one year of age inoculated with toxoid and vaccinated against smallpox in the infant and preschool hygiene clinics. A new diphtheria prevention and vaccination clinic was opened in the Servants of Mary Immaculate Day Nursery on April 17 and special clinics for the administration of toxoid were held in connection with National Negro Health Week, the Flower Mart at Lafayette Square and eight excursions of the Free Summer Excursion Society.

The first case of ophthalmia neonatorum resulting in partial injury to the sight which has been reported to the Bureau of Child Hygiene since 1929 occurred in January. This case was seen by a private physician who immediately sent the child to a hospital. The infecting organism was determined to have been the pneumococcus.

In applying Health Department rules and regulations governing child-caring institutions, inspections were made of ten institutions and reports compiled and forwarded by the Bureau of Child Hygiene to the State and City Departments of Public Welfare. Observation of the special regulations for day nurseries, nursery schools and child-caring institutions during the measles outbreak was made in order to prevent the entrance of the disease into these institutions. Throughout the outbreak new admissions and visitors to child-caring institutions were discontinued and children under three years of age were excluded from day nurseries and nursery schools.

School Hygiene

With the exception of measles, there was a decrease in the usual reportable quarantinable diseases in 1939 as compared with 1938. The year 1939 was what is termed a "measles year" with 5,931 cases in children of school age reported as compared with only 416 cases in 1938. Scarlet fever showed a marked decrease; there were only 322 cases among children of school age in 1939 as compared with 675 in 1938 and 395 in 1937. There was also a slight decrease in whooping cough with 270 cases of the disease reported for 1939 as against 357 cases in 1938 and 990 cases in 1937. There were 4 cases of poliomyelitis among school children during 1939 as compared with 3 cases in 1938 and 21 cases in 1937. There was only 1 case of meningococcus meningitis recorded during the year in a school child as compared with 5 cases in 1938 and 18 cases in 1937.

Of a total of 16,217 children between the ages of six months and twelve years to whom toxoid was administered by all agencies, 4,780 were inoculated in school clinics. Of the latter group 3,200 were children of elementary school age and 1,580 were children of preschool age. The records of 83,948 children in all public and parochial schools, colored and white, were studied and of this number 64,348 or approximately 76 per cent

showed that they had received the protective dose of diphtheria toxoid but for the other 19,600 children there was no such record. It is to be noted that in the latter group a considerable number were over the age limit for which toxoid inoculation is deemed advisable. Since the establishment of these school toxoid clinics for entering children almost two years ago the morbidity rate for diphtheria has steadily dropped. Among an estimated school population of approximately 100,000 children, 115 cases of diphtheria were reported in 1937, 68 cases in 1938 and only 31 cases in 1939. This decrease is just parallel to that for the city as a whole. Approximately 25 per cent of the 1939 cases occurred in one school located in the Hampden-Woodberry section where there have been several localized outbreaks of diphtheria.

Vaccination against smallpox is carried on in the monthly school clinics in conjunction with toxoid administration. Emphasis is placed upon vaccinating children of preschool age. The number of children of school age applying for enrollment without evidence of successful vaccination has shown a steady decrease year by year. The number of children actually vaccinated in the schools since the inauguration of the monthly clinics has been steadily increasing, due to the number of children of preschool age who have been brought to these clinics. In 1939 there were 3,189 children vaccinated as compared with 2,544 in 1938 and 1,467 in 1937. Of the 83,948 school records studied in the spring of 1939, all but 530 children showed evidence of past successful vaccinations. Of this group 505 were in the colored schools and this situation was mute evidence of the inadequate Health Department staff available for school health service. Between the time of the survey and the closing of the schools, all these colored children had been successfully vaccinated. Among the 25 children unvaccinated in the entire white school population, sufficiently satisfactory medical reasons were given to make it advisable to allow a postponement for their vaccinations.

The health officers made routine physical examinations of children in public and parochial schools at the time of entrance into school and in the third and fifth grades. Special examinations were made of potential candidates for the classes for the physically or mentally handicapped upon the request of the school authorities at various times during the year. There were 45,055 routine physical examinations made in 1939 and 21,855 children were found to have some physical defect or remediable chronic inflammatory disease associated with malnutrition. There were 10,497 children with infected tonsils and enlarged adenoids and of this number 2,890 had their tonsils and adenoids removed. A total of 11,987 children was found to be in need of dental attention and 4,812 received such service either at the hands of private dentists or at clinics maintained by the

Health Department. A total of 3,100 children had some degree of impaired vision that warranted further investigation. Of this number 1,798 were refracted and 1,738 obtained glasses. Of the total number refracted approximately 55 per cent were done in the eye clinic maintained by the Department and 10 of these were recommended for the sight saving class. During 1939 there were 2,129 children treated in the eye clinic for various diseases of the eye as compared with 2,183 in 1938.

There were 355 new patients examined in the Health Department ear clinic. Of this number 233 children whose hearing defects had been determined by a group audiometer test were referred to the clinic by the Department of Education. A total of 122 children was referred to the clinic by public health nurses after examination by school physicians. There were 66 children who were found to have hearing defects of such a degree as to warrant lip-reading instruction and 6 were referred to classes for the deaf for special instruction. A total of 1,588 children was treated for various ear ailments in the clinic during 1939 as compared with 1,299 in 1938 and 1,096 in 1937. It has been the policy of the ear clinic to refer for radium treatment those children who show symptoms of deafness due to persistence of adenoid tissue around the eustachian tube orifices. Twenty-seven such children were sent to the Howard A. Kelly Hospital for this type of treatment in 1939. Recent reports in the literature have indicated favorable results by treating certain types of deafness with intramuscular injections of prostigmin. With the permission of the parents, a group of children were selected for such treatment in both the ear clinic and in the classes for the deaf. Reference has already been made to the special work on behalf of deaf children which was begun in the Eastern Health District during 1939.

Dental Hygiene

There were 4,726 children examined and treated for dental defects during the year by the four part time dentists and the part time supervisor in the sixteen dental clinics located in elementary public schools. The majority of the pupils were treated for the relief of toothaches, either by extractions, sedatives or fillings. Because of the large number of children requesting dental care, the clinicians found very little time to give instruction in the care of the teeth; however, this was done whenever time permitted.

The preschool dental clinic continued to function at the Dental School of the University of Maryland. This clinic cooperates with the Health Department infant and preschool hygiene clinic in the University Hospital and examinations are made by senior students under the supervision of a

graduate dentist. Children over eighteen months of age were treated in this special clinic and followed periodically.

In children of school age, the accomplishments for 1939, briefly summarized, were as follows:

Pupils registered at clinics	4,726
Visits of pupils to clinics	5,785
Prophylactic treatments given	2,894
Teeth filled	1,253
Temporary teeth extracted	7,780
Permanent teeth extracted	2,300
Pupils completed and discharged	4,012

Public Health Nursing

Clinic and home nursing visits made by public health nurses in the Health Department maternity and infant and preschool hygiene program have undoubtedly been important factors in the maintenance of the relatively low maternal and infant mortality rates in the city. Decreases in these rates in past years have been an incentive to increasing efforts on the part of the nursing staff.

During the year the public health nurses made 10,451 visits on behalf of the maternity hygiene service and 73,527 visits for supervision of infant and preschool health. In addition, the dissemination of public health information with regard to school hygiene and tuberculosis and communicable disease control has been an active part of the work of the public health nurses in their home visits.

With the enlargement of the Western Health District and a corresponding increase in the proportion of its colored population from 46 to 55 per cent, a rearrangement of nursing assignments was made within the district on October 3. One white supervising nurse and twelve colored public health nurses were transferred from the central office to the headquarters that had been established at the Druid Health Center. The only three other colored public health nurses remained assigned as previously to the Eastern Health District.

For six weeks following the closing of schools in June, 1939, forty-five public health nurses, assisted by twenty junior and senior college students conducted a house-to-house census-survey of the entire Eastern Health District. This work was done under the direction of Dr. George Badger, Associate in Biostatistics of the Johns Hopkins School of Hygiene and Public Health and Dr. W. Thurber Fales, Director of the Bureau of Vital Statistics. It was the fourth such survey that has been conducted in this district. As part of this latest census-survey and in anticipation of the possible movement of population out of one of the city's slum-clearance

areas located within the Eastern Health District, this special area had been surveyed by nine public health nurses between March 27 to May 6.

One white and one colored public health nurse were appointed to newly created positions during January; four were appointed to assist in the survey in the Eastern Health District for a period of six weeks and two were appointed to fill temporary positions in the places of public health nurses on sick leave with pay. Throughout the year two public health nurses made available to the Board of Managers of the Maryland State Tuberculosis Sanatorium Commission by the Maryland Tuberculosis Association continued to carry on a special work assignment for the Commission. These nurses were given quarters in the Bureau of Public Health Nursing and worked in close cooperation with the Bureau of Tuberculosis and Health Department field nurses. The special nurses relieved regular Health Department nurses of several types of field procedure such as the delivery of bed-vacancy announcements for admission of patients to the Maryland Tuberculosis Sanatorium and its branches, and follow-up studies on post-sanatorium cases. On February 1 an additional nurse was appointed under the same auspices to assist in the pneumothorax clinic service.

An important change in the educational program for student nurse affiliates occurred on September 5. The teaching of the theory of public health nursing thereafter became the responsibility of instructors in the affiliated hospital schools of nursing and students were assigned to the established health districts for observation of field work only.

SANITARY SECTION

Dr. Wilmer H. Schulze was appointed Director of the Sanitary Section on October 23 following the death of Mr. R. S. Craig. Dr. Schulze has devoted much attention to planning an active City Health Department program for hygienic housing, in close association with the City Housing Authority; he has continued to improve the technical services in the field of industrial hygiene, to follow the sanitary problems involved in the current redrafting of the city building code, and to assist in formulating a Health Department policy relative to the pressing need for more adequate sanitary sewerage facilities in the outlying sections of the city.

Following the failure of the voters in May to authorize a loan for the extension of the sanitary sewerage system to areas badly in need of such facilities an ordinance was passed for the purpose of creating a sewer loan for Baltimore City as an emergency measure. The legality of this ordinance was being contested at the close of the year.

Since 1933 the Health Department has been endeavoring to keep additional sewage pollution of open streams at a minimum. During this

period there has been an increase in building operations in the outlying areas where sanitary sewers are not available with many requests for permission to dispose of sewage into nearby streams. Occasional cases of typhoid fever have been traced to these sewage-laden streams and have demonstrated the need for a policy of control and prevention pending the extension of the city's sewerage system.

While there has been notable improvement resulting from removing a large percentage of the sewage pollution from Gwynns Falls and Herring Run there is still danger in these areas and even more so in the case of such streams as run in the bed of Vail Street and in the vicinity of Cold Spring Lane and Greenspring Avenue. During 1939 intensive studies were made of these areas and also of the Graceland Park and Dundalk area, as well as the Brooklyn-Curtis Bay area. The findings were presented to the Board of Estimates and to the Commission on City Plan and an urgent City Health Department plea was made for more adequate sanitary sewers because of the existing menace to the health of the people of the city.

Milk Control

The Health Department dairy farm regulations which had been completely revised in order to raise the sanitary standards on all milk farms serving the city were adopted on February 16. A significant change in the new regulations allows for the issuance of permits to dairy farms located beyond the limits of inspection as previously established. Sixty-one dairy farm permits were issued to farmers outside the former milkshed. These were located on the Eastern Shore of Maryland and in Virginia as far south as Remington.

The bulk milk regulation was revised and adopted on March 13 for the purpose of prohibiting the sale and distribution of bulk milk for any purposes other than cooking or manufacturing, and to prevent a recurrence of the type of milk-borne disease which had occurred in 1937, apparently as a result of faulty handling of bulk milk in a cafeteria.

A new regulation was adopted on December 21 which, for the first time, permitted the sale of fluid goat milk in Baltimore under the same general requirements that apply to the production, handling, pasteurization and distribution of cow's milk in this city.

It was necessary for the Commissioner of Health to hold a lengthy hearing on the matter of permit revocation for one of the pasteurization plants in the city which had long refused to comply with the provisions of the milk ordinance and regulations. During the hearing there was again a change in the managerial control of this plant and while the charges were confirmed it was felt that the period of risk had apparently passed

nd that there would be no public health advantage in revoking the ermit.

Following a long series of violations of the milk ordinance and regulaons, the dairy farm permit of the Chestnut Farms Dairy, owned and perated by George and Victor Caplan, was revoked on November 10, fter a hearing. In one other instance it was also necessary for the Assistnt Commissioner of Health to hold a hearing by way of warning to nother pasteurization plant in the city which had been found guilty of he serious violation of bringing into the milk plant bootleg cream from on-permitted sources, even after the Bureau of Milk Control had warned his pasteurization plant on two previous occasions in connection with the ame violation.

The annual Sanitary Milk Production Contest, conducted by the Bureau f Milk Control, was won by the vocational agricultural class of the Delta igh School located in York County, Pennsylvania. This was the first ime since the contest began in 1932 that the award was made to a school utside of Maryland. There were nineteen rural high schools represented the contest in which 425 students participated.

In general, an excellent standard of sanitary quality of the city milk upply was maintained throughout the year. There was a slight decrease the average bacterial content of the incoming raw supply from 65,000 er cubic centimeter in 1938 to 64,000 in 1939. The count of 600 on asteurized milk as delivered to the consumers in 1938 was maintained gain in 1939. The most noteworthy point in relation to the safety of the ity milk supply during the year was the fact that of approximately 1,200 amples of pasteurized milk collected at random throughout the city only were found to be improperly pasteurized according to the phosphatase est for pasteurization. Due to the withdrawal from the Baltimore market f one of the two certified raw milk farms the percentage of raw milk old within the city was reduced from 1.38 per cent to 1.27 per cent.

Food Control

The few remaining milk pumps that were in use at soda fountains were liminated in 1939 and the hazardous practice of dipping or pouring ulk milk from large containers, as had been customary in some hospitals nd other institutions in the city, was discontinued. By cooperation vith the Bureau of Milk Control regulations were enforced prohibiting he sale and the distribution of milk in containers in excess of one quart apacity, except for cooking and manufacturing purposes. By the close f the year, chiefly as a result of educational and inspection activities, all ospitals and large institutions were purchasing milk in quart or smaller ontainers only, for the use of patients and employees.

FERDINAND A. KORFF
Chief of the Division of Chemistry
March 23, 1925-December 27, 1928
Assistant Director of the Bureau
of Chemistry and Food
December 28, 1928-March 14, 1933
Director of the Bureau of Food Control
Since March 15, 1933

Retail food stores, lunchrooms, restaurants and soda fountains in the city continued to show improvements in their general sanitation. Supplementary equipment was installed in many restaurants and soda fountains in order to comply with regulations for washing and disinfecting food utensils. Bacteriologic examinations of swabbings obtained from rims of glasses at restaurants, soda fountains and lunchrooms indicated that the regulations for disinfection of food containers had been followed.

Inspection of wholesale and distributing food establishments constituted the first line of defense against impure food reaching consumers in the city. Such establishments were kept under almost daily inspection. Oysters brought into the city for shucking, packing or for sale as shell stock were found to be from certified and approved sources. Bacteriologic examinations of samples of shell stock oysters showed them to be relatively free from bacteria of the coliform group. One truckload of cabbage was discovered which contained excessive quantities of poisonous spray residue. This was finally seized by representatives of the Department of Agriculture. At their points of entrance in the city several tons of other types of food, including candy, crab meat, fish, poultry and canned foods were condemned as unfit for human consumption by inspectors of the Bureau of Food Control. Samples of custard-filled pastries obtained for laboratory examination indicated that bakers were following the recommended procedure of rebaking such products after filling.

Prior to the opening of a large convention in the city in June inspections were made of many temporary food-dispensing stands and other food-handling facilities. During the convention caterers, hotel kitchens, concessions and transportation companies were visited daily and corrective and preventive measures were applied to safeguard the food. As far as could be determined, no illness attributable to the food served throughout the convention period occurred.

Thirty-six alleged food-poisoning outbreaks were reported and investigated in 1939. Of these outbreaks, only thirteen could be traced to any specific food. In instances where crab meat was found to be the cause of illness, improperly refrigerated crab salad, crab cocktails or insufficiently cooked Imperial crabs were found to be the offending elements. Warnings were promptly issued that such crab meat preparations, after proper cooking, should either be refrigerated adequately until used or heated for at least twenty minutes before serving.

Cooperative investigations made with the Directors of the Bureau of Communicable Diseases and the Bureau of Laboratories resulted in finding two temporary carriers of dysentery who probably were responsible for minor outbreaks of this disease in two institutions. A survey of the occurrence of dermatitis among persons employed as dishwashers in food-handling establishments was conducted with the guidance and assistance of the Director of the Bureau of Occupational Diseases. Information was furnished to the employers for the prevention of these skin infections. Assistance was given the Director of the Bureau of Tuberculosis in having persons infected with tuberculosis discontinue their occupation as food handlers.

Rabbits originating from out-of-State sources caused 31 cases of tularemia and 8 deaths from the disease in 1939, a larger number than has been recorded for any previous year. This increase indicates the need for a control ordinance to prohibit the importation of wild rabbits into the city.

Meat Inspection

In addition to the regular inspection of livestock, reinspections were made of all meat products entering establishments under municipal license. Supervision was maintained over all slaughtering, processing and wholesale plants to insure the public clean, wholesome products properly labeled and packaged. Additional improvements in sanitation and physical facilities were provided in 1939 in the meat plants in the city.

The total number of animals slaughtered under livestock inspection in 1939 as compared with 1938 showed an increase of approximately 8 per cent. Nineteen appeals were made to the bureau director relating to decisions on the final disposition of carcasses, parts of carcasses and meat products after condemnation by inspectors. Service was rendered to the Bureau of Communicable Diseases and to the Bureau of Food Control in the examination of domestic animals, such as dogs and cats, for the presence of communicable diseases, and of poultry for post-mortem changes.

Environmental Hygiene

Sanitation

The demolition of a group of nine slum dwellings known as St. John's Court by order of the Buildings Engineer on the recommendation of the Commissioner of Health because of their unfitness for human habitation eliminated what was probably the worst slum area in the city. A survey of nine unsewered areas of the city, made in cooperation with the Sewerage Engineer and at the request of the Commission on City Plan, indicated a pressing need for sanitary sewers in these sections, particularly in the Graceland Park-Dundalk and Brooklyn areas. In several instances stream pollution inside the city was diminished by diverting sewage to the sanitary sewerage system and was prevented in several cases by disapproval of requests for permission to make use of streams for sewage disposal.

Two dangerous types of cross-connections on the city water supply, one a water-powered pump installed on a cesspool for periodic emptying of its contents, and the other an interconnection of the city water with a private well, were eliminated in cooperation with the Water Engineer. In addition, 2,102 potential cross-connections in plumbing systems were prevented or eliminated.

The continuation of the short-range educational rat-control program on a neighborhood basis revealed the improvements accomplished in ninety-six of ninety-eight areas which at the time of first inspection were badly rat-infested. Other sanitary services rendered during the year were: Cooperation with railroad officials in supplying water, bathing facilities and methods of sewage disposal for "Pullman Hotels" provided at railroad terminals for the Shriners' Convention; periodic inspections of the stocks of dealers having psittacine birds, for compliance with the psittacosis control ordinance; proper sanitation in the first trailer camp located within the city; assistance to the Board of Liquor License Commissioners in the compilation of regulations governing sanitation in taverns and similar places; cooperation with the Bureau of Child Hygiene in matters of sanitation in child-caring institutions; and collaboration with representatives of the Maryland State Department of Health in inspections of certain Maryland shore resorts.

Industrial Hygiene

Following the death of a colored child and the partial asphyxiation of its mother by carbon monoxide from a gas-kerosene-fired boiler in a neighborhood tailoring shop, in cooperation with the Buildings Engineer, a survey of all such places was begun for locating and correcting such

hazardous installations. Other instances of carbon monoxide exposures were studied and corrections were subsequently made in several clothing manufacturing establishments and in a chemical manufacturing plant, and as part of investigations in connection with reports or complaints of defective domestic gas and coal-fired equipment.

The filling of a position under a new classification, senior inspector of industrial hygiene, and the appointment of an inspector of industrial hygiene made possible a considerable improvement of a technical character in the industrial hygiene services. Some of the more important technical studies of industrial exposures to harmful substances included those of: Dust in glass-manufacturing plants and in an establishment engaged in mixing street-paving materials; chromic acid mists in connection with chromium plating; lead dust in the manufacture of insecticides and in the junking of scrap metal; volatile solvents used in dry cleaning and for solvent purposes; and mercury, dust and carbon monoxide in the felt hat manufacturing plants. When added control measures were found necessary they were installed in most instances.

A large number of other improvements in industrial environments were made as the result of recommendations at the time of inspection including such items as the reduction of atmospheric pollution, the elimination of accident hazards, the provision of salt tablets for protection against heat prostration, and the provision of better lighting, ventilation and sanitary facilities. Cooperation was given the Director of the Bureau of Occupational Diseases in the investigation of reports of alleged occupational diseases and in the continuation of the development of industrial hygiene services to industry.

Conclusion

This brings to an end the summarized view of the more important public health happenings in Baltimore during the year 1939. It has been an eventful year and yet it closes with a world war situation that can never be out of mind.

Two years ago in stating that the city had a carefully developed Master Plan for Health I added "If Baltimore desires to establish for itself a well-rounded health protection service the coming years should bring no major hindrance." It is sincerely hoped that this may prove to be true.

Public health work by the very nature of things must go on, and the Baltimore City Health Department is most fortunate in its friends and supporters. But these are times that stir men's souls. I have quoted from James Hilton's "I Believe" once before in the ANNUAL REPORT for

1937. Because of the world in which we live today I would ask you to consider what appears on page 2 of this record for the year 1939.

Respectfully submitted,

Huntington Williams, M.D.

Commissioner of Health.

Baltimore, Maryland
May 1, 1940

BIBLIOGRAPHY FOR THE YEAR 1939

NDREW, DAVID H.;
KORFF, FERDINAND A.
and EWING, C. LEROY.....Two Related Outbreaks of Food Poisoning Attributed to a Salmonella Organism. *Journal of the American Medical Association*, December 23, 1939, Vol. 113, No. 26, pp. 2300-2302.

OHEN, BERNARD M.;
FAIRBANK, RUTH E.
and GREENE, ELIZABETH.....Personality Disorder in the Eastern Health District in 1933. *Human Biology*, February, 1939, Vol. 2, No. 1, pp. 112-129.

OHEN, BERNARD M.;
TIETZE, CHRISTOPHER
and GREENE, ELIZABETH.....Statistical Contributions from the Mental Hygiene Study of the Eastern Health District of Baltimore, IV. Further Studies on Personality Disorder in the Eastern Health District in 1933. *Human Biology*, December, 1939, Vol. 2, No. 4, pp. 485-512.

OUCHMAN, CHARLES E.
and SCHULZE, WILMER H.....A Vapor Pressure Method for the Estimation of Volatile Solvents. *Journal of Industrial Hygiene and Toxicology*, September, 1939, Vol. 21, No. 7, pp. 256-263.

LLER, C. HOWE.....Door-to-Door Health Control. *Johns Hopkins Alumni Magazine*, November, 1939, Vol. 28, No. 1, pp. 11-16.

WING, C. LEROY.....The Scientific Background of Sanitation. (In Hopkins, Edward S.: *Elements of Sanitation*, 1939, pp. 1-5.)

ALES, W. THURBER.....Utilization of Vital Statistics Data during the 1940 Census Period. *Vital Statistics —Special Reports*, December 11, 1939, Vol. 7, No. 61, p. 699.

ITZPATRICK, MARY EDNA.....Keeping Our School Children Well. *St. Martin's Church Journal*, December, 1939, pp. 5, 7-8.

ARMAN, LILLY.....The Johns Hopkins Hospital Student Affiliation with the Eastern Health District. *Johns Hopkins Nurses Alumnae Magazine*, Vol. 38, No. 2, April, 1939, pp. 41-44.

HODES, HORACE L.; STIFLER, WILLIAM C., JR.; WALKER, ETHEL; MCCARTY, MACLYN and SHIRLEY, ROBERT G. ..... The Use of Sulfapyridine in Primary Pneumococcic Pneumonia and in Pneumococcic Pneumonia Associated with Measles. *Journal of Pediatrics*, April, 1939, Vol. 14, No. 4, pp. 417–446.

HODES, HORACE L.; GIMBEL, HARRY S. and BURNETT, GEORGE W. ..... Treatment of Pneumococcic Meningitis with Sulfapyridine. *Journal of the American Medical Association*, October 28, 1939, Vol. 113, No. 18, pp. 1614–1619.

KORFF, FERDINAND A. ..... Common Food Infections. *Quarterly Bulletin of the Association of Food and Drug Officials of the United States*, April, 1939, Vol. 3, No. 2, pp. 35–37.

MCDONALD, JOHN M. ..... Occupational Diseases of Bakers. *Quarterly Bulletin of the Association of Food and Drug Officials of the United States*, April, 1939, Vol. 3, No. 2, p. 52.

The Integration of Industrial Hygiene and Public Health. *Transactions of the Second Annual Conference of Governmental Industrial Hygienists*, April 26–28, 1939, pp. 14–16.

NOVEY, M. ALEXANDER ..... The Treatment of Eclampsia. *Medical Clinics of North America*, March, 1939, pp. 405–415.

SCHULZE, WILMER H. ..... Environmental Hygiene. (In Hopkins, Edward S.: *Elements of Sanitation*, 1939, pp. 381–419).

Occupational Diseases—Their Control and Prevention. *Proceedings of the Special Libraries Association*, Baltimore, Maryland, May 23-27, 1939, Vol. 2, pp. 95–96.

Dust Control in a Ceramic Plant. *American Journal of Public Health*, June, 1939, Vol. 29, No. 5, pp. 508–509.

SCHWENTKER, FRANCIS F. and COMPLOIER, FRANK C. ..... The Production of Kidney Antibodies by Injection of Homologous Kidney Plus Bacterial Toxins. *Journal of Experimental Medicine*, September, 1939, Vol. 70, No. 3, pp. 223–230.

SIEGEL, ISADORE A.
and MCNALLY, HUGH B. . . . . Breech Presentations and Prophylactic External Cephalic Version. *American Journal of Obstetrics and Gynecology*, January, 1939, Vol. 37, No. 1, pp. 86-93.

HUNDLEY, J. MASON, JR.;
SIEGEL, ISADORE A.;
HACHTEL, FRANK W.
and DUMLER, JOHN C. . . . . Some Physiological and Pathological Observations on the Urinary Tract during Pregnancy. *Surgery, Gynecology and Obstetrics*, February 15, 1938, Vol. 66, pp. 360-379.

SPARER, PHINEAS J.; SUSSMAN, A. A.
and GOODMAN, M. H. . . . . Ulcerative Tuberculosis of the Oral Mucous Membranes (Tuberculosis Orificialis). *Archives of Dermatology and Syphilology*, May, 1939, Vol. 39, No. 4, pp. 900-901.

TURNER, T. B.; GELPERIN, A.
and ENRIGHT, J. R. . . . . Results of Contact Investigation in Syphilis in an Urban Community. *American Journal of Public Health*, July, 1939, Vol. 29, No. 7, pp. 768-776.

WARTHEN, WILLIAM H. F. . . . . A Campaign against an Acute Infectious Disease: Diphtheria. (In Hiscock, Ira V.: *Ways to Community Health Education*, 1939, pp. 164-184.)

WILLIAMS, HUNTINGTON . . . . . Morbidity and Mortality Statistics as Health Information. *American Journal of Public Health*, September, 1939, Vol. 29, No. 9, pp. 1019-1021.

Getting Together. *Proceedings of the Thirty-Sixth Convention of the Pennsylvania State Organization for Public Health Nursing*, Philadelphia, Pennsylvania, October 19, 1938, pp. 131-135.

Practical Problems of Staff Organization. *Transactions of the International Society of Medical Health Officers, 1938.* Institute on the Administrative Affairs of the Health Officer, Kansas City, Missouri, October 24, *1938*, pp. 62-68.

Community Health Organization. A Review in the *American Journal of Public Health*, November, 1939, Vol. 29, No. 11, p. 1266.

Health Department Publications

PUBLIC HEALTH LAW, PART I. CITY CHARTER. Extracts from the City Charter and Public Local Laws of Baltimore City (1927 edition) Which Concern the Commissioner of Health.

PUBLIC HEALTH LAW, PART II. CITY HEALTH ORDINANCES. Including Article 16 of the Baltimore City Code of 1927 and Health Ordinances Passed and Approved since May, 1938.

PUBLIC HEALTH LAW, PART III. CITY HEALTH ORDINANCES. Extracts from the Baltimore City Code of 1927 other than Article 16.

PUBLIC HEALTH LAW, PARTS V(a) and V(b). LAWS OF MARYLAND RELATING TO PUBLIC HEALTH. Articles 27, 43 and 58 in the Annotated Code, State Laws of Maryland and Health Laws Enacted since June 1, 1935.

REGULATIONS GOVERNING THE HANDLING AND SALE OF MILK AND MILK PRODUCTS. Regulation 57. Bulk Milk.

OCCUPATIONAL DISEASES. Extract from Chapter 465 of the Maryland State Laws of 1939, effective June 1, 1939.

REPORT OF THE COMMITTEE TO STUDY METHODS FOR SECURING EFFECTIVE AND UNIFORM REPORTING OF OCCUPATIONAL DISEASES AND OTHER ILLNESSES AMONG WORKERS.

REGULATIONS GOVERNING MEDICAL EXAMINER CASES IN HOSPITALS.

RULES AND REGULATIONS ADOPTED BY THE MARYLAND POST MORTEM EXAMINERS COMMISSION.

PUBLIC HEALTH BIBLIOGRAPHY. Prepared for student instruction in preventive medicine and hygiene.

APPROVED METHODS OF VACCINATION.

DIPHTHERIA. IT CAN BE PREVENTED.

FACTS ABOUT GONORRHEA.

SYPHILIS IN INDUSTRY.

ADMINISTRATIVE SECTION

EXECUTIVE OFFICE

Personnel

Huntington Williams, M.D.,Dr.P.H., Commissioner of Health
William H. F. Warthen, M.D., Assistant Commissioner of Health
Reed Gaither, Senior Account Clerk and Secretary to the Commissioner
Sadie E. Figg, Senior Stenographer
Helen von Wachter, Senior Stenographer
Frank J. Feeley, Junior Clerk
Dorothy I. Payson, Junior Stenographer
Paul Izat, Junior 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, 1939.

ASSISTANT COMMISSIONER OF HEALTH

ASSISTANT COMMISSIONER OF HEALTH

William H. F. Warthen, M.D.

The Assistant Commissioner of Health as in previous years devoted himself to Health Department administrative activities in close association with the Commissioner of Health. Much time and energy was given to the correlation and coordination of the medical and sanitary sections and the several bureaus of these sections in the Department. Assistance was rendered the three organized districts, especially the newly established Druid Health Center of the Western Health District, in program planning and frequent periodic technical guidance in the matter of relationship between district health officers and bureau directors.

Among the assignments of the Assistant Commissioner of Health in 1939, the following special activities are worthy of note:

1. Attending weekly conferences with the Commissioner of Health, the Superintendent, Medical Director and Superintendent of Nurses of Sydenham Hospital.
2. Holding weekly consultative conferences with the health officer and supervising staff in the offices of the Western Health District and of the Southeastern Health District and attending similar conferences each week at the Eastern Health District.
3. Drafting suggested programs and allotments for $15,000.00 in Social Security funds designated for use by the City Health Department through the Maryland State Department of Health.
4. Directing throughout 1939 a Works Progress Administration project for clerks and similar employees assigned to "made work" under the superintendence of several bureau directors.
5. Arranging for addresses on branches of Health Department work by bureau directors, district health officers and members of their staffs to groups in official, non-official and civic organizations in Baltimore. Several such addresses were given personally by the Assistant Commissioner of Health.
6. Receiving individuals and groups of visitors in the Department and arranging appropriate demonstrations of any or all of the bureaus.
7. Attending, as a representative of the Commissioner of Health, the meetings of the Building Code Committee to the membership of which the Assistant Commissioner of Health was designated in 1937.

8. Arranging a program for a section in field work in public health administration at the Johns Hopkins School of Hygiene and Public Health for Dr. Allen W. Freeman, Professor of Public Health Administration.
9. Assisting in the teaching of hygiene and public health in the Department of Medicine at the University of Maryland School of Medicine.
10. Lecturing in public health as part of the Central Lecture Course for student nurses of the various Baltimore Schools of Nursing.
11. Preparing, together with the Director of the Bureau of Vital Statistics, as Health Department representative, the report for the Inter-City Health Conservation Contest conducted by the United States Chamber of Commerce and the American Public Health Association.
12. Editing the ANNUAL REPORT, a duty of the Assistant Commissioner of Health since his incumbency in 1934.

Works Progress Administration

Works Progress Administration Project No. 7066 was begun on August 20, 1938 and was continued throughout 1939. The following table gives the estimated expenditures on this project for 1939:

EXPENDITURES ON WPA PROJECT NO. 7066 IN THE HEALTH DEPARTMENT

CLASSIFICATION	TOTAL	FEDERAL	SPONSOR (non-appropriated equivalences)
Total Items	$85,617.45	$71,062.23	$14,545.22
Labor	78,481.42	70,320.32	8,161.10
Other than Labor	7,136.03	751.91	6,384.12

The personnel ranged numerically at different times during the year from 67 to 90 workers. In addition, there was available from a Statewide Federal Art Project the services of an artist and a sculptor who prepared posters and exhibits for several bureaus of the Department. The majority of the WPA employees worked five days each week or 140 hours each month but beginning July 1 the number of monthly hours of each worker was decreased to 130. From July 27 to August 31 the equivalent of a total of 55 workers was dropped from the project in order to comply with the Federal legislation requiring the furlough of those who had been employed by the Works Progress Administration for a period of eighteen months.

The number of WPA workers by title classification in terms of equiva-

lent working hours of regular Health Department employees, is shown in the following tabulation:

WPA ASSIGNMENTS IN THE HEALTH DEPARTMENT

Classification	Average Number of Persons in Equivalent Working Hours for 12 Months
Supervisor	2.0
Foreman	1.8
Senior Research Assistant	0.8
Senior Editor	0.1
Supervisory Clerk	2.3
Senior Timekeeper	1.0
Senior Clerk	13.9
Card Punch Operator	3.8
Stenographer	1.7
Senior Typist	0.4
Junior Clerk	43.5
Junior Typist	12.4
Messenger	0.5
Charwoman	0.3

The entire WPA work in the Health Department was separated for convenience in administration into units or subprojects. The majority of the bureaus in the Department had one or more WPA workers assigned for different lengths of time to do work not included in the regular program.

The following are some of the Health Department subprojects completed during 1939: (1) cataloguing and indexing of books and other literature in the Department library; (2) tabulating reallocated birth and death certificates; (3) revising files of the Bureau of Venereal Diseases in order to permit complete follow-up of delinquent cases.

In addition to the subprojects completed, a great deal was accomplished on certain others. The health laws in Articles 27, 43 and 58 of the Annotated Code of the Public General Laws of Maryland were issued in two mimeographed volumes, *Public Health Law*, Part V (a) and Part V (b). The publications included all laws relating to health that had been enacted to June 1, 1935. Progress was made in "soundexing" the file cards and accumulating punched-cards for the diagnostic cross index in the history room of the Johns Hopkins Hospital.

As part of another subproject set up for library and allied work, the distribution of periodicals, pamphlets and literature to the various bureaus of the Department was continued throughout the year. A weekly library bulletin was issued to bureau directors listing 3,006 journals, bulletins, pamphlets and reprints received during the year. There was a total circulation in the Department of 15,900 pieces of literature. A newspaper clipping file on public health items was maintained currently

and articles were routed by subprojects to the bureau directors interested. Reference work was done on 24 different subjects and bibliographies were prepared for bureau directors. Work was started in the Bureau of Tuberculosis on the register for all tuberculosis cases and it is expected that a great deal will be accomplished on this register during the coming year and that it will be completed in 1940.

The distribution and time allotment of WPA personnel in the Health Department and the status of the subprojects as of December 31, 1939 are given in the following table.

ACTIVITIES OF WPA PERSONNEL ON PROJECT NO. 7066 IN THE HEALTH DEPARTMENT—1939

Assignment in Health Department	Description of Subproject	Status of Work as of December 31, 1939	Personnel		Average Number of Weeks per Person
			Classification	Number	
Administrative Section	Supervising and coordinating unit	Not completed	Supervisor	3	34
	Creating Library	Completed	Foreman	1	26
	Codifying health legislation	Not completed	Senior Research Asst.	1	40
	Indexing health ordinances	Not completed	Senior Timekeeper	1	48
	Preparing second edition of *Style Manual*	Not completed	Senior Editor	1	6
	Preparing a history of the teachers of hygiene at the University of Maryland School of Medicine	Not completed	Senior Clerk	3	42
	Improvement of current administrative practices	Not completed	Stenographer	1	22
			Junior Clerk	4	39
			Junior Typist	4	42
			Messenger	1	28
Vital Statistics	Tabulating follow-up records of tuberculosis sanatoria cases	Not completed	Foreman	2	35
	Reindexing old birth certificates	Not completed	Supervising Clerk	3	42
	Measuring preventive health services received by families in certain census tracts	Not completed	Senior Clerk	12	42
	Preparing punched card diagnostic cross index of hospital records; indexing syphilis records and revision of syphilis diagnosis file at the Johns Hopkins Hospital	Not completed	Card Punch Operator	4	40
	Refiling name cards using Russell Soundex System in the Johns Hopkins Hospital history room	Not completed	Junior Typist	6	42
	Studying population trends in Baltimore	Not completed	Junior Clerk	26	44
	Reallocating and tabulating birth and death certificates	Completed			
	Improvement of current administrative practices	Not completed			
Laboratories	Creating a laboratory manual	Not completed	None	0	None
	Creating a physician's manual	Not completed			
Eastern Health District	Assembling data for dental studies of children residing in the Eastern Health District	Not completed	Senior Clerk	1	20
	Transcribing of theses	Not completed	Senior Typist	1	48
	Giving clerical assistance in Health Department clinic	Not completed	Junior Clerk	3	32
Communicable Diseases	Revising diphtheria inoculation records	Not completed	Junior Clerk	1	40
Venereal Diseases	Follow-up of delinquent venereal disease cases	Completed	Typist	1	16
			Junior Clerk	1	16
Child Hygiene	Revising diphtheria prevention visit files and completing records of smallpox vaccination	Not completed	Typist	1	30
			Junior Clerk	2	48
Food Control	Revising files and permit system	Not completed	Junior Clerk	1	48
			Senior File Clerk	1	22
Tuberculosis	Improvement of current administrative practices	Not completed	Stenographer	1	42
			Junior Clerk	2	48
			Typist	3	28
Southeastern Health District	Giving clerical assistance in Health Department Clinics	Not completed	Junior Clerk	1	26
Western Health District	Improvement of current administrative practices	Not completed	Typist	1	48

BUREAU OF VITAL STATISTICS

BUREAU OF VITAL STATISTICS

W. Thurber Fales, Sc.D.

Director

In 1939 there were 15,152 births registered as compared with 15,545 in 1938. Of the total registered in 1939, 265 were births that occurred prior to 1938. Of the 14,887 births actually occurring in the city, 77.1 per cent were delivered in hospitals as against 73.6 per cent in 1938. Midwives delivered 2.2 per cent in 1939 as against 2.8 per cent in 1938. The percentage of births in hospitals has continually increased while the percentage of births attended by midwives has decreased since 1923. In that year 23.2 per cent of the city's births occurred in hospitals and 22.6 per cent were attended by midwives.

During the year, 2,545 transcripts of birth certificates were issued and 15,700 transcripts of death certificates as compared with 1,982 birth transcripts and 14,476 death transcripts issued in 1938. In addition to the requests for official transcripts of birth and death certificates, 45,295 additional searches of the records were made including those for school enrollment, work permits and certification for relief as required by the Department of Public Welfare. It may be added that during the past five years there has been an increase of 112 per cent in the demand for birth and death certificates.

Personnel

Dr. Howard J. Maldeis and Dr. Conrad Acton, Post Mortem Physicians resigned from the Health Department on May 31 to become medical examiners under the newly created Maryland Post Mortem Examiners Commission. Dr. Maldeis was appointed Chief Medical Examiner, and Dr. Acton was appointed Assistant Medical Examiner on a temporary basis.

Division of Morgue and Public Cemetery

There were 818 bodies sent to the Morgue during 1939. Of these, 657 were claimed by relatives and friends and 161 were taken care of by the city in accordance with the provisions of the City Charter which deal with the State Anatomical Board.

The incineration plant was in operation thirty-two days and 131 bundles of clothing and bedding from homes of patients who died of tuberculosis were destroyed. A summary of the work of the Division of Morgue and Public Cemetery appears in Table No. 1.

Statistical Reports and WPA Work

As in previous years the bureau continued to prepare a weekly report of the health conditions of the city which was incorporated in the letter sent each week by the Commissioner of Health to the Mayor. An article, written by the Commissioner of Health, appeared in the September, 1939 number of the *American Journal of Public Health* which described this so-called "Saturday Letter to the Mayor" and its use for public instruction. The article bore the title "Morbidity and Mortality Statistics as Health Information." A short monthly summary of the vital statistics of the city was published in each issue of *Baltimore Health News*. The bureau also continued to render tabulation and other statistical service to the various bureaus of the Health Department, particularly the Bureau of Communicable Diseases and the Bureau of Public Health Nursing.

During 1939 the Bureau of Vital Statistics again received valuable assistance from workers assigned by the Works Progress Administration. The reindexing of birth records was completed back to 1875, the year when these records were started and also the reindexing of death certificates was begun. The WPA workers also allocated and tabulated residential building permits issued in the city of Baltimore for the period 1929–1938, inclusive. Tabulations were made on the basis of census tracts and tables were prepared to show the net gain or loss in housing units for each year and each tract. Another project was the tabulation of School-Police Census material according to census tracts similar to a tabulation that was made for the School-Police Census of 1936.

The bureau also carried out two important statistical studies during the year. The first involved an intensive analysis of cases of measles which occurred during the outbreak of measles in the first half of the year. In addition to the usual investigation of each case of measles in the city by public health nurses whenever a child under three years of age was found to be a member of the household, steps were taken to have the child given placental extract either by the family physician or a Health Department representative. In the case where the Health Department administered this treatment a case record was kept of the result. At the close of the year the bureau was tabulating the results of this survey.

The second study involved a tabulation by census tracts (sub-units of the city wards) of causes of death for previous years. These data will make possible the computation of death rates for the more important causes of death according to census tracts and ages as soon as the 1940 census figures become available.

The director of the bureau was asked to participate in several projects of both local and national interest. Among these were:

1. Cooperating with the Department of Biostatistics of the Johns Hopkins School of Hygiene and Public Health in a census-survey of the Eastern Health District.
2. Assisting Mayor Jackson's Committee on Population Trends in analyzing several projects in the School Building Program. Mr. Cleveland R. Bealmear was Chairman of this committee.
3. Serving as consultant in vital statistics for the Bureau of Old-Age and Survivors Insurance of the Federal Social Security Board in devising a workable procedure whereby the Board could receive on a uniform national basis prompt notification of death of Social Security account holders throughout the country beginning with January 1, 1940.
4. Continuing the series of seminars for the fourth year medical students at the University of Marlyand designed to instruct these persons in the proper filling out of birth and death certificates.
5. Giving jointly with Dr. Arthur W. Hedrich, Chief of the Bureau of Vital Statistics of the State Department of Health a course in public health statistics at the Johns Hopkins School of Hygiene and Public Health.

Personnel

W. Thurber Fales, Sc.D., Director
Howard A. Moore, Principal Clerk
Langdon B. Backus, Statistician
Irma E. Wehn, Principal Clerk
Ruth Gees, Statistical Clerk
Elizabeth Steman, Statistical Clerk
Margaret Amspacher, Statistical Clerk
Robert R. Krauter, Senior Clerk
George H. Grese, Senior Clerk
Fannye G. Adler, Senior Stenographer
Mildred Soper, Senior Hollerith Machine Operator
Lillian S. Core, Hollerith Machine Operator
Mary A. Hohrein, Junior Stenographer
J. G. McLaughlin, Principal Clerk
S. J. Koesters, Morgue Keeper
W. J. Snowden, Morgue Keeper
John P. Boyle, Chauffeur
Frederick Laib, Chauffeur
C. L. Disney, Park Caretaker

TABLE NO. 1

ACTIVITIES OF DIVISION OF THE MORGUE AND PUBLIC CEMETERY—1939

Age	Total	White			Colored		
		Male	Female	Unknown	Male	Female	Unknown
BODIES DELIVERED TO ANATOMICAL BOARD							
All bodies	781	231	122	6	262	140	20
Stillbirths	390	114	88	6	99	63	20
Under 1 year	173	54	27	..	52	40	..
Other children	..	..	..	..	..	..	..
Adults	218	63	7	..	111	37	..
BODIES BURIED IN PUBLIC CEMETERY							
All bodies	22	12	3	1	5	1	..
Stillbirths	11	7	2	1	1	..	..
Under 1 year	..	..	..	..	..	..	..
Other children	..	..	..	..	..	..	..
Adults	11	5	1	..	4	1	..
BODIES RECEIVED AT MORGUE							
All bodies	818	376	96	..	241	105	..
Stillbirths	46	23	16	..	5	2	..
Under 1 year	29	4	4	..	11	10	..
Other children	39	20	5	..	8	6	..
Adults	704	329	71	..	217	87	..

BUREAU OF HEALTH INFORMATION

BUREAU OF HEALTH INFORMATION

Dorothy Yoe Kalben

The Bureau of Health Information has attempted, by various methods, to carry health education to the whole population of the city. The success of the attempt is indicated by the increasing demand for reliable health information and by the growing number of requests made for speakers by schools, churches, civic organizations and student groups. The number of addresses given during 1939 increased 37 per cent over the preceding year. The general interest in health talks is shown by a diversity of requests that require the services of all members of the staff and by the subject interest that covers the entire field of health work.

Increased widespread interest in the Department's publications is noticeable by the fact that more than eight hundred additional requests for places on the mailing lists have been received and recorded. These requests included *Baltimore Health News*, the Department's monthly publication, the ANNUAL REPORT, and *Guarding the Health of Baltimore*.

Health agencies have used the radio as a medium of disseminating health information since the early days of broadcasting. This method of health education for the public is a popular one, because those people are reached who prefer to listen rather than those who prefer to read health messages. Beginning in 1932 the weekly "Keeping Well" radio broadcasts have continued without interruption. On March 4, 1939 the radio program was changed from a five-minute talk to a fifteen-minute drama. This new venture was believed to be in keeping with the present day preference for radio programs which are dramatized and which reach a larger number of people and are more effective in producing results.

New and excellent opportunities for informing the public about the prevention of disease were afforded with the opening of the Druid Health Center. Two spacious assembly rooms are located in the Center and are constantly in use for meetings and lectures.

"Keeping Well" Series

There were nine five-minute radio talks given, five of which were prepared by persons outside the Department who were interested in public health. The health dramas were broadcast over Station WFBR by the Baltimore Health Players who are volunteers from the little theater groups in the city. Each week, the central character in the play is a ficticious "Doctor Richard C. Ashley" who discusses with his patients, friends and medical students important points on how to keep well.

Forty-two dramas were presented on a large variety of public health and medical subjects. The scripts, prepared by Mr. Skipwith Gordon and edited by the Commissioner of Health, were mimeographed each week and copies have been sold to individuals and agencies requesting them. Plans have been made to have the first twenty-five dramas copyrighted and bound.

Favorable publicity was given to these new health dramas both in the local newspapers and in journals of national importance. Posters advertising the Baltimore Health Players and giving the time of the broadcast and the radio station were made and distributed for posting in all Department district headquarters and clinics. The public and private schools of Baltimore cooperated splendidly by publicizing the health drama schedules from time to time and they also made announcements about them in classrooms. Individual teachers have used the programs as a basis for weekly lessons on health. Radio dramas were presented in cooperation with non-official organizations in the local observance of Negro Health Week, Child Health Day, National Hearing Week, the prevention of tuberculosis, National Social Hygiene Day and the Baltimore Plan for the Control of Syphilis.

News Releases

The *Saturday Letter* written by the Commissioner of Health to the Mayor of the City has almost without fail resulted in an article in one or more of the local newspapers each week and thus has proved to be one of the chief means of informing the public of the health of the city. It serves not only as a weekly health index but also frequently as a basis for a special or feature article. An example in point was the newspaper account of the *Saturday Letter* in the *Evening Sun* of December 13 which carried the subject heading "Six Tularemia Cases, One Death Reported" and a follow-up that appeared in *The Sun* of December 22, a news article of 19.5 inches whose subject was "Rabbit Fever Danger Here Is Cited Again."

Clipping Service

All local newspapers were clipped for health items and a tabulation showing the number of inches of publicity received by each bureau will be found in Table No. 1. Clippings of health items other than local are sent to bureau directors and are later filed in the Department library.

Baltimore Health News

Baltimore Health News, the official bulletin of the Health Department, was edited and published each month for the sixteenth consecutive year. It carried information on all current public health activities, new city

ordinances and regulations, State laws, medical research, disease prevention measures and the monthly summary of vital statistics. The value of this publication is shown by the fact that almost 10,000 copies have been distributed monthly to physicians and health workers in Baltimore and elsewhere in the United States as well as in foreign countries.

Department Publications

The Bureau of Health Information assisted in the editing, mimeographing and distribution of eighteen publications and seven form letters. Twenty articles written by staff members appeared in numerous journals and by helping to distribute reprints of them the Bureau of Health Information has been of service both to the Department and to the public.

Visual Education

Exhibits

Exhibits as a method of informing the public about health were used advantageously throughout the year. Three were given in the local observance of Negro Health Week, National Hearing Week and the Annual Christmas Seal Sale. Others were held at the Baltimore National Home Show, National Conference of the Special Libraries Association, Druid Health Center, Baltimore Food Show, Flower Mart of the Cooperative Women's Civic League, Manufacturers' Products Exhibit, Annual Meeting of Industrial Physicians and Surgeons (Cleveland, Ohio) and at School No. 43.

Films

The Bureau of Health Information acted as booking agent for the showing of Health Department moving picture films. Films and slides were used at forty-two meetings and every opportunity was taken to present to the public the Department motto *Learn to do your part in the prevention of disease.*

Miscellaneous

A great deal of time was given by the bureau staff to students and health workers from Maryland, other States and foreign countries who visited the Department and were interested in the methods used to disseminate health information. There were three hundred and one letters written in answer to requests for special information on various subjects related to public health education.

Staff members conducted three hundred and five seminars and field demonstrations for students, sanitarians and others interested in public health procedures. Three hundred and twenty-three classes and planned

courses were given for training Department personnel. Much important work was done in the field of health information by the public health nurses who gave classroom talks in private and public schools and who gave interviews to parents in response to requests and during their usual home visits.

Personnel

Dorothy Yoe Kalben, Chief
Esther S. Horine, Editorial Assistant
Dorothy Maynard, Junior Stenographer

TABLE NO. 1

SUMMARY OF EDUCATIONAL WORK DONE BY THE HEALTH DEPARTMENT IN 1939

Section or Bureau	New Publications	Newspaper Publicity		Printed Material Distributed				Health News		Health Addresses		Seminars and Demonstrations of Field Work	Visual Education		Radio		Exhibits		Health Contests	Training of Department Personnel Round Table Talks and Planned Courses			Meetings Attended	Conferences
		No. of Articles	Column Inches	No. of Pieces	No. of People	Requests	Special Letters	No. of Articles	No. of Pages	Number*	Persons Reached		Films or Slides	Persons Reached	Talks	Dramas	Bureaus Participating	Materials Loaned Out		Classes	Persons	Hours		
Entire Department	17	400	3,773	321,869	72,102	3,259	656	67	96	392	23,872	305	42	1,513	9	42	11	33	1	323	3,889	288	1,097	1,795
Administrative Section																								
Commissioner of Health	4	40	390	18,432	6,316	400	200	5	10	181	10,000	20			1								300	200
Asst. Commissioner of Health	1	7	23	1,600	800					21	3,661	19											71	234
Vital Statistics		57	400	11,000	600			15	17	2	980	26	10	980	1			8					85	265
Health Information	5	7	62	126,927	10,172		301	3	4	3	48												22	39
Exhibits		1	4														9							
Health News		4	31	111,220	9,300																			
Miscellaneous				13,360	600	660																		
Radio talks and dramas by other than Department Staff		7	38	2,347	212			4	2						5								5	20
Laboratories		1	6					2	3	13	321	16					1			7	181	7	45	15
Western Health District		4	36	2,381	2,363			1	1	3	244	10	1	3			1			37	240	37	40	314
Southeastern Health District		3	98	4,732	4,475					9	413	1								90	2,271	55	68	117
Druid Health Center		11	138	123	123					7	686	1					1			1	1	1	7	16
Medical Section																								
Communicable Diseases	2	73	502	73,873	2,200	2,199	4	8	10	16	737	13				13							19	30
Sydenham Hospital		22	264					4	6	21	1,265	97								91	994	91	32	18
Tuberculosis		2	6	1,485	1,431		67	3	4	14	781	5	6	375		2	1						45	119
Venereal Diseases	2	6	34	15,340	12,473		24	2	4	17	2,352	16	17		1	1	1						72	33
Occupational Diseases	2	10	195	1,293	1,277		14	5	12	14	555	12				2	2						39	56
Child Hygiene		16	108	38,744	11,576			2	2	5	170	10			1	3	3						15	169
School Hygiene																2								
Dental Clinics		1	1							3	140					1							32	
Public Health Nursing		6	92	800	800												1			80	67	80	105	25
Sanitary Section																								
Milk Control	1	17	146	4,058	3,763			2	2	6	286	21				1			1				16	12
Food Control		20	200	12,706	6,588			3	4	19	681	7				2	4	15					23	14
Meat Inspection										1	40	3											6	10
Environmental Hygiene		55	791	8,375	7,145		46	2	3	18	512	28	8	155		2	2	10		17	135	17	50	89
General		30	208					6	12							13								

*Exclusive of 500 classroom talks by public health nurses.

TABLE NO. 2

FIVE-MINUTE RADIO TALKS BROADCAST UNDER AUSPICES OF THE BALTIMORE CITY HEALTH DEPARTMENT AND THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, 1939

"KEEPING WELL" SERIES

DATE		TITLE	AUTHOR
January	7	An Important Measles Warning	Williams, Huntington, M.D.
	14	Baltimore's Health Record for 1938	Fales, W. Thurber, Sc.D.
	21	Light in the Home	Ives, James E., Ph.D.
	28	Syphilis Control Day—February 1, 1939	Reinhard, Ferdinand O., M.D.
February	4	Safety	Holland, Paul L.
	11	Exercise	Baetjer, Anna M., Sc.D.
	18	The Health Department Clinic for Preventing Deafness	Breitstein, M. L., M.D.
	25	Roaches—Food Contaminators	Cory, Ernest N., Ph.D.
April	26	Tuberculosis from the Viewpoint of the Family Physician	Cullen, Victor F., M.D.

TABLE NO. 3

RADIO DRAMAS BROADCAST UNDER AUSPICES OF THE BALTIMORE CITY HEALTH DEPARTMENT AND THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, 1939

"KEEPING WELL" SERIES

Date		Title	Subject
March	4	They've Got to Have It	Measles
	11	Murder by Love	Diphtheria
	18	Milk	Milk
	25	The Scarlet Scourge	Scarlet Fever
April	1	Bright Poison	Lead Poisoning
	8	The Life Savers	Pneumonia
	15	Why Little Alice Won't Eat	Child Hygiene
	22	Night Call	Food Inspection
	29	The Innocent Borgia	Food Poisoning
May	6	Afraid to Tell	Syphilis
	13	Breakdown	Sleep
	20	F.O.B. Vacation	Preventing Typhoid
	27	None So Blind	Industrial Hygiene
June	3	Penny Wise	Undulant Fever
	10	Speed	Automobile Accidents
	17	Health by Radio from 1921 to 1939	History
July	1	Death in the Grass	Tick-bite Fever
	8	Not Like an Ostrich!	The Periodic Health Examination
	15	Fatal Accident	Maternity Hygiene
	22	Bring 'Em Back Alive	Drowning
	29	Baby Plague	Child Hygiene in Summer
August	5	Enemy in the Sky	Sunburn
	12	Too Much of a Good Thing	Overdoing on Vacation
	19	Zero Hour	Sleep, Driving, Auto, Fatigue
	26	Green Apple Colic	Appendicitis
September	2	An Even Break	Going Back to School
	9	A Quick Snack	Trichinosis
	23	The Dark Enemy	Tuberculosis and Housing
	30	Health Detective	Discovery of a Typhoid Carrier
October	7	Skippy's School Lunch	School Lunches
	14	Eight Hundred Thousand Public Enemies	Rats
	21	The Women Who Lived Again	Hearing
	28	Invisible Death	Carbon Monoxide Poisoning
November	4	Kids' Disease	Whooping Cough
	11	The Rabbits' Revenge	Tularemia
	18	Witches' Broth	Cancer
	25	Pennies from Heaven	Tuberculosis Seal Sale
December	2	Every Man His Own Doctor?	Self Medication
	9	The Root of Evil	Teeth
	16	Too Much Christmas	Safe Christmas
	23	Nothing But a Cold	Colds and Sore Throats
	30	Paved with Good Intentions	New Year's Health Resolutions

BUREAU OF LABORATORIES

BUREAU OF LABORATORIES

C. Leroy Ewing

Director

Laboratory testing of specimens of blood and spinal fluid in the diagnosis of syphilis has become one of the most important routine activities of the bureau. Since this service was introduced twenty-three years ago it has increased in scope and in 1939 a total of 55,514 specimens was received and tested. Such testing is an essential part of the nation-wide program to control syphilis and it is a matter of interest to note how local private physicians are availing themselves of the opportunity to use the service. As in the past four years studies have been conducted upon the extent to which laboratory facilities are used and the tabulation that follows shows an increasing number of physicians taking advantage of the serodiagnostic facilities available:

SERODIAGNOSTIC TESTS OF BLOOD AND SPINAL FLUID FOR SYPHILIS

Year	Different Physicians Submitting Specimens	Total Specimens	Source of Specimens			Per Cent of Specimens Submitted		
			Physicians	Clinics	Other Agencies	Physicians	Clinics	Other Agencies
1939	595	55,514	18,961	13,145	23,408	34.2	23.7	42.1
1938	544	50,319	17,232	12,596	20,491	34.2	24.8	41.0
1937	541	39,801	15,570	10,056	14,175	39.1	25.2	35.7
1936	495	32,049	12,543	9,327	10,179	39.1	29.1	31.8
1935	484	30,267	10,005	8,958	11,304	33.1	29.6	37.3

The Bureau of Laboratories cooperated with the Bureau of Bacteriology of the Maryland State Department of Health and developed plans in the latter part of 1939 for conducting a State-wide study of syphilis serology. A survey had been made on a somewhat restricted basis by the Subcommittee of the Governor's Committee on Syphilis Control and at that time 112 specimens were tested by 24 collaborating laboratories. Because of the limitations of the study and the unsatisfactory results obtained and as a result of expressed criticism and dissatisfaction, the need for a wide-scale and carefully conducted investigation became a pressing one. This latest survey was patterned after studies of the U. S. Public Health Service and was begun on December 13, 1939 when the first batch of specimens was sent to the participating laboratories. The twenty-nine institutions cooperating in this activity were as follows:

Hospital and private laboratories in Baltimore City	16
Hospital and private laboratories in the counties of Maryland	10
Official ("check") laboratories	3

The official laboratories were those of the city and State health departments and the U. S. Public Health Service Venereal Disease Research Laboratories at Staten Island, New York. The donors for normal and syphilitic blood were selected on the basis of the clinical judgment of three syphilologists and all specimens were carefully documented. By the end of December, 56 specimens had been tested and it was planned to complete the study in 1940 after 100 normal and 100 syphilitic specimens have been examined.

Assistance was rendered in connection with a special study conducted in the Eastern Health District in order to ascertain the incidence of syphilis in the pupils of a Negro junior-senior high school. Of a total enrollment of 1,539 pupils there were 1,203 volunteers of whom 1,189 had their blood tested in the Health Department laboratories and 14 at other laboratories during the period from May 9 to May 31. Among the 1,189 pupils tested by the Bureau of Laboratories, 27 or 2.3 per cent showed positive and 43 or 3.6 per cent doubtful serodiagnostic results. Nine of the positive cases were previously on record at a hospital clinic as having syphilis and 22 were considered as having recently acquired the disease. During the survey 1,254 specimens including repeat specimens on positives were submitted to the Bureau of Laboratories and of these 52 or 4.1 per cent were positive, 52 or 4.1 per cent doubtful, 1,148 or 91.6 per cent negative and 2 or 0.2 per cent unsatisfactory.

As an important part of the Department's pneumonia control program curative serum distribution was increased in 1939. There was a total of 15,420,000 units of serum given to hospitals for treating 66 indigent cases during 1939 at an approximate cost of $4,243.00 as compared with 10, 290,000 units to hospitals for 65 such cases in 1938 at an approximate cost of $3,700.00. Horse serum only was furnished in 1938 but in May, 1939 the Commissioner of Health approved distribution of rabbit serum.

There was an increase of more than 100 per cent in the number of pneumococcus type differentiation tests performed in 1939 both in the bureau and in approved laboratories as compared with the number of tests made in 1938. In that year there were 2,113 specimens of sputum, exudates, nose swabs and cultures examined whereas the corresponding figure was 4,577 in 1939. The type of pneumococcus was undetermined during 1939 in 490 specimens and no pneumococci demonstrated in 913. With the availability of complete records for 1939 from nineteen hospital laboratories definite statements can be made concerning pneumococcus

type distribution in Baltimore. The following tabulation lists the numbers of each type of pneumococcus reported:

TYPE	SPECIMENS	TYPE	SPECIMENS
I	295	XVII	35
II	116	XVIII	106
III	209	XIX	190
IV	74	XX	40
V	32	XXI	21
VI	162	XXII	29
VII	102	XXIII	79
VIII	145	XXIV	9
IX	46	XXV	7
X	36	XXVI	0
XI	45	XXVII	14
XII	35	XXVIII	9
XIII	26	XXIX	33
XIV	237	XXX	0
XV	64	XXXI	9
XVI	28	XXXII	5

Note: In 56 specimens various combinations of two and, in some instances, three different types were encountered.

There was a decrease in the amount of alum-precipitated toxoid distributed from 25,117 cubic centimeters in 1938 to 19,150 cubic centimeters in 1939. However, private physicians withdrew from distributing points 6,243 cubic centimeters of toxoid in 1939, an increase of 464 cubic centimeters over the amount withdrawn in 1938.

On May 20, a new type of laboratory service was instituted by giving technical assistance to the Pan American Airways Company as an aid in the establishment of a sanitary program for transatlantic airflights. In the offices of the company at the Municipal Airport a conference was held on May 12 which was attended by the Commissioner of Health, the Port Quarantine Officer of the U. S. Public Health Service, Chief Steward of the Pan American Airways and the Director of the Bureau of Laboratories. At this meeting arrangements were made for the Bureau of Laboratories to supply the necessary sampling equipment for collecting samples of food products at the various ports of call. From May 27 to December 31 samples consisting of butter, ice, milk and water have been submitted to the Department and tested.

There was a total of 202,476 examinations made of 89,152 specimens, cultures and samples in 1939 which represent increases of 8.4 per cent and 8.1 per cent respectively for each figure as compared with 1938. This establishes a record in volume of work done in any single year since the laboratories were created in 1896. Of all the examinations made, 49,344 bacteriologic and 101,545 serologic tests were performed on 73,288 speci-

mens and cultures submitted by practising physicians, clinics and other agencies in connection with the diagnosis and control of communicable diseases. In addition, 33,559 bacteriologic and 18,031 chemical examinations were made of 15,864 samples of milk and food products and other materials for the Sanitary Section of the Department.

Bacteriology

The Division of Bacteriology made 184,448 examinations of 85,938 specimens and cultures in 1939. This is an increase of 10 per cent in the number of examinations and an increase of 8.2 per cent in the number of specimens and cultures as compared with 1938.

Streptococcus Grouping

In October, 1938 procedures for grouping streptococci on the basis of the Lancefield classification were instituted and since that time over 500 cultures have been examined by the method of Brown. In 1939, a total of 485 cultures was grouped with the following results:

TOTAL	485
Group A	393
Group B	21
Group C	7
Other than groups A, B or C	40
Unsatisfactory for grouping	24

No attempts were made to test the cultures for groups other than A, B or C, because grouping serum was only available for these groups. The value of streptococcus grouping procedures has been satisfactorily demonstrated as a result of the experience of over a year and the results obtained have been very helpful to physicians, and particularly to the medical staff at Sydenham Hospital.

A tuberculosis culturing method was instituted in February to determine whether the use of such a procedure, in addition to microscopic examinations, would increase the number of positive sputum specimens. A modified Lowenstein's medium was used and a total of 252 specimens was tested. In the following tabulation the specimens are listed as 352 single specimens, 232 split specimens and 20 where the cultures were contaminated. Analysis of the results of split specimens indicated that 59 were positive and 173 negative by both methods, that 10 were negative microscopically and positive culturally while seven were positive microscopically and negative culturally.

SUMMARY OF ROUTINE MICROSCOPIC AND CULTURE METHODS OF EXAMINING SPUTUM FOR TUBERCULOSIS

Type of Examination and Result			Distribution of Specimens	
Specimens	Microscopic Examination	Culture	Number	Per Cent
Single Specimens	+	Not made	114	32.4
	−	Not made	238	67.6
	Total		352	100.0
Split Specimens	+	+	42	18.1
	−	+	10	4.3
	+	−	7	3.1
	−	−	173	74.5
	Total		232	100.0
Split Specimens Culture Contaminated	+	Contaminated	6	30.0
	−	Contaminated	14	70.0
	Total		20	100.0

The figures indicate that no significant difference in the number of positive results would occur if either method were used alone, but when the methods are combined the significance could be determined only if a much larger number of split specimen examinations was made. This would necessitate a considerable increase in present facilities.

Inasmuch as the results did not show any significant difference between the two methods and since the culture method requires special preparation before culturing, weeks of incubation, animal inoculations and extra microscopic examinations, no change is contemplated in present procedures.

Chemistry

The Division of Chemistry made 18,031 examinations of 7,474 samples in 1939. This is a decrease of 8.3 per cent in the number of examinations and a decrease of 3.6 per cent in the number of samples as compared with 1938.

Blood Examinations for Lead Poisoning

Additional experience was gained in 1939 with the blood-lead test in facilitating the diagnosis of plumbism. There were 280 specimens of blood obtained from 180 individuals submitted by 32 different private physicians and 15 hospitals during 1939. This figure represents an increase of 46.6 per cent over the number for 1938. The value of this blood-lead service is demonstrated when it is pointed out that at least 32 cases of lead poisoning were known to have occurred in Baltimore in 1939 and these involved 18 adults and 14 children, four of whom died.

As part of lead-poisoning investigative procedures the Bureau of Occupational Diseases was responsible for the submission of twenty-four samples of colored chalk and nine of enamel paint. The latter material was submitted in connection with a search for a suitable paint which can be recommended for use on children's toys and furniture.

Special Services

The Division of Chemistry prepared fifty-five solutions for the clinics of the Bureau of Venereal Diseases, fifty-eight solutions for the Bureau of Public Health Nursing and twelve solutions for Sydenham Hospital. Eighty-one portable residual chlorine field test sets were prepared and twenty dairy thermometers' calibrations were checked for the Bureau of Milk Control. Ninety-two specimens of urine from employees of the Health Department and eight specimens from pregnant women were examined.

Research

There were indications of a high incidence of coliform bacteria in samples of pasteurized dairy products tested during 1937 and 1938. Table No. 8 shows a slight decrease in the incidence of coliform bacteria in milk and dairy products for 1939. The finding of coliform bacteria in pasteurized milk products was the compelling reason for a study begun in 1938 and continued in 1939 as a joint activity of the Division of Bacteriology and the Division of Chemistry. The objective of the study during 1939 was the development of a means for a more efficient pasteurization control which would embody a correlation of the phosphatase test with the determination of coliform organisms as an index of post-pasteurization contamination. The study involved the collection of a large number of samples of milk products and swabbings made from pasteurization equipment. In this connection a new sampling outfit was devised and was used quite extensively. Results of the study are summarized as follows: (1) that coliform organisms found in properly pasteurized dairy products are the result of post-pasteurization contamination in the dairy; (2) that the sources of such contamination are spreader pipes on coolers, pumps and bottle filling machines, particularly their rubber nipple attachments; and (3) that post-pasteurization contamination can be prevented by thorough cleansing and adequate chlorination of equipment.

Other investigations included: (1) a determination of the fat content in chocolate milk; (2) a field assay of chlorine solution prepared from chloramine-T compounds; (3) methods for the detection of neutralizers and stabilizers in cream; and (4) the quantitative differentiation of cocoa fat and butter fat in chocolate milk.

Personnel

C. Leroy Ewing, Director
Theodore C. Buck, Jr., Assistant Director
Emanuel Kaplan, Sc.D., Chief of the Division of Chemistry
Harry L. Carman, Principal Clerk
Laura B. Grim, Senior Clerk
Gertrude C. Lipp, Senior Stenographer
Sophie Scheerer, Senior Stenographer
Harriet H. McCawley, Junior Stenographer
John J. Dunn, Senior Bacteriologist
Guy C. Albaugh, Senior Bacteriologist
Claire L. Waters, Senior Bacteriologist
Milton Friedman, Senior Bacteriologist
Katherine E. Welsh, Senior Bacteriologist
Anna V. Burkhard, Senior Bacteriologist
Felix H. Pretsch, Junior Bacteriologist
Mary T. Parker, Junior Bacteriologist
Harriet Storm, Junior Bacteriologist
Mildred H. Fleischman, Junior Chemist
M. J. Doonan, Laboratory Assistant
Nathan L. Chislow, Laboratory Assistant
John F. Bees, Laboratory Assistant
Henry O. Schulze, Laboratory Assistant
Frederick Alois Pazdera, Laboratory Assistant
James J. Hagens, Jr., Laboratory Helper
Thomas H. Hale, Laborer
William J. Jones, Laborer
Louis Svatora, Laborer

TABLE NO. 1
SPECIMENS SUBMITTED AND THE NUMBER OF LABORATORY PROCEDURES PERFORMED FOR EACH TYPE OF SPECIMEN

Type of Specimen	Number of Specimens	Number of Procedures
Total	73,288	150,889
Animal heads	50	
Animal inoculations		47
Microscopic tests		50
Bile	2	
Bacteriologic tests		10
Blood	56,716	
Agglutination tests		7,747
Animal inoculations		..
Bacteriologic tests		4,179
Microscopic tests		78
Serologic tests		99,988
Direct cultures	4,257	
Agglutination tests		278
Animal inoculations		408
Bacteriologic tests		2,923
Microscopic tests		11,007
Feces	2,045	
Bacteriologic tests		7,249
Microscopic tests		329
Fluid (chest, knee, peritoneal, etc.)	24	
Animal inoculations		22
Bacteriologic tests		29
Microscopic tests		107
Helminths	4	
Microscopic tests		5
Pus	5,455	
Animal inoculations		3
Bacteriologic tests		21
Microscopic tests		5,499
Serum	106	
Microscopic tests		377
Spinal fluid	341	
Agglutination tests		..
Animal inoculations		11
Bacteriologic tests		2
Microscopic tests		24
Serologic tests		1,556
Sputum	4,226	
Animal inoculations		174
Bacteriologic tests		549
Microscopic tests		7,983
Urine	62	
Animal inoculations		14
Bacteriologic tests		145
Microscopic tests		75

TABLE NO. 2

EXAMINATIONS FOR PHYSICIANS CLASSIFIED BY RESULT AND TYPE OF EXAMINATION

Type of Examination	Total	Positive	Negative	Doubtful	Unsatisfactory
Total	127,814	43,336	71,977	11,950	551
Diphtheria					
Total examinations	3,842	708	3,105	6	23
Animal inoculations					
Virulence tests	398	191	204	3	..
Microscopic					
Diagnostic	1,205	137	1,049	1	18
Initial	428	28	399	..	1
Institution	818	210	606	..	2
Release	971	139	828	2	2
School	22	3	19	..	..
Dysentery, amebic					
Total examinations	154	..	154	..	..
Microscopic					
Feces	154	..	154	..	..
Enteric Infections					
Total examinations	7,843	262	7,257	314	10
Agglutination					
Blood, H antigen	3,263	57	3,002	202	2
Blood, O antigen	1,296	93	1,091	112	..
Bacteriologic					
Bile	2	1	1	..	..
Blood cultures	22	..	22	..	..
Clot cultures	1,185	7	1,178	..	..
Feces	2,042	103	1,931	..	8
Urine	33	1	32	..	..
Gonococcus Infections					
Total examinations	5,387	1,386	2,843	1,151	7
Bacteriologic					
Cultures	5	..	5	..	..
Microscopic					
Exudates	5,382	1,386	2,838	1,151	7
Intestinal Parasites					
Total examinations	154	12	142	..	..
Microscopic					
Feces	154	12	142	..	..
Malaria					
Total examinations	16	1	14	..	1
Microscopic					
Blood smears	16	1	14	..	1
Metallic Poisoning					
Total examinations	295	110	121	42	22
Biochemic					
Arsenic					
Hair	5	2	3	..	..
Nails	1	..	1	..	..
Urine	1	..	1	..	..
Lead					
Blood	274	103	108	42	21
Paint	5	4	1	..	..
Spinal fluid	5	..	5	..	..
Urine	2	1	..	..	1
Mercury					
Urine	1	..	1	..	..

TABLE NO. 2—Continued

EXAMINATIONS FOR PHYSICIANS CLASSIFIED BY RESULT AND TYPE OF EXAMINATION

Type of Examination	Total	Positive	Negative	Doubtful	Unsatisfactory
Pneumonia					
Total examinations	222	122	99	..	1
Typing					
Blood cultures	7	..	6	..	1
Sputum	213	121	92	..	..
Swabs, throat	2	1	1	..	..
Rabies					
Total examinations	89	..	89	..	..
Animal inoculations					
Brain emulsions	39	..	39	..	..
Microscopic					
Animal brains	50	..	50	..	..
Streptococcus Infections					
Total examinations	811	586	200	..	25
Bacteriologic					
Blood cultures	24	2	22	..	..
Exudates	5	4	1	..	..
Sputum	80	80	..	..	..
Throat cultures	221	53	167	..	1
Precipitin					
Cultures	480	446	10	..	24
Sputum	1	1	..	..	..
Syphilis					
Total examinations	101,653	39,127	51,691	10,386	449
Biochemic					
Colloidal gold	151	21	121	6	3
Globulin	330	101	217	10	2
Gum mastic	328	52	258	12	6
Microscopic					
Dark field	104	26	77	..	1
Precipitin					
Kline exclusion					
Blood	55,184	17,169	32,603	5,117	295
Spinal fluid	331	81	229	13	8
Kline diagnostic					
Blood	22,402	12,018	6,732	3,633	19
Spinal fluid	330	58	244	24	4
Kahn diagnostic					
Blood	22,402	9,569	11,193	1,547	93
Spinal fluid	91	32	17	24	18
Tuberculosis					
Total examinations	3,969	847	3,104	12	6
Animal inoculations					
Exudates	53	13	39	..	1
Microscopic					
Exudates	6	1	5	..	..
Sputum	3,910	833	3,060	12	5
Tularemia					
Total examinations	678	23	645	10	..
Agglutination					
Blood	678	23	645	10	..
Typhus Group					
Total examinations	1,554	17	1,516	21	..
Agglutination					
Blood					
Proteus X2O antigen	777	3	758	16	—
Proteus X19O antigen	777	14	758	5	..

TABLE NO. 2—Continued

EXAMINATIONS FOR PHYSICIANS CLASSIFIED BY RESULT AND TYPE OF EXAMINATION

Type of Examination	Total	Positive	Negative	Doubtful	Unsatisfactory
Undulant Fever					
Total examinations	954	27	918	8	1
Agglutination					
Blood	954	27	918	8	1
Vincent's Angina					
Total examinations	25	12	13	..	..
Microscopic					
Exudates	25	12	13	..	..
Whooping Cough					
Total examinations	4	..	4	..	..
Bacteriologic					
Cultures	4	..	4	..	..
Other Examinations					
Total	164	96	62	..	6
Bacteriologic	105	80	19	..	6
Biochemic					
Blood (calcium)	1	..	1	..	..
Blood (sugar)	1	1	..	..	..
Feces (sodium fluoride)	1	..	1	..	..
Sputum on cloth (occult blood)	1	1	..	..	..
Urine (albumin)	1	..	1	..	..
Urine (boric acid)	1	..	1	..	..
Urine (sugar)	9	6	3	..	..
Vomitus (sodium fluoride)	1	..	1	..	..
Microscopic	21	5	16	..	..
Serologic	23	3	20	..	..

TABLE NO. 3

CLASSIFICATION OF AGGLUTINATION AND BACTERIOLOGIC TESTS FOR ENTERIC ORGANISMS

AGGLUTINATION TESTS

Organisms	Total	Positive	Negative	Doubtful	Unsatisfactory
Total agglutination	4,560	142	4,105	311	2
*Eberthella typhosa**	2,118	77	1,854	185	2
Salmonella choleraesuis	109	1	108	..	..
Salmonella enteritidis	3	..	3	..	..
Salmonella paratyphi	1,007	15	926	66	..
Salmonella schottmuelleri	1,006	8	960	38	..
Salmonella typhimurium	77	..	75	2	..
Shigella dysenteriae, polyvalent	240	41	179	20	..

BACTERIOLOGIC TESTS

Total		3,274
Positive results		112
Eberthella typhosa	57	
Salmonella schottmuelleri	1	
Salmonella sp. (Newport type)	2	
Salmonella typhimurium	4	
Shigella madampensis	1	
Shigella paradysenteriae	28	
Shigella sonnei	19	
Negative results		3,154
Unsatisfactory results		8

* Nomenclature adapted from *Bergey's Manual of Determinative Bacteriology*, Fifth Edition, 1939.

TABLE NO. 4
BIOLOGIC PRODUCTS DISTRIBUTED TO PHYSICIANS, HOSPITALS AND INSTITUTIONS

Product	Number of Packages	Basic Content	Total Amount
Total	17,937		
Diphtheria products			
Alum-precipitated toxoid	2,554	Cubic centimeter	19,150 c.c.
Antitoxin	416	Unit	5,825,000 units
Ramon plain toxoid	3	Cubic centimeter	6 c.c.
Toxin for Schick test	175	Test	1,834 tests
Toxin for Schick test control	137	Test	1,760 tests
Horse serum for conjunctival test	10	Test	80 tests
Immune globulin for measles	2,266	Cubic centimeter	5,692 c.c.
Meningitis serum	8	Cubic centimeter	180 c.c.
Pertussis vaccine	1,855	Cubic centimeter	20,156 c.c.
Pneumococcus curative serum	824	Unit	16,590,000 units
Rocky Mountain spotted fever vaccine	12	Cubic centimeter	60 c.c.
Scarlet fever products			
Antitoxin	223	Unit	1,168,000 units
Antitoxin for Schultz-Charlton test	6	Test	10 tests
Toxin for Dick test	71	Test	5,570 tests
Toxin for prophylaxis	7	Skin test dose	7,458,000 s.t.d.
Silver nitrate solution, one per cent	188	Ampule	2,536 ampules
Smallpox vaccine	4,853	Point	22,655 points
Tetanus products			
Antitoxin	3,421	Unit	7,494,000 units
Toxoid	1	Cubic centimeter	2 c.c.
Tuberculin for von Pirquet test	75	Test	190 tests
Typhoid vaccine	778	Cubic centimeter	8,278 c.c.
Typhoid-paratyphoid vaccine	54	Cubic centimeter	400 c.c.

TABLE NO. 5
SUPPLY MATERIALS AND OUTFITS PREPARED AND DISTRIBUTED

Glassware and material cleaned (units)	963,770
Sterilized	729,500
Bottles	83,112
Petri dishes	121,627
Pipettes	249,578
Tubes	265,853
Miscellaneous	9,430
Media prepared	
Liters	3,594.5
Bottles	12,171
Petri dishes	27,576
Tubes	127,583
Outfits	
Prepared	78,595
Distributed	77,294
Culture stations	3,819
Health districts	10,763
Laboratory	61,617
Stains prepared	
Liters	49.1
Water distilled (gallons)	1,801

TABLE NO. 6
FOOD AND OTHER SAMPLES SUBMITTED FOR BACTERIOLOGIC ANALYSIS AND EXAMINATIONS PERFORMED

Type of Sample	Number of Samples	Number of Procedures
Total	12,650	33,559
Cream, pasteurized (dairy, store and wagon) bottled and bulk	732	
Direct plating		1,600
Direct microscopic tests		732
Coliform tests		597
Special tests		250
Empty articles for sterility (bottles, caps, spoons, dippers)	3,537	
Direct plating		3,537
Food products		
Custard-filled bakery products	42	
Direct plating		42
Direct microscopic tests		2
Coliform tests		42
Special tests		63
Food poisoning	42	
Anaerobic tests		2
Direct plating		56
Direct microscopic tests		10
Coliform tests		35
Special tests		109
Miscellaneous foods	199	
Direct plating		130
Direct microscopic tests		41
Coliform tests		182
Special tests		530
Oysters	146	
Direct plating		145
Coliform tests		440
Special tests		592
Ice cream	941	
Direct plating		937
Coliform tests		103
Milk, pasteurized (dairy, store and wagon) bottled and bulk	1,367	
Direct plating		2,729
Direct microscopic tests		1,297
Coliform tests		1,275
Special tests		480
Milk, chocolate pasteurized and ingredients	996	
Direct plating		2,001
Direct microscopic tests		19
Coliform tests		956
Special tests		360
Milk, raw (batch, certified, selected, shippers')	1,619	
Direct plating		4,543
Direct microscopic tests		1,693
Coliform tests		142
Special tests		378
Miscellaneous samples	97	
Direct plating		36
Direct microscopic tests		3
Coliform tests		150
Special tests		195
Swabbing from utensils and equipment	265	
Direct plating		250
Coliform tests		218
Special tests		30
Water	2,667	
Direct plating		5,334
Coliform tests		825
Special tests		468

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 Procedures
Total	7,474*	18,030
Body fluids and excreta	420	
Biochemic tests		2,232
Dairy products (milk, cream, chocolate milk, ice cream)	5,756	
Butter fat test		4,624
Refractive index (added water)		939
Phosphatase test		4,069
Sediment test		1,188
Unclassified tests		765
Food products	247	
Adulteration tests		589
Decomposition tests		135
Unclassified tests		23
Miscellaneous samples (organic solvents, dusts, sterilizing solutions, etc.)	164	
Unclassified tests		2,032
Solutions and outfits	367	
Unclassified tests		850
Water samples	520	
pH		356
Sanitary analysis		228

* Of this number, 3,214 samples were submitted for chemical analysis only; the remaining 4,260 samples were submitted for bacteriologic and chemical analysis.

TABLE NO. 8

COLIFORM BACTERIA IN MILK AND MILK PRODUCTS

Dairy	Total		Bottled Pasteurized Milk		Bottled Pasteurized Chocolate Milk		Bottled Pasteurized Cream	
	No. of Samples	Per Cent Positive	Number of Samples Examined	Per Cent Containing Coliform Bacteria	Number of Samples Examined	Per Cent Containing Coliform Bacteria	Number of Samples Examined	Per Cent Containing Coliform Bacteria
Total	2,649	39	1,148	32	955	43	546	45
A			54	74	..	..	15	80
B			41	63	34	70	30	77
C			46	61	44	70	32	75
D			43	56	41	63	14	57
E			62	44	51	35	13	23
F			45	44	46	41	29	86
G			44	43	..	..	11	18
H			46	39	47	51	21	33
I			49	37	45	40	31	32
J			57	37	44	55	22	50
K			50	32	44	27	24	54
L			50	32	50	20	27	37
M			44	30	44	52	24	33
N			46	28	52	73	30	73
O			46	24	46	37	14	21
P			46	20	44	27	24	0
Q			43	19	47	28	32	25
R			57	18	47	32	31	29
S			50	18	53	57	23	17
T			63	13	50	40	27	36
U			50	8	45	60	26	27
V			39	8	37	11	23	17
W			45	4	44	11	31	80
X			32	0	..	..	2	0

EASTERN HEALTH DISTRICT

EASTERN HEALTH DISTRICT

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

Health Officer

At the close of 1939 the Eastern Health District had completed a little over seven years of operation and sixteen months as an enlarged organization serving more than 100,000 people. Since the district was set up as a study and teaching center, as well as a service agency, activities in field research and teaching are of special interest and importance.

The triennial population census of the district was completed during August. This is the first time that the entire population of the district has been surveyed since its enlargement late in 1938 and the majority of the actual field work was done, as in the 1933 census, by regular Health Department public health nurses. The following table summarizes the results of the 1939 census:

EASTERN HEALTH DISTRICT CENSUS-SURVEY—1939

	Original Area (Wards 6 and 7)	Additional Area (Wards 5 and 10, Census Tracts 8-3, 8-4 and 8-7)	Total
Households enumerated	15,318	11,873	27,191
Unable to contact	12	8	20
Refusals	44	30	74
Vacancies	640	825	1,465
Per cent of known households where no schedule was taken	0.36	0.32	0.34

A serological survey to determine the prevalence of syphilis in a colored junior high school was carried out during May and June in cooperation with the Department of Education. Of the 1,539 pupils enrolled in the school, 1,203 volunteered to have the tests made. This was the first such study in this area and it was gratifying to find that there was a rather low percentage of children who were "positive."

For the second consecutive year, a program for the Schick-testing of first year school children was carried out. During October, November and December, 1,363 children from all the schools of the district were tested. Of the approximately 25 per cent who were Schick-positive, all were given one cubic centimeter of alum-precipitated toxoid.

Over 2,000 school children were given careful dental examinations in connection with a study to evaluate the effects of the preschool dental hygiene program which has been a part of the Eastern Health District

services for several years. The records of these children are being studied and it is hoped that a significant report can be made at a later date.

A study of hearing loss in apparently normal children was undertaken as a new project on October 1 in collaboration with the Department of Otolaryngology of the Johns Hopkins Hospital and the Department of Education. It is planned to give upwards of 1,000 children careful physical and audiometric examinations during the 1939-1940 school year.

The teaching activities of the Eastern Health District continue to center, to a considerable degree, around the training of student and graduate nurses. During 1939, forty-two nurses were given a concentrated two months' course in public health nursing.

Over fifty out-of-State public health officials and workers visited the Eastern Health District during 1939. Nearly one-half of these came from foreign countries.

Activities continue to increase in the Eastern Health District and as a result, the demands are greater on the staff workers. The value of the work cannot be questioned, so that it becomes increasingly important that adequate personnel be made available in order that the quality of the work may not be affected.

Personnel

C. Howe Eller, M.D., Dr.P.H., Health Officer
A. L. Rettaliata, M.D., Health Officer, Full Time
S. S. Glick, M.D., Health Officer
Hugh P. Hughes, M.D., Health Officer
Lucille Liberles, M.D., Health Officer
Dorothy Shaw, Secretary
Katherine Ewing, Junior Stenographer
Lillian Garrett, Junior Stenographer
Lillian Danzig, Junior Stenographer
Alice Raquet, Clerk
John J. Phair, M.D., Dr.P.H., Bacteriologist
Charlotte Root, Laboratory Technician
Lilly Harman, Supervisor of Nursing
Gladys Girton, Assistant Supervisor of Nursing
Mildred Drury, Assistant Supervisor of Nursing
William Bryant, Janitor

Public Health Nurses

C. M. Delcher
Mary Goldberg
Teresa Griffin
Margaret Harper
A. L. Kemp
S. Margaret King
Mildred Lane
Elizabeth McGovern
Margaret R. Oberle
Sarah E. Patterson
Elizabeth M. Schweikert
H. M. Singleton
Maude C. Suter
Berta H. Taylor
O. Ruth Thompson
Ann L. Ugiansky

TABLE NO. 1

SUMMARY OF ACTIVITIES OF THE EASTERN HEALTH DISTRICT—1939

ACTIVITY	TOTAL	WHITE	COLORED
Maternity Hygiene Service			
Individuals on register as of January 1, 1939	228	104	124
New cases	765	306	459
Total individuals carried	998	414	584
Individuals on register as of December 31, 1939	222	98	124
Home visits	3,451	1,536	1,915
Home visits, not seen	1,018	586	432
Visits in behalf of case	144	65	79
Infant Health Supervision Service			
Child Health conferences			
Individuals on register as of January 1, 1939	1,077	472	605
New cases	1,320	607	713
Total cases carried	2,443	1,118	1,325
Individuals on register as of December 31, 1939	1,032	453	579
Attendance at conferences	9,970	5,509	4,461
Home visits, registered cases			
Neonatal	1,237	492	745
Subsequent	4,426	2,262	2,164
Home visits, diphtheria prevention	392	316	76
Home visits, other cases			
Neonatal	535	424	111
Subsequent	14	5	9
Home visits, not seen	1,004	508	496
Visits in behalf of case	117	61	56
Preschool Health Supervision Service			
Preschool hygiene clinic cases			
Individuals on register as of January 1, 1939	3,178	1,468	1,710
Transferred from infant group	791	441	350
New cases	343	113	230
Total individuals carried	4,413	2,101	2,312
Individuals on register as of December 31, 1939	3,125	1,398	1,727
Attendance at conferences	7,762	3,132	4,630
Home visits, registered cases	7,818	3,467	4,351
Home visits, diphtheria prevention	392	316	76
Home visits, not seen	1,004	508	496
Visits in behalf of case	117	61	56
School Health Supervision Service			
Children examined by health officer			
Periodic examinations	7,960	5,275	2,685
Children with physical defects (new)	2,629	1,858	771
Defects corrected			
Tonsils and adenoids	581	454	127
Teeth	863	637	226
Eye defects	466	384	82
Children inspected by public health nurse			
Contacts and absentees	4,475	3,469	1,006
Classroom inspections	544	518	26
Special examinations	20,211	16,854	3,357
Treatment of minor ailments and accidents	11,563	9,336	2,227
Interview with parents at school	4,179	3,100	1,079
Children taken to clinics	1,170	923	247
Home visits			
Correction of physical defects	2,890	2,691	199
Other	74	68	6

TABLE NO. 1—Continued

SUMMARY OF ACTIVITIES OF THE EASTERN HEALTH DISTRICT—1939

ACTIVITY	TOTAL	WHITE	COLORED
School Health Supervision Service—Continued			
Home visits, not seen	610	544	66
Visits in behalf of case	117	61	56
Tuberculosis Service			
Cases on register as of January 1, 1939			
Pulmonary case	506	271	235
Childhood type	110	55	55
New cases	201	72	129
Cases on register as of December 31, 1939			
Pulmonary case	553	273	280
Childhood type	95	48	47
Home visits			
Presanatorium, pulmonary case	1,745	610	1,135
Postsanatorium, pulmonary case	1,192	775	417
Presanatorium, childhood type	659	233	426
Postsanatorium, childhood type	57	38	19
Other cases and contacts	999	409	590
Home visits, not seen	1,326	578	748
Visits in behalf of case	674	303	371
Venereal Disease Service			
Home visits by public health nurse	523	9	514
Home visits, not seen	93	3	90
Visits in behalf of case	3	..	3
Acute Communicable Disease Service			
Home visits by public health nurse	5,841	4,196	1,645
Home visits, not seen	295	211	84
Visits in behalf of case	62	30	32
Other Morbidity Service			
Home visits, cases under one year of age	279	122	157
Home visits, cases 1-5 years of age	422	168	254
Home visits, cases of school age	465	304	161
Home visits, adult cases	80	35	45
Home visits, not seen	94	54	40
Visits in behalf of case	14	5	9

TABLE NO. 2

RESIDENT BIRTHS, EASTERN HEALTH DISTRICT—1939

PLACE OF DELIVERY AND ATTENDANT	TOTAL	WHITE	COLORED
All Births	1,750	1,026	724
Hospital	1,158	766	392
Home	592	260	332
Out-patient delivery service	271	50	221
Private physician	256	185	71
Midwife	65	25	40

TABLE NO. 3

RESIDENT DEATHS ACCORDING TO MAJOR GROUPS OF CAUSES AND COLOR
EASTERN HEALTH DISTRICT—1939

CAUSE OF DEATH	TOTAL	WHITE	COLORED
All Causes	1,364	884	480
I. Infectious and parasitic diseases (exclusive of tuberculosis and syphilis)	22	7	15
Tuberculosis (all forms)	123	47	76
Syphilis	40	9	31
II. Cancers and other tumors	156	114	42
III. Rheumatic diseases, nutritional diseases, diseases of the endocrine glands and other general diseases	46	33	13
IV. Diseases of the blood and blood-making organs	8	5	3
V. Chronic poisonings and intoxications	4	2	2
VI. Diseases of the nervous system and of the organs of special sense	129	80	49
VII. Diseases of the circulatory system	352	286	66
VIII. Diseases of the respiratory system	102	58	44
IX. Diseases of the digestive system	58	39	19
X. Diseases of the genito-urinary system	169	118	51
XI. Diseases of pregnancy, child-birth and of the puerperal state	8	3	5
XII. Diseases of the skin and cellular tissue	1	1	..
XIII. Diseases of the bones and organs of locomotion	..	..	..
XIV. Congenital malformations	13	8	5
XV. Diseases of early infancy	37	16	21
XVI. Senility	..	..	..
XVII. Violent and accidental deaths	96	58	38

TABLE NO. 4

COMMUNICABLE DISEASES REPORTED IN THE EASTERN HEALTH DISTRICT—1939

Disease	Cases
Total	2,289
Chickenpox	190
Diphtheria	10
German Measles	2
Measles	1,817
Meningococcus Meningitis	2
Mumps	67
Poliomyelitis	0
Scarlet Fever	77
Whooping Cough	191

TABLE NO. 5

DIPHTHERIA TOXOID AND SMALLPOX VACCINE ADMINISTERED TO RESIDENTS OF THE EASTERN HEALTH DISTRICT—1939

Age at Date of Inoculation or Vaccination	Diphtheria Inoculation			Smallpox Vaccination		
	Total	White	Colored	Total	White	Colored
Total	2,657	1,349	1,308	1,990	772	1,218
Under 1 year	1,306	755	551	126	40	86
1	188	90	98	348	112	236
2	92	37	55	264	92	172
3	62	26	36	264	102	162
4	67	37	30	273	126	147
5	182	94	88	346	164	182
6	359	183	176	241	101	140
7	201	81	120	36	11	25
8	115	33	82	15	4	11
9	52	7	45	25	7	18
10 years and over	33	6	27	52	13	39

WESTERN HEALTH DISTRICT

WESTERN HEALTH DISTRICT

George W. Hemmeter, M.D. **Henry F. Buettner, M.D.**

Health Officers

Decentralization of public health work was advanced during the year 1939 by bringing the services, where they were most needed, closer to the people on a neighborhood basis. Educational activities for affiliate students in public health nursing and lectures to lay groups were featured throughout the year. Friendly relations have been maintained with all the physicians practising in the district and their attitude, in return, has been the same.

Personnel

Dr. George W. Hemmeter, who had been the district health officer since September 9, 1935, died on July 12 and Dr. Henry F. Buettner was appointed to take his place on July 31. Dr. Lucille Liberles, part time health officer, was transferred on January 16 to the Eastern Health District.

Dr. H. Maceo Williams was appointed the first full time Negro health officer on July 27 and was assigned to the Druid Health Center. On September 1 the following assignments became effective: Dr. J. Walker Thomas, Dr. James B. Hawkins and Dr. James G. McRae were assigned to the district as part time health officers. Miss Anna Persch was appointed supervisor of public health nurses and Miss Marie Dandridge, supervisor of field nursing. Miss Dorothea E. Tag was assigned as supervisor of public health nurses at the Druid Health Center. Miss Sara Sigel, Miss Grace Volmar, Mrs. Ruth Pyle and Mrs. Florence Collins, public health nurses, were assigned to the Western Health District. Mrs. Ruth F. Eckman, Mrs. Alice K. Stevenson and Mrs. Romaine Basford were transferred on September 1 to the Southern Health District. Miss Anna Padnuk, junior stenographer, resigned on November 22 and was was replaced by Miss Marie J. Braun.

Administration and Activities

The proposed addition to the original district area of Wards 11 and 14, with Census Tracts 1 of Ward 15 and 1, 2 and 3 of Ward 16, was made effective on September 1. The population of the entire district, including the enlargement, was estimated to be 161,880 as of December 31, 1939, 55 per cent of which is colored.

A new electric refrigerator for biologic and culture supplies was installed at the Western Health District on June 20. Through the courtesy of the Baltimore Police Department, "No Parking" signs were installed in front of both the Western Health District at 617 W. Lombard Street and the Druid Health Center at 1313 Druid Hill Avenue. The privilege of parking for a few minutes, necessary to physicians calling for supplies, has been very convenient for them and has been much appreciated.

A thirty-two hour course of instruction in public health nursing was given by Miss Iva E. Schieswohl, teaching supervisor, to the instructors from five affiliating hospital training schools for nurses. Thirty-eight students were given a two months' course of affiliate instruction in public health nursing. These included twenty-eight undergraduate students, seven white graduate nurses and three colored graduate nurses. Student nurses from the following schools of nursing affiliated during 1939: University of Maryland, Union Memorial, Mercy, St. Agnes and Provident Hospitals. Many demonstrations and family studies were presented by the student nurses during the scholastic year.

Seminars for medical students at the School of Medicine of the University of Maryland were held in the district. All the various biologic supplies and culture outfits were shown and their uses explained. Many students were furnished copies of the Health Department chart "Requirements for Communicable Diseases" and other pamphlets.

Weekly conferences were held in the district and many out-of-the-district conferences were attended by the personnel. Two meetings of the District Conference Committee, which had been organized on September 17, 1936, were held in 1939. These meetings were of great assistance in coordinating the various activities of the district with associating organizations.

Two volunteer workers, Mrs. George W. Hemmeter and Miss Margaret R. Schieswohl, made over 50,000 gauze sponges with gauze supplied by the Health Department. These sponges were used by the physicians and nurses working in the clinics throughout the year.

Druid Health Center

A five-story building with the ground, the Druid Health Center at 1313 Druid Hill Avenue, was purchased by the Mayor and City Council for $10,000.00. The building was remodeled and an elevator installed at a cost of approximately $43,000.00 and an additional sum of $3,000.00 was provided by the Julius Rosenwald Fund for equipment. The building was accepted by the Mayor and the Public Improvement Commission from the contractors on September 27. This center is devoted to administrative and clinic services for the colored only.

On October 3, twelve public health nurses and two student affiliate nurses from Provident Hospital, with Miss Dorothea E. Tag, supervisor of nurses, moved into their quarters on the second floor. On October 30, the prenatal clinic for colored women was closed at 1516 Madison Avenue and was opened at the Druid Health Center, and this was followed by the congenital syphilis clinic and an adult venereal disease clinic on November 6, and an infant and preschool hygiene clinic on November 27. The upper floor will be used for tuberculosis clinics as soon as facilities are available. The prenatal clinic for white women was closed at 1516 Madison Avenue and was opened on October 26 at the Hospital for the Women of Maryland.

Clinic attendance during November and December was as follows:

	NOVEMBER	DECEMBER	TOTAL
Prenatal Clinic No. 1	443	419	862
Venereal Disease Clinic No. 5	1,198	1,091	2,289
Venereal Disease Clinic No. 6 (Congenital Syphilis)	496	452	948
Venereal Disease Clinic No. 7	961	1,218	2,179
Infant and Preschool Clinic	5	123	128
TOTAL	3,103	3,303	6,406

In addition to clinic facilities rendered at the Druid Health Center, other features of neighborhood and community health services were offered and accepted. Physicians have used the center as a station for obtaining culture supplies and biologicals. The Medical Section of the Maryland Medical, Dental and Pharmaceutical Association accepted the invitation of the Commissioner of Health to hold their regular monthly meetings in the auditorium and held their first meeting at the center on December 4.

Personnel

Henry F. Buettner, M.D., Health Officer, Full Time
H. Maceo Williams, M.D., Health Officer, Full Time
J. Walker Thomas, M.D., Health Officer
James B. Hawkins, M.D., Health Officer
J. G. McRae, M.D., Health Officer
Samuel Weinberg, M.D., Health Officer
D. McKinley Reesby, M.D., Health Officer
Evelyn Moses, Junior Stenographer
Marie J. Braun, Junior Stenographer
Anna Persch, Senior Supervisor of Field Nurses
Dorothea Tag, Senior Supervisor of Field Nurses
Iva E. Schieswohl, Supervisor of Field Nurses
Marie Dandridge, Supervisor of Field Nurses
Bernard A. Smith, Janitor

Public Health Nurses

Katherine Brady
Theresa Byrne
Olga M. Chambers
Minnie L. Corbin
Margaret T. Ellis
M. E. FitzPatrick
Irene D. Gladden
Rose M. Hoffman
Bess C. Lang
Margaret L. Lockerman
Mary C. Malone
Charlotte Miller
Elizabeth Moore
F. E. W. Moore
Beulah B. McCausland
Ella McKenna
Cecelia Nossell
Cornelia Phillips
Julia B. Phillips
Ruth B. Pyle
Florence E. Roberts
Mary F. Sewell
Sara Sigel
Mary F. Turner
Grace S. Volmar
Pearl L. J. Ward
Mildred B. Williams
Ethel G. Young
Florence Zinz

TABLE NO. 1

SUMMARY OF ACTIVITIES OF THE WESTERN HEALTH DISTRICT—1939

ACTIVITY	TOTAL	WHITE	COLORED
Maternity Hygiene Service			
Individuals on register as of January 1, 1939	85	14	71
New cases	628	69	559
Total individuals carried	804	78	726
Individuals on register as of December 31, 1939	136	8	128
Home visits	1,960	269	1,691
Home visits, not seen	906	106	800
Visits in behalf of case	14	..	14
Infant Health Supervision Service			
Infant hygiene clinic case			
Individuals on register as of January 1, 1939	2,056	436	1,620
New cases	2,168	484	1,684
Total cases carried	4,381	1,000	3,380
Individuals on register as of Dec. 31, 1939	2,111	410	1,701
Visits to clinics	7,657	1,422	6,235
Home visits			
Neonatal	2,256	464	1,792
Other	7,191	2,120	5,071
Home visits, nonregistered cases			
Neonatal	481	308	173
Other	40	34	6
Diphtheria prevention			
Home visits	915	699	216
Home visits not seen	2,516	906	1,610
Visits in behalf of case	37	7	30
Preschool Health Supervision Service			
Preschool hygiene clinic case			
Individuals on register as of January 1, 1939	2,143	286	1,857
Transferred from infant group	1,435	369	1,066
Total individuals carried	3,772	741	3,031
Individuals on register as of Dec. 31, 1939	3,167	554	2,613
Visits to clinic	4,170	803	3,367
Home visits, clinic case	6,763	2,081	4,682
Home visits, nonregistered case	40	30	10
Diphtheria prevention			
Home visits	1,255	778	477
Home visits, not seen	1,383	498	885
Visits in behalf of case	14	6	8
School Health Supervision Service			
Children examined by health officer			
Periodic examination	9,258	3,534	5,724
Children with physical defects (new)	4,332	1,592	2,740
Defects corrected			
Tonsils and adenoids	291	197	94
Teeth	1,103	617	486
Eye defects	283	181	102
Children inspected by public health nurses			
Contacts and absentees	728	724	4
Classroom inspections	1,618	1,498	120
Special examinations	20,597	17,427	3,170
Treatment of minor ailments and accidents	10,408	7,467	2,941
Interview with parents at school	2,860	1,821	1,039
Children taken to clinics	1,211	519	692

TABLE NO. 1—Continued

SUMMARY OF ACTIVITIES OF THE WESTERN HEALTH DISTRICT—1939

ACTIVITY	TOTAL	WHITE	COLORED
School Health Supervision Service—Continued			
Home visits			
Correction of physical defects	1,363	1,025	338
Other	403	319	84
Home visits, not seen	113	83	30
Visits in behalf of case	1	1	..
Tuberculosis Service			
Cases on register as of January 1, 1939			
Pulmonary case	702	211	491
Childhood type	509	95	414
New cases			
Pulmonary case	438	82	356
Childhood type	38	2	36
Cases on register as of December 31, 1939			
Pulmonary case	840	223	617
Childhood type	494	82	412
Home visits			
Presanatorium, pulmonary case	3,055	655	2,400
Postsanatorium, pulmonary case	1,204	536	668
Presanatorium, childhood type	1,805	310	1,495
Postsanatorium, childhood type	274	139	135
Other cases and contacts	927	242	685
Home visits, not seen	1,993	627	1,366
Visits in behalf of case	67	16	51
Venereal Disease Service			
Home visits by public health nurse	6	..	6
Home visits, not seen	..	..	..
Visits in behalf of case	2	..	2
Acute Communicable Disease Service			
Home visits by public health nurse	6,250	4,107	2,143
Home visits, not seen	332	193	139
Visits in behalf of case	2	1	1
Other Morbidity Service			
Home visits by public health nurse			
Sore eye cases	1,063	311	752
Other cases under one year of age	70	23	47
Cases, 1-5 years of age	65	40	25
Cases, school age	93	65	28
Cases, adult	43	19	24
Home visits, not seen	11	6	5

TABLE NO. 2

RESIDENT BIRTHS, WESTERN HEALTH DISTRICT—1939

PLACE OF DELIVERY AND ATTENDANT	TOTAL	WHITE	COLORED
All Births	3,040	940	2,100
Hospital	1,826	649	1,177
Home	1,214	291	923
Out-patient delivery service	722	96	626
Private physician	381	183	198
Midwife	111	12	99

TABLE NO. 3

RESIDENT DEATHS ACCORDING TO MAJOR GROUPS OF CAUSES AND COLOR
WESTERN HEALTH DISTRICT—1939

CAUSE OF DEATH	TOTAL	WHITE	COLORED
All Causes	2,696	1,076	1,620
I. Infectious and parasitic diseases (exclusive of tuberculosis and syphilis)	54	13	41
Tuberculosis (all forms)	270	61	209
Syphilis	151	14	137
II. Cancers and other tumors	271	143	128
III. Rheumatic diseases, nutritional diseases, diseases of the endocrine glands and other general diseases	78	46	32
IV. Diseases of the blood and blood-making organs	14	7	7
V. Chronic poisonings and intoxications	5	3	2
VI. Diseases of the nervous system and of the organs of special sense	258	84	174
VII. Diseases of the circulatory system	650	335	315
VIII. Diseases of the respiratory system	231	77	154
IX. Diseases of the digestive system	124	56	68
X. Diseases of the genito-urinary system	266	105	161
XI. Diseases of pregnancy, child-birth and of the puerperal state	11	2	9
XII. Diseases of the skin and cellular tissue	..	..	..
XIII. Diseases of the bones and organs of locomotion	..	..	..
XIV. Congenital malformations	14	5	9
XV. Diseases of early infancy	79	26	53
XVI. Senility	..	..	..
XVII. Violent and accidental deaths	220	99	121

TABLE NO. 4

COMMUNICABLE DISEASES REPORTED IN THE WESTERN HEALTH DISTRICT—1939

Disease	Cases
Total	1,847
Chickenpox	227
Diphtheria	4
German measles	2
Measles	1,211
Meningococcus meningitis	7
Mumps	9
Poliomyelitis	7
Scarlet fever	36
Typhoid fever	8
Whooping cough	336

TABLE NO. 5

DIPHTHERIA TOXOID AND SMALLPOX VACCINE ADMINISTERED TO RESIDENTS OF THE WESTERN HEALTH DISTRICT—1939

Age at Date of Inoculation or Vaccination	Diphtheria Inoculation			Smallpox Vaccination		
	Total	White	Colored	Total	White	Colored
Total	2,736	676	2,060	2,352	538	1,814
Under 1 year	1,132	214	918	564	116	448
1	174	40	134	377	72	305
2	110	17	93	279	45	234
3	61	16	45	241	57	184
4	71	25	46	302	90	212
5	341	85	256	355	99	256
6	353	122	231	161	45	116
7	166	69	97	30	10	20
8	108	25	83	17	1	16
9	79	23	56	9	..	9
10 years and over	141	40	101	17	3	14

SOUTHEASTERN HEALTH DISTRICT

SOUTHEASTERN HEALTH DISTRICT

John A. Skladowsky, M.D.

Health Officer

Special attention was devoted during 1939 to continued expansion of many district activities. Enlargement of public health information facilities and service to the practising physicians and the people of the area were potent factors in furthering the district objective of bettering the health of the local community. The greatest single force in this connection was the active participation and cooperative support furnished by the nonofficial voluntary organizations associated with the district.

Personnel

Miss M. Isabelle Streckfus, assistant supervising nurse, was transferred on September 1 to the position of acting supervisor for the Southern Health District. On the same date Mrs. Ruth Pyle and Mrs. Florence Collins were transferred to the Western Health District and were replaced by Miss Lillian Wiese and Miss Ruth Rouse. Miss Helen Fluskey was assigned to the district on February 13.

Administration and Services

During the city-wide outbreak of measles which reached its height in the district in February, intensive measures for its control were inaugurated with particular emphasis on the prevention of measles deaths in children under three years of age and the modification of measles and prevention of its complications in susceptible contacts in that age group by the administration of placental extract and the subsequent follow-up of these cases. Advancement in the control of tuberculosis was undertaken during the year in collaboration with the Bureau of Tuberculosis through the inauguration of steps to expedite the admission of tuberculosis cases to the State sanatoria and examination of contacts of these cases. An additional diphtheria prevention and vaccination clinic established in the Servants of Mary Immaculate Day Nursery at 102 South Patterson Park Avenue served to further the means of securing these protective measures for children of that locality.

Intensified health information service to the residents of the area was further advanced with the publication in a local periodical of an article reviewing the activities and functions of the Southeastern Health District. Formal health instruction to groups of expectant mothers registered in the district's prenatal clinics maintained a steady progress, with increased interest and appreciation on the part of the mothers, to each of whom a

certificate was presented upon the completion of her attendance at a series of eight classes. The district has responded to all requests for talks and demonstrations on health subjects from special groups, public school students, medical students and public health officials. The distribution of printed material has been extensive and it is hoped that these activities will bring about a better understanding on the part of the people toward personal and community hygiene.

It is gratifying to report that the local practising physicians have increasingly availed themselves of the service rendered by the district for the distribution of laboratory supplies and biologic products and the consultative service in communicable diseases throughout the year. These services have encouraged the physicians to greater participation in activities of the district and a very cordial cooperation and harmonious relationship has resulted.

As has been the custom of previous years students from Goucher College, the Johns Hopkins School of Hygiene and Public Health, the University of Maryland School of Medicine, distinguished public health officials and lay observers have visited the district for study, observation and instruction. A plan designed to improve the existing relationship between the various districts of the Department was put into effect in October whereby the health officer of the Southeastern Health District attends regularly the conference meeting held in the Eastern Health District on the first Wednesday of each alternate month.

Personnel

John A. Skladowsky, M.D., Health Officer, Full Time
O. L. Long, M.D., Health Officer
Benjamin Jaffe, M.D., Health Officer
Rita Lankford, Junior Stenographer
Minnie Yenkinson, Junior Stenographer
Rae Serpick Bye, Senior Supervisor of Field Nurses
Stanley Imbierowicz, Janitor

Public Health Nurses

Nettie Anderson
Florence P. Colburn
Blanche C. Craig
Margaret Duddy
Helen F. Fluskey
Julia R. Hagenbuch
Florence G. Katz
Madeleine P. Lawson
Ida L. Lilly
Loretta C. Link
Virginia S. Pendleton
Grace B. Ridgaway
Ruth E. Rouse
Louise R. Schuster
Lillian M. Wiese

TABLE NO. 1

SUMMARY OF ACTIVITIES OF THE SOUTHEASTERN HEALTH DISTRICT—1939

ACTIVITY	TOTAL	WHITE	COLORED
Maternity Hygiene Service			
Individuals on register as of January 1, 1939			
Health Department	59	59	..
Babies' Milk Fund Association	95	85	10
New cases			
Health Department	148	148	..
Babies' Milk Fund Association	368	321	47
Total individuals carried			
Health Department	235	235	..
Babies' Milk Fund Association	478	420	58
Individuals on register as of December 31, 1939			
Health Department	43	43	..
Babies' Milk Fund Association	128	111	17
Home visits			
Health Department nurses	688	688	..
Babies' Milk Fund Association nurses	1,425	1,302	123
Home visits, not seen			
Health Department nurses	302	302	..
Babies' Milk Fund Association nurses	793	721	72
Visits in behalf of case			
Health Department nurses	20	20	..
Babies' Milk Fund Association nurses	15	14	1
Attendance to mother classes	2,190	2,190	..
Infant Health Supervision Service			
Infant hygiene clinic, Babies' Milk Fund Association			
Individuals on register as of January 1, 1939	813	780	33
New cases	1,160	1,104	56
Total cases carried	2,081	1,989	92
Individuals on register as of December 31, 1939	772	729	43
Attendances at conferences	9,444	9,049	395
Home visits			
Neonatal, Health Department nurses	500	500	..
Babies' Milk Fund Association	6,589	6,301	288
Diphtheria Prevention			
Home visits, Health Department nurses	1,814	1,813	1
Home visits, Babies' Milk Fund Association	1,096	980	116
Home visits, other cases			
Neonatal, Health Department nurses	446	446	..
Other, Health Department nurses	4	3	1
Home visits, not seen			
Health Department nurses	974	974	..
Babies' Milk Fund Association nurses	1,643	1,562	81
Visits in behalf of case			
Health Department nurses	33	33	..
Babies' Milk Fund Association nurses	94	92	2
Preschool Health Supervision Service			
Preschool hygiene clinic, Babies' Milk Fund Association			
Individuals on register as of January 1, 1939	1,492	1,419	73
Transferred from infant group	800	768	32
New cases	112	109	3
Total individuals carried	2,527	2,407	120
Individuals on register as of December 31, 1939	1,585	4,504	81
Attendance at conferences	6,562	6,370	192
Home visits	8,163	7,794	369
Home visits, diphtheria prevention			
Health Department nurses	1,336	1,336	..
Babies' Milk Fund Association nurses	66	60	6
Home visits, not seen			
Health Department nurses	323	323	..
Babies' Milk Fund Association nurses	1,596	1,534	62
Visits in behalf of case			
Health Department nurses	10	10	..
Babies' Milk Fund Association nurses	112	112	..
School Health Supervision Service			
Children examined by health officer			
Periodic examinations	5,834	5,722	112
Children with physical defects (new)	2,095	2,011	84
Defects corrected			
Tonsils and adenoids	264	251	13
Teeth	425	422	3
Eye defects	224	213	11
Children inspected by public health nurses			
Contacts and absentees	7,798	7,752	46
Classroom inspections	1,373	1,373	..

TABLE NO. 1—Continued

SUMMARY OF ACTIVITIES OF THE SOUTHEASTERN HEALTH DISTRICT—1939

ACTIVITY	TOTAL	WHITE	COLORED
School Health Supervision Service—(Continued)			
Special examinations	15,832	13,637	2,195
Treatment of minor ailments and accidents	11,004	10,691	313
Interview with parents at school	1,252	1,161	91
Children taken to clinics	729	729	..
Home visits			
Correction of physical defects	1,438	1,247	191
Other	224	221	3
Home visits, not seen	117	103	14
Visits in behalf of case	34	34	..
Tuberculosis Service			
Cases on register as of January 1, 1939			
Pulmonary case	491	463	28
Childhood type	155	145	10
New cases			
Pulmonary case	110	98	12
Childhood type	17	16	1
Cases on register as of December 31, 1939			
Pulmonary case	452	424	28
Childhood type	128	116	12
Home visits			
Presanatorium, pulmonary case	720	603	117
Postsanatorium, pulmonary case	1,952	1,883	69
Presanatorium, childhood type	614	558	56
Postsanatorium, childhood type	159	152	7
Other cases and contacts	481	435	46
Home visits, not seen	986	939	47
Visits in behalf of case	120	90	30
Venereal Disease Service			
Home visits	5	5	..
Acute Communicable Disease Service			
Home visits by public health nurse	3,964	3,895	69
Home visits, not seen	109	104	5
Visits in behalf of case	3	2	1
Other Morbidity Service			
Home visits to patient under one year of age			
Sore eye cases	909	887	22
Other cases by Health Department nurses	21	21	..
Other cases by Babies' Milk Fund Association nurses	735	729	6
Home visits to patients 1-5 years of age			
By Health Department nurses	13	13	..
By Babies' Milk Fund Association nurses	1,174	1,168	6
Home visits to patients of school age			
By Health Department nurses	995	975	20
Home visits to adult patients			
By Health Department nurses	17	16	1
Home visits, not seen	100	100	..
Visits in behalf of case	2	2	..

TABLE NO. 2

RESIDENT BIRTHS, SOUTHEASTERN HEALTH DISTRICT—1939

Place of Delivery and Attendant	Total	White	Colored
All Births	1,586	1,537	49
Hospital	1,065	1,037	28
Home	521	500	21
Out-patient delivery service	43	27	16
Private physician	397	397	..
Midwife	81	76	5

TABLE NO. 3

RESIDENT DEATHS ACCORDING TO MAJOR GROUPS OF CAUSES AND COLOR
SOUTHEASTERN HEALTH DISTRICT—1939

Cause of Death	Total	White	Colored
All Causes	1,036	966	70
I. Infectious and parasitic diseases (exclusive of tuberculosis and syphilis)	17	15	2
Tuberculosis (all forms)	59	50	9
Syphilis	14	9	5
II. Cancers and other tumors	139	133	6
III. Rheumatic diseases, nutritional diseases, diseases of the endocrine glands and other general diseases	38	38	..
IV. Diseases of the blood and blood-making organs	4	4	..
V. Chronic poisonings and intoxications	6	5	1
VI. Diseases of the nervous system and of the organs of special sense	79	69	10
VII. Diseases of the circulatory system	317	309	8
VIII. Diseases of the respiratory system	92	80	12
IX. Diseases of the digestive system	49	46	3
X. Diseases of the genito-urinary system	73	69	4
XI. Diseases of pregnancy, child-birth and of the puerperal state	6	5	1
XII. Diseases of the skin and cellular tissue	1	1	..
XIII. Diseases of the bones and organs of locomotion	1	1	..
XIV. Congenital malformations	9	9	..
XV. Diseases of early infancy	26	25	1
XVI. Senility	1	1	..
XVII. Violent and accidental deaths	105	97	8

TABLE NO. 4

COMMUNICABLE DISEASES REPORTED IN THE SOUTHEASTERN HEALTH DISTRICT—1939

DISEASE	CASES
TOTAL	1,931
Chickenpox	184
Diphtheria	4
German Measles	6
Measles	1,423
Meningococcus Meningitis	4
Mumps	22
Scarlet Fever	92
Typhoid Fever	2
Whooping Cough	194

TABLE NO. 5

DIPHTHERIA TOXOID AND SMALLPOX VACCINE ADMINISTERED TO RESIDENTS OF THE SOUTHEASTERN HEALTH DISTRICT—1939

AGE AT DATE OF INOCULATION OR VACCINATION	DIPHTHERIA INOCULATION			SMALLPOX VACCINATION		
	TOTAL	WHITE	COLORED	TOTAL	WHITE	COLORED
TOTAL	1,747	1,646	101	1,879	1,803	76
Under 1 year	830	796	34	203	198	5
1	141	138	3	321	317	4
2	79	75	4	225	217	8
3	76	72	4	242	240	2
4	56	53	3	267	266	1
5	116	109	7	331	319	12
6	168	146	22	212	189	23
7	57	51	6	35	32	3
8	84	79	5	2	1	1
9	63	55	8	9	5	4
10 years and over	77	72	5	32	19	13

MEDICAL SECTION

BUREAU OF COMMUNICABLE DISEASES

BUREAU OF COMMUNICABLE DISEASES

David H. Andrew, M.D., C.P.H.

Director

There was an increase in the total number of cases of communicable diseases reported during 1939 as compared with 1938. The increase was due primarily to the prevalence of measles during the first part of the year, but several other of the communicable diseases, such as poliomyelitis, tularemia, pneumonia and mumps also showed an increase. An interesting and satisfactory situation was noted in the marked decrease in the number of cases of diphtheria and typhoid fever reported during 1939 as compared with 1938. No administrative change of major importance was made in any of the control procedures in regard to communicable diseases.

Diphtheria

A total of 67 cases and 3 deaths from diphtheria was reported during 1939 as compared with 125 cases and 3 deaths during 1938. The number of cases of diphtheria reported during 1939 was lower than for any corresponding year in the records of the city. A slight increase in the incidence of the disease was noted during the last two months of the year, but there was no evidence of any marked outbreak. The program of diphtheria prevention inaugurated in 1938 was continued during 1939. No intensive city-wide or localized diphtheria prevention campaign was held during 1939.

During the year private physicians reported that they had given diphtheria toxoid to 4,000 children and during 1938 the private physicians reported 2,774 children to whom they had given the inoculations. This was the largest number of children ever reported as having received diphtheria toxoid from private physicians in Baltimore during any one year.

A total of 8,786 children under one year of age was recorded as having received the diphtheria toxoid inoculation in 1939 as compared with 7,349 in 1938. This figure of 1939 represents the largest number of children under one year of age ever recorded as having received the diphtheria toxoid in the city in a single year. A total of 16,217 children of all ages was recorded during the year as having received the diphtheria toxoid inoculation. This number was exceeded in 1938 when 19,325 inoculations were given and in 1937 when there were 17,934. At the close of 1939 69 per cent of the children under five years of age in Baltimore was recorded as inoculated against diphtheria and 64 per cent in the group from five to nine years of age.

An investigation of each case of diphtheria reported in 1939 revealed that 23 of the 67 patients had according to Health Department records received some type of diphtheria inoculation in the past. A comment on this phenomenon appears in the Report of the Commissioner of Health. Ten other patients were believed by the parents to have received some type of inoculation against diphtheria but no record of it could be found and the 34 remaining patients had no history of ever having received the inoculation. A study of the histories of the 3 persons who died of diphtheria during 1939 disclosed that none had ever had an inoculation against diphtheria. The ages of the three individuals in whom the disease proved fatal in order of their occurrence were four, twenty-three and fourteen years respectively.

Typhoid Fever

Twenty-four cases and 1 resident death of typhoid fever were reported in Baltimore during 1939 as compared with 51 cases and 8 deaths for 1938. For the disease the cases were very evenly distributed throughout the year. The 24 cases reported during 1939 was the lowest number of cases of typhoid fever ever reported in the city during a period of one calendar year. A summary of the allocation of the reported 1939 typhoid fever cases follows:

Residents of Baltimore infected in city	22	
Residents of Maryland counties infected in city	0	
Cases infected outside of Maryland	1	
Residents of Baltimore infected in counties of Maryland	1	
TOTAL TYPHOID FEVER CASES—INFECTION CHARGED TO BALTIMORE		24
Maryland county cases hospitalized in Baltimore	17	
TOTAL TYPHOID FEVER CASES—INFECTION CHARGED ELSEWHERE IN MARYLAND		17
Residents of Baltimore—infection charged to other States		0
Non-residents of Maryland hospitalized in city		1
Suspected typhoid fever cases not confirmed and not recorded as typhoid fever		80
TOTAL TYPHOID FEVER INVESTIGATIONS		122

Typhoid Fever Carriers

Every case of typhoid fever reported in Baltimore during 1939 was investigated by a full time medical health officer. The procedure of obtaining stool cultures from every adult contact in each household and also any friends or relatives who may have served meals to the patient during

the month prior to the onset of the illness was continued throughout the year. In addition, in many instances where carriers were not found as a result of stool examinations, blood was obtained from the contacts and submitted to Dr. Calista Eliot of the Johns Hopkins School of Hygiene and Public Health who in turn examined the blood for evidence of Vi antibody which is considered by many authorities to be diagnostic for the typhoid fever carrier state. In one instance where two suspected carriers in the household had refused to cooperate in the proper submission of stool specimens, the presence of Vi antibody in one confirmed the epidemiological investigation in identifying the carrier. In the investigation of two other cases, contacts were found who had Vi antibody in the blood, but it was not possible to confirm their carrier state by authentic urine and stool specimen examinations. Whenever typhoid bacilli were found in the stool of carriers the Vi antibody was always present. Two cases of typhoid fever were traced to carriers who were previously known to the Health Department. In addition, a total of 5 new typhoid fever carriers was found as a result of the investigation of each case and 60 carriers were under supervision at the end of the year.

Tularemia

A total of 31 cases and 8 deaths of tularemia was recorded in 1939 as compared with 13 cases and 3 deaths for 1938. This was the largest number of cases and deaths from this disease to be reported in any one year in the city. The wild rabbits of Maryland are known to be infected with tularemia, but due to State conservation laws they are not sold within the city limits of Baltimore. Occasionally a resident of the city is infected by Maryland rabbits which he has handled either while hunting or while preparing a meal. Investigation reveals that the rabbits which caused the Baltimore cases, in the majority of instances, came from the west north central section of the United States. Before and during the rabbit season late in 1939 the Bureau of Food Control had warned the marketmen and hucksters and by various means of publicity had advised housewives how to protect themselves against the disease. These measures were apparently of little avail and it is believed that the only practical approach to a method for an effective control of the disease in the city lies in the promulgation of a suitable ordinance banning the sale of wild rabbits.

Poliomyelitis

There were 20 cases of paralytic anterior poliomyelitis with no deaths reported in Baltimore during 1939 as compared with 3 cases and no deaths in 1938. All of the cases in 1939 occurred among persons of fairly low economic status who lived in the areas to the south and west of the business section of the city.

Measles

During the year a total of 11,833 cases and 9 deaths of measles was recorded as compared with 1,119 cases and no deaths in 1938. Placental extract was distributed free of charge to private physicians for any patients under three years of age who had been in contact with a case of measles. Those young children who had no family physician were given the placental extract by Health Department physicians. Follow-up visits to study the efficacy of the material were made by public health nurses and Department physicians in the homes of certain children who had been given the placental extract. Every child known to be ill with pneumonia following measles was hospitalized at once at Sydenham Hospital. A total of 9 children died from measles and its complications during the year, a smaller number of deaths than is usually experienced in an outbreak the size of that in 1939. It is believed that three factors entered into this gratifying situation: (1) the large number of young children given the placental extract resulting in a mild case of the disease with no complications; (2) the mild variety of the disease in many of the observed cases; and, probably most important, (3) the recovery from pneumonia of children with measles admitted to Sydenham Hospital, due primarily to the use of sulfapyridine.

Animal Bites

A total of 1,902 cases of dog or other animal bites was reported to the Health Department as compared with 1,896 for the previous year. No known case of rabies occurred in the animal population of Baltimore during the year, nor has there been any since November, 1931.

Personnel

David H. Andrew, M.D., C.P.H., Director
L. S. Horka, M.D., Health Officer
Roscoe Z. G. Cross, M.D., Health Officer
C. R. Goldsborough, M.D., Health Officer
Henry B. Kolb, M.D., Health Officer
Howard H. Warner, M.D., Health Officer
H. W. Wheaton, M.D., Health Officer
W. A. Sinton, M.D., Health Officer
L. J. Rosenthal, M.D., Health Officer
Erma M. Hoshall, Assistant Director, Bureau of Public Health Nursing
Alice V. Owings, Senior Clerk
Goldie K. Attman, Senior Stenographer
Harriette L. Charkatz, Junior Stenographer
Amelia Link, M.D., Health Officer (Substitute)

TABLE NO. 1

CASES AND RESIDENT DEATHS OF REPORTABLE DISEASES—1936-1939

DISEASES	1939		1938		1937		1936	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Chancroid	167	..	172	..	192	1	181	1
Chickenpox	2,231	1	3,435	..	3,972	2	2,167	1
Diarrhea and enteritis								
Under 2 years of age	156	45	373	80	127	69	186	90
Two years and over	30	17	50	15	24	20	32	21
Diphtheria	67	3	125	3	257	7	146	8
Dysentery								
Amebic	13	1	13	..	6	1	5	..
Bacillary	134	12	194	31	121	14	190	28
Unspecified	43	..	181	1	39	1	36	1
Encephalitis lethargica	1	1	3	4	8	5	6	4
Erysipelas	89	4	87	4	105	4	114	19
German measles	48	..	100	..	138	..	938	..
Gonococcus infection	2,252	12	2,289	21	2,213	16	1,663	14
Gonorrheal ophthalmia	27	..	31	..	36	..	36	..
Impetigo contagiosa	59	..	55	..	76	..	76	..
Influenza	562	63	227	53	840	104	361	76
Leprosy	..	..	1	..	..	..	..	..
Malaria	3	..	14	..	10	2	16	..
Measles	11,833	9	1,119	..	9,227	25	4,361	7
Meningococcus meningitis	18	6	28	7	109	30	285	94
Mumps	1,054	1	578	..	3,900	..	4,847	..
Paratyphoid fever	2	..	3	..	5	1	..	..
Pellagra	19	6	17	7	9	8	9	5
Pneumonia								
Broncho	740	362	482	405	530	481	556	467
Lobar	1,141	305	748	359	735	557	825	549
Psittacosis	..	..	..	..	..	..	..	..
Poliomyelitis (paralytic cases)	20	..	3	..	47	9	7	..
Rabies in man	..	..	..	..	..	..	..	..
Rocky Mountain spotted fever	1	..	5	4	1	..	..	..
Scarlet fever	598	1	1,092	3	810	4	1,046	5
Septic sore throat	97	1	106	3	166	13	67	10
Smallpox	..	..	..	..	..	..	..	..
Salmonella infection	8	..	1	1	1	..	4	..
Syphilis	7,507	258	8,236	278	5,882	269	5,625	267
Tetanus	8	3	6	6	5	..	2	1
Trachoma	3	..	1	..	1	..	..	..
Trichinosis	1	..	5	..	2	..	1	..
Tuberculosis								
Pulmonary	1,430	631	1,613	668	1,755	810	1,497	790
Other forms	85	42	57	43	76	51	68	46
Tularemia	31	8	13	3	13	2	14	1
Typhoid fever	24	1	51	8	68	7	49	8
Typhus fever	6	2	3	1	2	..	1	..
Undulant fever	9	1	8	1	7	..	5	..
Vincent's angina	24	..	31	..	39	2	25	1
Weil's disease	1	..	7	..	..	..	..	..
Whooping cough	1,575	9	1,548	19	3,661	35	3,570	36

TABLE NO. 2

CASES AND RESIDENT DEATHS FROM CERTAIN DISEASES ACCORDING TO MONTHS—1939

Diseases		Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Typhoid fever	Cases	24	2	1	1	2	1	1	2	2	5	3	1	3
	Deaths	1	..	..	..	..	..	..	..	..	1	..	..	..
Paratyphoid fever	Cases	2	1	..	..	..	..	..	..	..	..	1	..	..
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhus fever	Cases	6	..	..	1	..	1	..	1	..	..	..	1	2
	Deaths	2	..	..	1	..	..	..	..	..	..	..	..	1
Smallpox	Cases	..	..	..	..	..	..	..	..	..	..	..	..	..
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	Cases	11,833	2,412	4,080	3,195	1,368	585	147	13	2	11	7	7	6
	Deaths	9	4	3	2	..	..	..	..	..	..	..	..	..
Scarlet fever	Cases	598	79	92	97	91	80	26	16	10	24	22	20	41
	Deaths	1	..	..	..	..	..	..	..	..	..	..	1	..
Whooping cough	Cases	1,575	100	54	48	55	92	174	196	199	158	146	174	179
	Deaths	9	..	3	1	..	..	1	..	..	..	1	..	3
Diphtheria	Cases	67	3	6	5	2	6	5	4	2	2	5	10	17
	Deaths	3	1	2	..	..	..	..	..	..	..	..	..	..
Influenza	Cases	562	40	321	90	20	9	4	10	1	4	20	13	30
	Deaths	63	6	15	13	6	2	3	4	..	1	2	6	5
Poliomyelitis (paralytic cases)	Cases	20	..	..	..	..	..	..	..	2	5	9	3	1
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Encephalitis lethargica	Cases	1	..	1	..	..	..	..	..	..	..	..	..	..
	Deaths	1	..	1	..	..	..	..	..	..	..	..	..	..
Meningococcus meningitis	Cases	18	1	5	2	2	2	1	..	2	..	1	..	2
	Deaths	6	1	2	..	1	1	..	..	..	..	1	..	..
Tuberculosis, pulmonary	Cases	1,430	120	112	128	112	168	143	139	101	93	109	101	104
	Deaths	631	50	51	53	65	51	51	52	60	48	47	47	56
Tuberculosis, other forms	Cases	85	4	8	14	9	12	11	7	8	1	2	3	6
	Deaths	42	1	4	6	3	5	7	5	3	3	1	2	2
Chickenpox	Cases	2,231	321	359	288	240	238	120	15	16	11	62	261	300
	Deaths	1	1	..	..	..	..	..	..	..	..	..	..	..
German measles	Cases	48	9	10	8	4	6	4	..	3	1	..	1	2
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Rocky Mountain spotted fever	Cases	1	..	..	..	..	..	..	1	..	..	..	..	..
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Tularemia	Cases	31	4	1	..	..	..	..	1	..	..	..	..	25
	Deaths	8	..	..	..	..	..	..	1	..	..	..	..	7
Bronchopneumonia	Cases	740	100	159	84	62	61	24	19	25	38	38	41	89
	Deaths	362	41	70	38	36	28	9	11	17	25	22	23	42
Lobar pneumonia	Cases	1,141	175	202	125	115	96	63	32	31	29	42	97	134
	Deaths	305	56	54	31	21	20	14	10	7	10	15	26	41

TABLE NO. 3

DIPHTHERIA PREVENTION SUMMARY

Age at Time Protected	Persons Having Received the Required Dosage of an Approved Immunizing Agent—Years in Which Treated							Total at Specified Ages, as of December 31, 1939, Who Have Received Toxoid	
	1933 and Prior	1934	1935	1936	1937	1938	1939		
Under 1 year	3,319	4,435	4,702	5,925	5,534	7,349	8,786	8,786	Total under 5 yrs. 41,372
1 year	3,930	2,111	1,292	2,047	1,289	1,302	1,079	8,428	
2 years	3,979	1,400	703	1,208	653	745	555	7,391	
3 years	4,178	1,220	513	923	536	585	421	8,380	
4 years	4,205	1,072	482	846	489	553	400	8,387	
5 years	5,151	2,273	1,544	1,626	1,152	1,368	1,241	9,265	Total 5–9 yrs. 51,892
6 years	7,074	2,668	1,951	1,732	1,723	1,940	1,640	10,553	
7 years	8,662	966	498	479	1,084	1,073	706	10,487	
8 years	7,187	362	186	247	1,049	1,044	493	10,596	
9 years	7,285	205	114	166	1,128	1,130	337	10,991	
10 years and over	30,384	223	39	247	3,172	2,194	502	89,747	Grand Total 183,705
Unstated	347	74	29	40	105	42	57	694	

NOTE: Figures in column headed "1933 and prior" are the number of children at specified ages in 1933 who had been inoculated that year or prior.

TABLE NO. 4

DIPHTHERIA CASES AND PERCENTAGE OF POPULATION (BY AGE GROUPS) GIVEN AN IMMUNIZING AGENT—1925-1939

Year	Number Diphtheria Cases Reported	Estimated Population as of July 1		Number Given Immunizing Agent as of December 31		Percentage Given Immunizing Agent as of December 31	
		Age Group 0-4	Age Group 5-9	Age Group 0-4	Age Group 5-9	Age Group 0-4	Age Group 5-9
1939	67	60,073	81,037	41,372	51,892	68.86	64.03
1938	125	60,549	80,189	38,155	50,538	63.01	63.02
1937	257	61,024	79,341	35,186	47,351	57.65	59.68
1936	146	61,500	78,493	33,354	41,697	54.23	53.12
1935	119	61,976	77,644	28,086	40,907	45.32	52.68
1934	108	62,452	76,797	25,644	38,754	41.06	50.46
1933	137	62,298	75,948	19,611	35,360	31.16	46.55
1932	254	63,404	75,099	15,194	35,407	23.96	47.15
1931	416	63,878	74,252	10,489	30,630	16.42	41.25
1930	522	64,355	73,403	6,776	35,223	10.53	47.99
1929	547	64,831	72,555	5,824	30,290	8.98	41.75
1928	829	65,308	71,706	3,334	25,277	5.11	35.25
1927	1,619	65,783	70,858	3,438	18,358	5.23	25.91
1926	837	66,261	70,009	2,449	11,340	3.70	16.20
1925	897	66,735	69,161	1,660	5,458	2.49	7.90

TABLE NO. 5

INOCULATION HISTORIES OF DIPHTHERIA CASES—1939

Groups	Cases Without History of Previous Inoculation	Cases With Inoculation History					
		Total	Confirmed				Unconfirmed
			Total	Alum-Precipitated Toxoid	Ramon Toxoid	Toxin-Antitoxin	
Total Cases	34	33	23	18	4	1	10
A. Classified by Age							
Age Groups							
0-2 years	4	3	3	3	0	0	0
3-4 years	4	10	7	7	0	0	3
5-9 years	6	10	6	4	2	0	4
10-14 years	6	9	7	4	2	1	2
15 and over	14	1	0	0	0	0	1
B. Classified by Time Since Inoculation							
Time Since Inoculation							
0-3 months		0	0	0	0	0	0
4-11 months		3	2	2	0	0	1
1 year		7	6	6	0	0	1
2 years		6	6	6	0	0	0
3 and over		15	9	4	4	1	6
Unspecified		2	0	0	0	0	2

SYDENHAM HOSPITAL

SYDENHAM HOSPITAL

Myron G. Tull, M.D.

Superintendent

During the 1939 measles outbreak, 93 patients with measles complicated by pneumonia were admitted to the hospital and all recovered following treatment with sulfapyridine. Most of the patients in this group were infants under three years of age among whom the mortality rate prior to the use of sulfapyridine had been as high as 30 per cent. Another disease for which sulfapyridine proved valuable was pneumococcus meningitis. During the year 13 patients with this disease were admitted with 7 recoveries, a rate of 53 per cent in an illness which heretofore had been almost uniformly fatal. Sulfapyridine was also used in the treatment of patients with whooping cough complicated by pneumococcus pneumonia. Although the results have been favorable, the effect of this drug was not so striking as that obtained in the treatment of pneumococcus pneumonia associated with measles. Use was made of the type specific anti-pneumococcic serum in conjunction with sulfapyridine in patients who did not respond promptly to the use of sulfapyridine alone.

A study of the development of immunity during the course of whooping cough pneumonia was begun and one of the interesting features observed was that precipitinogen was not found in the urine nearly so frequently in whooping cough pneumonia as in primary pneumonia. It also appeared that agglutinins were formed much more slowly in whooping cough pneumonia than in lobar pneumonia. This may account for the longer course and the greater tendency of chronicity in whooping cough pneumonia.

During November and December a few patients with pneumonia were treated with the new drug, sulfathiazole. The drug appeared to be effective although no comparison with sulfapyridine could be made because of the small number of patients treated. However, it is quite apparent that the use of sulfathiazole is rarely accompanied by nausea or vomiting which are so frequent following the use of sulfapyridine.

By means of filtration, neutralization and cross immunization experiments, the virus of lymphocytic choriomeningitis was recovered from the spinal fluid of four patients admitted for meningitis. All of these patients recovered and during their convalescence developed demonstrable neutralizing antibodies against the virus.

Services

The total number of admissions to Sydenham Hospital of patients for all diseases during 1939 was 1,218, a decrease of 47 cases as compared with the previous year. The principal diseases and their totals were:

Diphtheria	60
Scarlet fever	278
Measles	236
Whooping cough	78
Streptococcus sore throat	88

There were 60 patients admitted with diphtheria, 5 of whom had the laryngeal type requiring intubation, and all recovered. There were recorded 5 deaths from diphtheria; 1 was a Baltimore resident and the remaining 4 were non-residents brought to the city for hospitalization.

A gradual decrease in the number of patients admitted with scarlet fever was noted as compared with the previous year. A total of 278 cases of this disease was admitted during 1939 as compared with 471 for 1938.

A total of 51 surgical operations was performed during the year of which there were 38 tonsillectomies and adenoidectomies, 1 mastoidectomy, 1 thoracotomy, 6 tracheotomies and 5 operations for other conditions. A total of 750 X-rays of chests was taken.

The total number of deaths from all diseases was 67 and the death rate was 5.5 per cent as compared with 6.8 per cent for 1938. Deducting 26 deaths which occurred within twenty-four hours after admission, the death rate was 3.4 per cent as against 5.1 per cent for 1938. There was a total of 39 post-mortem examinations performed, or 58.2 per cent of the number of deaths.

The third floor of the hospital was opened and operated from January 14 to May 9 due to an increase in the incidence of measles. The cost of subsistence per person per day was $0.63. The average daily cost per patient was $7.89.

Personnel

Myron G. Tull, M.D., Superintendent
Horace L. Hodes, M.D., Director of Medical Research
Jacob S. Light, M.D., Resident Hospital Physician
John R. Black, M.D., Hospital Intern
M. C. Schwartzman, Senior Clerk
Edna E. Herget, Junior Clerk
Bertha J. Potthast, Senior Stenographer
Lulu N. Rocco, Municipal Exchange Operator
Ruth E. Jones, Municipal Exchange Operator
Esther G. Haas, Municipal Exchange Operator
Edwin Whittemore, Pharmacist

Frank Comploier, Junior Bacteriologist
Salvatore Giordano, Laboratory Helper
Anne M. Roebuck, Superintendent of Nurses
Edith B. Sacks, Assistant Head Hospital Nurse
M. G. Crawford, Night Supervisor of Nurses
Alice S. Montell, Housekeeper
Arlie McCoy, Hospital Orderly
Charles Couglar, Hospital Orderly
Pearl E. M. King, Seamstress
Ennis Pearson, Laundryman
E. A. Schanberger, Laundryman
Anna Emrick, Laundress
Mary Barry, Laundress
Lauretta Rizzo, Laundress
Margaret Henrichs, Laundress
Eva Buttner, Laundress
Matilda Kuipers, Laundress
Ralph E. Guhl, Head Cook
R. Seabrease, Cook
P. J. Reilly, Jr., Storekeeper
Nathaniel M. Crow, Painter
William Farrell, Handy Man
George A. Rider, Gardner and Pruner
Adam Helinski, Watchman
Ferdinand Hammett, Chauffeur
G. W. Ilgenfritz, Chauffeur
Melvin Creamer, Chauffeur
Thomas Grady, Chief Engineer
W. M. Tracy, Shift Engineer
Harry Saltzman, Shift Engineer
Spence Spry, Shift Engineer
Timothy O'Neill, Oiler
Ethan Kline, Oiler
Benhard Nelson, Steam Fireman
George Ott, Steam Fireman
Edward E. Weeks, Steam Fireman

Charge Nurses

Pauline E. DelSignore
Lillian Fieldman
Margaret Gogel
Ethel F. Grese
Isabel Kelbaugh
Romaine Agnes McKim
Margaret W. Wood

Graduate Nurses

Eugenie E. Anderson
Louise Emma Beagle
Grace R. Boggs
Ethel Mae Crew
Ann Irene Dick
Lena Mae Elliott
Hattie Lou Ennis
Katharine S. Gairoard
Anna M. M. Golish
Blanche L. Kahley
Margaret Emily Maguire
Bertha A. Schrock
Dorothy V. Sturges
Teresa Rosa Verderamo

Domestics

Clarence Beall
Catherine Behnke
Caroline E. Brenner
Bertha Burch
Aram J. Carpentier
Grace Dotterweich
Erma Dunkle
Lillian G. Fisher
James O. Fitzgerald
Rose D. Gorman
Pearl Hamlin
Millard Holland
Margaret Kinkle
Nellie E. Lake
Dorothea Luht
F. J. Neslein
Harry W. Poole
Vivian Estrep Stratemyer
Reed Smoot
Audrey Taylor
Catherine Zang

TABLE NO. 1
HOSPITAL CENSUS

Patients in hospital at beginning of year		45
Patients in hospital at end of year		55
Maximum number of patients in hospital at one time		104
Minimum number of patients in hospital at one time		26
Total number of admissions		1,218
Daily average number of patients		51.9
Average number of days stay of patients:		
Scarlet fever		22.7
Diphtheria		24.7
Diphtheria carrier		13.1
Total number of days maintenance given patients	18,977	
Total number of days maintenance given employees	29,477	
Total number of days maintenance given patients and employees		48,454

TABLE NO. 2

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

Admission Diagnosis	Admissions			Deaths			Deaths Within 24 Hours		
	Total	White	Colored	Total	White	Colored	Total	White	Colored
Total	1,218	923	295	67	40	27	26	17	9
Measles	233	199	34	..	..	..	..	..	..
Measles encephalitis	3	3	..	3	3	..	1	1	..
Scarlet fever	278	211	67	1	1	..	1	1	..
Whooping cough	78	41	37	7	4	3	4	2	2
Diphtheria	60	50	10	5	5	..	1	1	..
Diphtheria carrier	27	25	2	..	..	..	..	..	..
Dysentery, bacillary	6	6	..	..	..	..	..	..	..
Erysipelas	60	56	4	1	1	..	..	..	..
Poliomyelitis	22	11	11	..	..	..	..	..	..
Meningococcus meningitis	11	9	2	2	2	..	1	1	..
Tetanus	3	1	2	2	..	2	..	..	..
Tuberculosis	2	..	2	..	..	..	..	..	..
Tuberculous meningitis	11	1	10	11	1	10	..	..	..
Syphilis of central nervous system	3	1	2	..	..	..	..	..	..
Gonorrheal ophthalmia	20	18	2	..	..	..	..	..	..
Gonorrheal vaginitis	5	2	3	..	..	..	..	..	..
Staphylococcus septicemia	4	4	..	4	4	..	3	3	..
Chickenpox	11	10	1	..	..	..	..	..	..
German measles	2	2	..	..	..	..	..	..	..
Mumps	8	5	3	..	..	..	..	..	..
Mumps meningitis	2	2	..	..	..	..	..	..	..
Influenzal meningitis	4	..	4	5	1*	4	1	..	1
Pneumococcus meningitis	13	5	8	6	2	4	3	..	3
Streptococcus meningitis	5	5	..	3	3	..	3	3	..
Lymphocytic meningitis	9	7	2	..	..	..	..	..	..
Meningitis, cause unknown	13	6	7	..	..	..	..	..	..
Meningismus	5	1	4	..	..	..	..	..	..
Bronchopneumonia	27	21	6	2	1	1	1	..	1
Lobar pneumonia	16	8	8	3	2	1	3	2	1
Streptococcus sore throat	88	66	22	1	1	..	1	1	..
Laryngitis	8	5	3	..	..	..	..	..	..
Pharyngitis	25	19	6	..	..	..	..	..	..
Tonsillitis	8	6	2	..	..	..	..	..	..
Other conditions of upper respiratory tract	47	39	8	2	2	..	1	1	..
Nephritis	3	2	1	..	..	..	..	..	..
Other conditions	95	75	20	9	7	2	2	1	1
No disease	3	1	2	..	..	..	..	..	..

* Admitted in 1938.

TABLE NO. 3
LABORATORY EXAMINATIONS

Total	21,231
CULTURES	
Spinal fluid	473
Urine	28
Blood	552
Pus	301
Nose or throat for diphtheria	7,487
Throat for streptococcus	1,981
Stool	53
Pleural fluid	4
Sputum	4
Water	2
Vagina	5
Nose	4
Gums	1
SMEARS	
Vagina for gonococcus	938
Eye for gonococcus	126
Sputum for tuberculosis	7
Throat for Vincent's	4
ANIMAL INOCULATION TESTS FOR DIAGNOSTIC PURPOSES	
Blood and spinal fluid for St. Louis encephalitis	1
Sputum for tuberculosis	2
Spinal fluid for choriomeningitis	3
Spinal fluid for tuberculosis	3
Mouse inoculation for isolation of pneumococci	574
TESTS FOR ISOLATION OF VIRUS	
Spinal fluid	5
Brain organs	3
Throat washings	2
Blood	2
Urine	2
Stool	1
Serous fluids	3
MISCELLANEOUS	
Pneumococcus typing	574
Streptococcus typing	118
Streptococcus grouping	109
Routine urine examinations	3,183
Blood counts	1,471
Tuberculin tests	1,086
Sulfanilamide determinations	434
Sulfapyridine determinations	162
Sulfathiazole determinations	9
Addis counts	516
Phenolsulphonthalein tests	556
Non-protein nitrogen tests	293
Blood sugars	74
Blood chlorides	53
Spinal fluid sugars	16
Kline serologic tests for syphilis	6

TABLE NO. 4

POST-MORTEM EXAMINATIONS

Total	39
Measles encephalitis	1
Scarlet fever	1
Whooping cough and bronchopneumonia	2
Diphtheria and myocarditis	3
Meningococcus meningitis	2
Tetanus	2
Tuberculosis and tuberculous meningitis	6
Staphylococcus septicemia	4
Granulocytopenia	2
Influenzal meningitis	4
Streptococcus meningitis	2
Pneumococcus meningitis	4
Brain abscess	2
Bronchopneumonia	1
Lobar pneumonia	1
Lobar pneumonia, empyema and lateral and longitudinal sinus thrombosis	1
Pneumococcic laryngotracheobronchitis	1

BUREAU OF TUBERCULOSIS

BUREAU OF TUBERCULOSIS

Phineas J. Sparer, M.D., M.P.H.

Director

Dr. Bartus T. Baggott, Chief of the Tuberculosis Clinics, resigned on April 30 after nineteen years of faithful service in the City Health Department. The Commissioner of Health then requested the director of the bureau, in addition to his other work, to assume the duties of medical supervisor of the clinics. The director of the bureau attended the meeting of the National Tuberculosis Association in Boston from June 26 to 29.

An event of first importance in 1939 was the preliminary preparation of records for the inauguration of the new visible Kardex register to improve the administrative handling and care of cases. A new form, *Tuberculosis Register Record,* has been drafted to be used with the new register and will replace the *Summary Record,* as the new form will include a summary of the services rendered in tuberculosis care.

Tuberculosis Morbidity and Mortality

In 1939 there was a total number of 1,515 primary reports of all forms of tuberculosis of which 703 or 46.4 per cent was white and 812 or 53.6 per cent colored as against 1,670 recorded cases, 898 white and 772 colored for 1938. The percentages are striking when it is remembered that the colored group represents 20 per cent of the city's total population. For the second year in succession the resident tuberculosis mortality rate showed a decline, thus placing the 1939 rate at a new minimum low. The number of resident deaths from all forms of tuberculosis decreased from 711 in 1938 to 673 in 1939. The specific resident death rate for the city's total population was 77.4 per 100,000 which is less by 5 points than the previous all-time minimum low in 1938; the white and colored death rates were 48.3 and 194.3 respectively as contrasted with 54.8 and 195.1 in 1938. It is apparent that these figures represent a slight decrease in the incidence and mortality of tuberculosis among the white and colored as compared with 1938. By all means, admittedly, the huge problem of tuberculosis control lies in the colored population of the city. The present situation forms a part of the general downward trend which has continued for the past several decades in the city's tuberculosis death rate. Nonetheless, the tuberculosis death rate level for Baltimore is too high as compared with the rates of 68 for Maryland and 50 for the United States in 1939.

Tuberculosis Clinics

The personnel and facilities for the examination of clinic patients were overtaxed, as in the preceding few years, and clinic activities continued at utmost capacity throughout the year. Beginning March 13 the Health Department clinic staff was relieved of pneumothorax work when two part time physicians and a nurse were added to the personnel of the two clinics by the Sanatorium Commission through funds made available by the Maryland Tuberculosis Association. Arrangements were made to have the pneumothorax clinics held during morning hours in order to avoid interference with the afternoon diagnostic service. There were 939 pneumothorax refills given to 37 white and 5 colored patients. On June 10 one of the pneumothorax physicians was assigned by the Commissioner of Health on a volunteer basis as a physician in the afternoon diagnostic clinic and he acted in this capacity until the close of the year.

The new patients admitted to the two Health Department clinics during the year numbered 3,173; of these, 1,895 were white and 1,278 colored. Of the new admissions adults numbered 2,286 or 72 per cent and children numbered 887 or 28 per cent. The total number of persons seen at the clinics was 4,748 and these made an aggregate of 9,307 visits as compared with a total of 4,736 persons and an aggregate of 8,845 visits in 1938. The Mantoux tuberculin test was given to 830 persons, predominantly children, and 400 or 46.7 per cent showed positive reactions. There were 3,145 patients who received chest X-ray examinations, of which 2,145 were plates and 1,000 were fluoroscopic observations. The clinic physicians reported 565 positive cases of tuberculosis; of these, 43.5 per cent were minimal tuberculosis, including the childhood type, and 56.5 per cent were advanced. White patients constituted 295 or 52.2 per cent of the positive cases and colored 270 or 47.8 per cent. These figures disclose that 21.1 per cent of the colored admissions to the clinics and 15.6 per cent of the white admissions were tuberculous. It is worthy of note that Department physicians were responsible during 1939 for 37.3 per cent of the newly reported cases of tuberculosis in Baltimore. Sanatorium care was recommended for 366 patients; of these, 189 or 51.6 per cent were white and 177 or 48.4 per cent colored. Only 206 or 56.1 per cent of these patients were admitted to a sanatorium during the year. Of the white patients recommended for sanatorium care 136 or 71.9 per cent were admitted, but of the colored patients recommended for sanatorium care only 70 or 39.5 per cent were admitted. The remainder either refused sanatorium care or were still on the waiting list at the close of the year.

Three groups referred patients to the clinics. In the first group were the city's private physicians who referred 1,680 or 52.9 per cent of the total

patients on a consultation basis. In the second group were the public health nurses who referred 929 or 29.3 per cent of the patients. In the third group are included 564 patients or 17.8 per cent of the total who were referred by other clinics or welfare agencies, or who came to the clinic of their own accord.

As in previous years, the clinic at 28 South Broadway continued to receive the majority of white patients admitted whereas the clinic at 1516 Madison Avenue admitted the majority of colored patients. Of the new admissions to both clinics, 59.7 per cent was white and 40.3 per cent colored. The former clinic admitted 66.4 per cent of the white patients and the latter clinic admitted 82.5 per cent of the colored. At the close of 1939 plans were being made for the provision of clinic facilities for white patients in the western section of the city in one of the hospitals in west Baltimore when the service for Negro patients will be transferred from 1516 Madison Avenue to the Druid Health Center.

Joint Participation

In an effort to protect young children from tuberculosis, the Director of the Bureau of Tuberculosis continued the cooperation established with the Juvenile Court in getting recalcitrant adult cases of tuberculosis in a household to comply with the recommendations of the Health Department. In addition cooperation was given the Department of Public Welfare in institutionalizing certain cases of tuberculosis and in supplementing the routine diet of some cases on relief. The Bureau of Tuberculosis and the Bureau of Food Control continued the policy established two years ago of joint supervision of tuberculous food handlers. The Bureau of Tuberculosis participated actively with the Division of School Hygiene in the special follow-up of school-child contacts and those suspected of having tuberculosis. The director assisted in the program of the Bureau of Child Hygiene by investigating cases of tuberculous persons in boarding homes and helped the Bureau of Environmental Hygiene by investigating several complaints involving tuberculosis. Beginning February 6, the Director of the Bureau of Tuberculosis and the Director of the Bureau of Public Health Nursing held weekly conferences in order to review with each supervising nurse cases of tuberculosis carried on the visiting list by her group of field nurses.

Special Activities and Studies

The reorganization of the bureau in the past three years and the increased activities in the chest clinics and central office have led to the practical realization of the urgent need for a thorough survey of the bureau's services,

facilities and needs. Arrangements were completed in the summer by the Commissioner of Health for having such a survey start in the latter part of the year by Dr. Allen W. Freeman, Professor of Public Health Administration of the Johns Hopkins School of Hygiene and Public Health. When completed, this survey will form a factual basis from which prospective and remedial action may be planned. Preparatory to drafting a tuberculosis quarantine law for Baltimore, a study was made of several State and city laws for the quarantine of cases of tuberculosis. The use of new types of prophylactic supplies was inaugurated on January 25 in the Southeastern Health District preliminary to the possible extension of the service to the whole city. The new supplies consisted of sanitary tissue packets for sputum collection and paper envelopes to contain the soiled tissue. These were distributed by the field nurses of the district to about 100 ambulatory tuberculosis cases as a substitute for the long-used tin receptacles. This new service proved so satisfactory that it will be continued in the Southeastern Health District during 1940 and will be extended to include the Druid Health Center. A special study in collaboration with the Bureau of Vital Statistics was continued during 1939 that had been begun in 1934 concerning follow-up of cases discharged from the sanatoria. In view of the need for further data in this connection the study will be continued indefinitely. Special attention was given to strengthening relationships further with various hospitals and other agencies engaged in tuberculosis work. The bureau prepared a list of cases in connection with certain house numbers of properties included in Area B of the Baltimore Housing Authority project for slum clearance.

Sanatoria

Adequate sanatorium facilities is a basic consideration in the tuberculosis problem and post-sanatorium pneumothorax is a very important adjunct. A very significant development occurred when the pneumothorax service in the Health Department clinics was enlarged in 1939. This may have salutary effects in two directions, an appreciable diminution of hospital stay and relative reduction of the total number of sanatorium beds needed according to standard requirements since the same number of beds will actually serve a larger number of patients during a given year. Construction of a building to house 128 additional beds for colored patients at Henryton Sanatorium was completed and the beds made available on December 26. This number included twenty-six beds added in 1938 for which maintenance money was not made available until the latter part of 1939. The additional space will reduce the overcrowded waiting list for admission to this institution.

Maryland Tuberculosis Association

The Maryland Tuberculosis Association donated to the Bureau of Tuberculosis in 1939 a new tuberculosis register and a safety film entitled *The Story of My Life*. The director of the bureau was instrumental in supplying to a staff physician of the Association sufficient tuberculin to test 100 nurses at the Provident Hospital. The bureau cooperated with the Association in the selection of children and adult girls for the preventorium at Claiborne. The Director of the Bureau of Tuberculosis reviewed twelve essays transmitted by the Association in connection with a Negro college and high school contest on the subject "What Is Being Done and What Now Can Be Done to Reduce Tuberculosis in My Community"?

Health Information

Health addresses were given to the Instructive Visiting Nurse Association, Family Welfare Association, various Parent-Teacher Association meetings, to students from the Johns Hopkins School of Hygiene and Public Health and the Maryland State Teachers College and to Girl Scout groups. One of the clinic physicians addressed a social service group of the Bureau of Catholic Charities on tuberculosis.

Personnel

Phineas J. Sparer, M.D., M.P.H., Director
Isidore I. Levy, M.D., Dispensary Physician
A. A. Weinstock, M.D., Health Officer
F. L. Bagli, M.D., Health Officer
Helen P. Stewart, Junior Stenographer

TABLE NO. 1

SUMMARY OF ACTIVITIES OF THE TUBERCULOSIS CLINICS—1939

Group	Grand Total	28 S. Broadway						1516 Madison Avenue					
		Total		White		Colored		Total		White		Colored	
		White	Colored	Male	Female	Male	Female	White	Colored	Male	Female	Male	Female
New Patients Examined	3,173	1,258	223	..	..	..	..	637	1,055	..	..	..	...
Adults	2,286	901	156	440	461	79	77	473	756	194	279	326	430
Positive	445	164	46	101	63	30	16	80	155	48	32	91	64
Suspicious	157	46	5	22	24	2	3	40	66	20	20	27	39
Negative	1,684	691	105	317	374	47	58	353	535	126	227	208	327
Children	887	357	67	172	185	34	33	164	299	91	73	137	162
Positive	96	28	6	13	15	3	3	9	53	6	3	24	29
Suspicious	18	1	1	..	1	1	..	5	11	4	1	6	5
Negative	773	328	60	159	169	30	30	150	235	81	69	107	128
Old Patients Diagnosed Positive	24	11	1	6	5	1	..	3	9	..	3	2	7
Minimal Lesions	246	93	20	50	43	12	8	38	95	27	11	47	48
Advanced Lesions	319	110	33	70	40	22	11	54	122	27	27	70	52
Contacts Examined	1,685	576	118	244	332	53	65	360	631	154	206	254	377
Return Visits	6,134	2,551	297	1,203	1,348	139	158	1,425	1,861	567	858	716	1,145
Tuberculin Tested	830	336	70	176	160	38	32	144	280	72	72	121	159
Positive Reactors	400	161	38	88	73	21	17	50	151	24	26	65	86
X-ray Examinations	3,145	1,445	188	716	729	92	96	568	944	250	318	420	524
Pneumothorax:													
New Cases	42	20	..	13	7	..	..	17	5	3	14	2	3
Refills	939	410	7	212	198	..	7	349	173	31	318	23	150
Advised:													
City Hospitals (Tuberculosis)	121	34	15	26	8	8	7	8	64	8	..	37	27
State Sanatoria	138	112	..	66	46	..	..	26	..	17	9	..	..
Eudowood Sanatorium	9	7	..	6	1	..	..	2	..	2	..	..	..
Henryton Sanatorium	98	..	30	..	..	22	8	..	68	..	..	37	31
Preventorium	106	53	..	24	29	..	..	53	..	33	20	..	..
Number Admitted to Sanatoria	206	106	21	68	38	12	9	30	49	20	10	25	24
Visits to Home by Clinic Physicians	9	..	1	..	..	1	..	2	6	..	2	2	4
Referred by:													
Physicians	1,680	736	101	377	359	55	46	391	452	164	227	210	242
Public Health Nurses	929	260	91	106	154	39	52	152	426	71	81	164	262
Other Agencies	564	262	31	129	133	19	12	94	177	50	44	89	88
Total Number of Individuals	4,748	2,087	297	1,003	1,084	147	150	988	1,376	471	517	577	799

TABLE NO. 2

TUBERCULOSIS CASES UNDER NURSING SUPERVISION, DECEMBER 31, 1939

Classification	Entire City	Eastern Health District	Western Health District	South-eastern Health District	Remainder of City
Total					
Pulmonary cases	3,024	553	840	452	1,179
Childhood types	1,011	95	494	128	294
Other types	49	11	28	4	6
Suspects	41	4	10	12	15
Families, contact	436	114	226	31	65
White					
Pulmonary cases	1,985	273	223	424	1,065
Childhood types	482	48	82	116	236
Other types	12	2	2	4	4
Suspects	28	1	1	12	14
Families, contact	131	35	26	31	39
Colored					
Pulmonary cases	1,039	280	617	28	114
Childhood types	429	47	312	12	58
Other types	37	9	26	..	2
Suspects	13	3	9	..	1
Families, contact	305	79	200	..	26

BUREAU OF VENEREAL DISEASES

BUREAU OF VENEREAL DISEASES

Ferdinand O. Reinhard, M.D., M.P.H.

Director

There was an enlargement and improvement of clinic services in the Bureau of Venereal Diseases in 1939. Following the purchase and prior to the reconditioning of the five-story building at 1313 Druid Hill Avenue a diagnostic clinic for Negro patients had been established here on the first floor on May 17, 1938. The ANNUAL REPORT for 1938 contained a comment upon the advance in venereal disease control work to be brought about by the inauguration of this improved type of service, complete with trained personnel and dark-field and laboratory facilities.

Pending extensive improvements at 1313 Druid Hill Avenue the diagnostic clinic was temporarily quartered beginning October 18, 1938, in the city-owned property at 1516 Madison Avenue. Just after the Druid Health Center was ready for occupancy a second, well-equipped diagnostic clinic for colored patients was opened on November 6, 1939, on the fourth floor of the building and the clinic was placed under the supervision of a second newly appointed physician with special training as a syphilologist. On the same date the first diagnostic clinic that had been started in 1938 was returned to its original location at 1313 Druid Hill Avenue and the congenital syphilis clinic with three weekly sessions was transferred from 1516 Madison Avenue to the third floor of the Druid Health Center. It is proposed early in 1940 to transfer another clinic to the first floor of the Druid Hill Avenue building and to modernize this clinic which has been quartered for several years at 1104 Madison Avenue. The latter building will be torn down as a part of the city slum clearance work.

By the end of 1939 ten of the twenty-eight weekly clinic sessions were enabled to do a highly satisfactory type of work. Patients with infectious lesions who attended those clinics which remained unimproved were referred, whenever possible, to the Health Department laboratory for dark-field examination. In 1939 a total of 385 dark-field examinations was made of which 210 or 55 per cent were positive. The increased number of cases diagnosed in the seronegative stage has had a direct bearing on the number of infectious contacts discovered.

Morbidity and Mortality

There were 729 fewer cases of syphilis reported in 1939 than during the previous year. The number of cases of gonorrhea and chancroid reported

in 1939 showed very little change as compared with 1938. Deaths from syphilis numbered 313 in 1939 as compared with 310 in 1938.

CASES OF VENEREAL DISEASE REPORTED—1935-1939

Disease	1939		1938		1937		1936		1935	
	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored
Total	2,084	7,842	2,686	8,011	2,423	5,864	1,946	5,523	2,048	5,530
Syphilis	1,413	6,094	1,868	6,368	1,422	4,460	1,390	4,235	1,455	4,299
Gonorrhea	667	1,585	792	1,497	967	1,246	553	1,110	592	1,105
Chancroid	4	163	26	146	34	158	3	178	1	126

Venereal Disease Clinics

There were 251 fewer new cases of syphilis and 145 fewer new cases of gonorrhea admitted to the clinics of the Bureau of Venereal Diseases during 1939 than during 1938. There was also a slight decrease in the number of chancroid cases in 1939 as compared with 1938. It is worthy of note that although 931 fewer cases of syphilis were treated in the clinics in 1939 than in 1938, there was a total of 90,096 treatments given in 1939, an increase of 13,545 over the preceding year. The total number of visits to the clinics for treatment, examination or advice increased from 112,764 in 1938 to 126,544 in 1939. These figures show that fewer cases of syphilis were treated in 1939 but the average number of treatments per case increased markedly. The increase in the number of visits is accounted for largely by a greater number of applicants for examinations and blood tests, many of which were found to be negative.

Congenital Syphilis Clinic

Children of syphilitic mothers had blood tests made in the congenital syphilis clinic at the age of six weeks and again at the age of six months. If treatment was indicated it was begun without delay. The mother was also treated at the time she brought her child to the clinic. A total of 126 children and 69 mothers received treatments during the year. All other children in the families of these mothers were examined and of 129 examinations, 16 additional cases of congenital syphilis were thus discovered.

Work Done by Social Investigators

Social workers made epidemiological investigations of almost all cases in City Health Department venereal disease clinics. They interviewed the new patients, filled in epidemiological records and investigated possible

sources of infection and contacts. The contacts discovered during the year were studied in accordance with the method proposed in the article, "Result of Contact Investigation in an Urban Community," by Dr. T. B. Turner and others which appeared in the July, 1939 issue of the *American Journal of Public Health.* These authors suggest that "the results of contact investigation should be estimated in terms of new cases of syphilis brought under treatment in relationship to the number of original cases interviewed." The results of contact investigations in the Health Department series of 143 colored patients with primary and secondary syphilis have been tabulated in this way in Table No. 4 in order to compare the results with those in the Eastern Health District.

In the Health Department series of 143 original cases of primary and secondary syphilis, contact investigation is credited with bringing under treatment 104 previously unrecognized cases of the disease. This is a ratio of 72 contact cases to 100 original cases. Of the contacts examined 45 had primary or secondary syphilis and were obviously potential sources of infection in the community. The ratio of infectious contact case to an original case is 42 to 100. In a series of 117 cases of latent syphilis, contact investigation revealed only two previously unrecognized infectious cases, but 88 latent cases were discovered. These figures would seem to indicate that although contact investigations of latent cases do not materially reduce new foci of infection, such investigations are valuable adjuncts in case finding. By bringing these contacts under treatment the number of late cases with incapacitating complications should in time be reduced. Table No. 5 gives the results of Health Department contact investigations for 1939.

Follow-up of Cases Reported by Physicians

In 1939 more private physicians reported cases of syphilis than in 1938. Whenever a report card or laboratory card on an early case of syphilis was received in the office of the Bureau of Venereal Diseases the physician was telephoned by the director and asked whether the patient was cooperating. If the physician replied in the affirmative a follow-up card was sent to him at the end of each month for a period of three months and a fourth card at the end of six months. A self-addressed, stamped envelope was enclosed so that the physician could check off the required information on the card and return it to the Health Department. More than 50 per cent of the cooperating physicians availed themselves of this ooportunity in 1939. If the patient was found, through information obtained from the physician, to be uncooperative, a social worker was sent to the patient in his home and he was advised to return to his own private physician. The physician was then again telephoned in order to determine whether

the patient had returned. Any contacts reported by private physicians were investigated by social workers.

Other Venereal Diseases

The treatment of gonorrhea cases formed a real and inescapable problem of Health Department venereal disease clinics. Gonorrhea cases to the number of 2,712 received 22,140 treatments in 1939. In addition there were 4,082 local treatments and dressings given to 175 patients suffering from chancroid, granuloma inguinale or lymphopathia venereum. Most gonorrhea patients were able to take sulfanilamide which was given in large doses with satisfactory results. In one of the clinics powdered sulfanilamide was used for chancroid dressings.

Syphilis and Industry

The working plan for the employment of persons with positive serologic tests for syphilis, as outlined in the ANNUAL REPORT for 1938, was encouraged during 1939. Five additional industrial plants adopted the agreement between firm and Health Department relative to the employment of such persons. At the close of 1939 there were nine industrial plants employing 8,557 persons that were cooperating in the plan, as compared with four plants employing 4,412 persons at the end of 1938.

Health Information

A new pamphlet entitled "Facts about Gonorrhea" was published and issued in 1939. This pamphlet was based on a similar one printed by the American Social Hygiene Association. Several new letter forms for physicians and the laity were placed in regular use and proved valuable in the follow-up of certain types of cases. Continued interest on the part of the public in the syphilis program of the Baltimore City Health Department was indicated by requests for talks, literature and general information. There is contained in the report of the Bureau of Health Information a summary of educational work done by the Bureau of Venereal Diseases during 1939.

Personnel

Ferdinand O. Reinhard, M.D., C.P.H., Director
H. E. Wooden, M.D., Health Officer
Earle P. Clemson, M.D., Health Officer
Ralph J. Young, M.D., Health Officer
John A. Pfeiffer, M.D., Health Officer
Harris Goldman, M.D., Health Officer
George C. Page, M.D., Health Officer
J. D. Shepperd, M.D., Health Officer
C. T. Woodland, M.D., Health Officer

Grafton R. Browne, M.D., Health Officer
William B. Butler, M.D., Health Officer
George McDonald, M.D., Health Officer
Bowman J. Hood, M.D., Medical Supervisor
Israel P. Meranski, M.D., Clinic Physician
Louis E. Harmon, M.D., Clinic Physician
Ernest W. Shervington, M.D., Clinic Physician
Charles R. Campbell, M.D., Clinic Physician
Francis J-B. Luke, M.D., Clinic Physician
Charles D. Lee, M.D., Clinic Physician
James S. Julian, M.D., Clinic Physician
Maurice L. Adams, M.D., Clinic Physician
George A. Strauss, M.D., Clinic Physician
Henry T. Collenberg, M.D., Clinic Physician
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Katie Crane Lucas, Social Investigator
William P. Duffy, Social Investigator
Odessa D. Benton, Social Investigator
Elsie S. Brown, Social Investigator
Reginald F. Jefferson, Social Investigator
Mattie May Gwynn, Senior Stenographer
C. Richard Martin, Jr., Senior Stenographer
Beatrice Kravetz, Senior Stenographer
Rena McKelvey, Junior Stenographer
Anna M. Schmidt, Junior Stenographer
James P. Lynch, Jr., Clinic Clerk
Leo M. White, Clinic Clerk
Mildred V. Robinson, Clinic Clerk
Eugene A. Briscoe, Clinic Clerk
George D. Clark, Clinic Clerk
Agnes T. O'Hare, Junior Clerk
William B. Lucas, Janitor

TABLE NO. 1

RESIDENT DEATHS ATTRIBUTABLE TO SYPHILIS BY COLOR—1935-1939

Cause of Death Certified	1939			1938			1937			1936			1935		
	Total	White	Colored	Total	White	Colored	Total	White	Colored	Total	White	Colored	Total	White	Colored
Total	313	81	232	310	99	211	321	115	206	312	78	234	324	92	232
Syphilis under one year of age	6	1	5	18	5	13	6	2	4	12	2	10	19	3	16
Syphilis over one year of age	252	61	191	260	83	177	263	79	184	255	56	199	267	69	198
General paralysis of the insane	51	15	36	31	10	21	44	27	17	38	16	22	33	15	18
Tabes Dorsalis	4	4	..	1	1	..	8	7	1	7	4	3	5	5	..

TABLE NO. 2

VENEREAL DISEASE CASES AND VISITS TO CLINICS FOR TREATMENT, EXAMINATION OR ADVICE—1935-1939

Year	Syphilis			Gonorrhea			Chancroid		Total Visits for Treatment, Examination or Advice
	Cases		Treatments	Cases		Treatments	New Cases	Treatments and Dressings	
	New	Total		New	Total				
1939	2,421	4,973	90,096	1,389	2,712	22,140	175	4,082	126,544
1938	2,672	5,904	76,551	1,544	3,431	22,987	172	5,489	112,764
1937	1,862	4,917	66,231	1,416	4,448	23,364	192	5,980	100,186
1936	2,095	4,870	68,561	1,433	3,875	23,544	181	6,426	103,115
1935	1,770	4,082	68,385	1,454	3,735	23,444	127	5,298	100,122

TABLE NO. 3

CONSOLIDATED SOCIAL SERVICE REPORT—1935-1939

Activities	1939	1938	1937	1936	1935
Number of visits made during year	17,117	17,345	14,094	13,998	13,335
Number of patients referred to Health Department venereal disease clinics	11,925	10,419	10,473	10,422	9,897
Number of returns among patients so referred	6,216	6,393	6,957	5,958	2,776
Number of patients referred to other clinics or private physicians	1,169	872	660	332	284
Moved, not located	1,721	1,958	1,492	1,522	1,354
False addresses	809	779	578	556	513
Left city	335	366	304	336	296
Visits of cooperation to other agencies	98	76	125	271	289
Summons	273	168	232	248	203
Number of hours spent in clinics	2,589	2,547	2,321	2,345	2,011

TABLE NO. 4

RESULT OF CONTACT INVESTIGATION IN A SERIES OF 143 PATIENTS WITH PRIMARY OR SECONDARY SYPHILIS ADMITTED TO CLINICS—1939

Race and Sex	Data on Original Cases		Data on Contacts									Ratio	
				Diagnostic Classification									
	Number	Number Naming Contacts	Number of Contacts Named	Type of Contact	Number of Contacts	Number Examined	Infectious Syphilis	Latent Syphilis	Syphilis Known Previously	Non-syphilitic	Total New Cases	Number of Infectious Contact Cases to 100 Original Cases	Number of Infectious and Latent Contact Cases to 100 Original Cases
Total.....	143	123	152		142	142	45	59	10	41	104	31	72
Colored..... Male.....	98	80	102	Marital.....	24	23	7	7	1	9	69	30	70
				Non-familial.....	78	74	23	32	7	19			
Colored..... Female.....	45	43	50	Marital.....	5	5	2	1	..	2	35	33	86
				Non-familial	40	40	12	17	..	11			
				Household.....	5	5	1	2	2	..			

TABLE NO. 5

COMPARISON OF RESULTS OF CONTACT INVESTIGATION ON COLORED PATIENTS WITH INFECTIOUS SYPHILIS AND COLORED PATIENTS WITH LATENT SYPHILIS—1939

Original Cases		Infectious Cases		All Previously Unrecognized Cases of Syphilis	
Type	Number	Number	Ratio to 100 Original Cases	Number	Ratio to 100 Original Cases
Infectious.....	143	46	31	105	70
Latent.....	117	2	2	88	75

BUREAU OF OCCUPATIONAL DISEASES

BUREAU OF OCCUPATIONAL DISEASES

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

Director

ANNUAL REPORTS of previous years have covered the events leading up to the establishment of the bureau and have described its objectives as well as the services available therein. The number of requests for services has shown a slow but steady growth and the educational program of the bureau has been expanded gradually. Now that a law requiring the compensation of disability resulting from ocupational diseases is on the statute books of the State, it is to be expected that there will be much more public interest in the work of the bureau and that more calls will be made for its assistance in the prevention of occupational diseases.

Occupational Disease Law

At its 1939 session, the Maryland Legislature passed a law (Article 101, Sections 34–43, 66 and 70 in the Annotated Code of the Public General Laws of Maryland, 1939 edition) providing compensation for disability or death arising from any one of a schedule of thirty-four occupational disease states when incurred in specified employments. Under the law the Commissioner of Health of Baltimore, concurrently with the Maryland State Department of Health, is required:

1. To receive reports of occupational diseases from physicians who have knowledge of such cases.
2. To study occupational diseases and ways and means for their control and prevention and make the necessary rules and regulations for such control and prevention. Such rules and regulations for the control and prevention of occupational diseases shall have the force and effect of law. No such rule or regulation or any modification, amendment, or repeal thereof, shall become effective until public notice of such proposed rule or regulation, modification, amendment, or repeal thereof shall have been given, and a public hearing thereon held before the Maryland State Board of Health.
3. To investigate industrial conditions causing ocupational diseases, or which may be suspected of causing occupational diseases, and make recommendations for the control of such conditions.
4. To enforce regulations regarding occupational diseases.

5. To recommend to the Legislature of Maryland for enactment such measures, including additions to the list of occupational diseases contained in Section 32A of the Occupational Disease Act, as their studies and experience may demonstrate to be advisable.

The occupational disease law became effective on June 1, 1939. The immediate result was a marked increase of general public interest in occupational diseases. A good many reports of alleged occupational diseases were received, principally through an arrangement with the State Industrial Accident Commission of Maryland. Each claim was investigated by members of the Bureau of Environmental Hygiene or the Bureau of Occupational Diseases in order to determine whether or not the ailments reported had originated in the exposure of an employee in industry. In cases where hazardous exposures to industrial materials were found the management of the particular plant was advised concerning procedures for overcoming the hazards.

Education

Another factor which has done much to arouse interest in occupational diseases has been a series of seminars under the auspices of the Committee on Industrial Health of the Medical and Chirurgical Faculty of the State of Maryland. On October 24 the director contributed an address entitled "Occupational Health Hazards of the Industries in Maryland."

The senior students of the University of Maryland School of Medicine were given courses of lectures and demonstrations similar to those of previous years. Factory demonstrations and lectures were presented to two groups of students from the Johns Hopkins School of Hygiene and Public Health. Several talks were given to audiences such as social service groups, home nursing classes and the Instructive Visiting Nurse Association. The director also contributed discussions to a meeting of the National Conference of Governmental Industrial Hygienists, held in Washington, D. C. in April and to the program for industrial personnel sponsored jointly by the Baltimore Safety Council and Johns Hopkins University.

An educational leaflet was prepared containing the schedule of occupational diseases taken from the recent occupational disease law. Before the close of the year more than 700 copies of the schedule had been distributed and it has proved to be a welcome addition to the material already available for distribution. A number of copies of the complete law have also been furnished to interested persons.

The Bureau of Occupational Diseases cooperated with the Bureau of

Environmental Hygiene in presenting two exhibits. The first was on syphilis and industry for the Fourth Annual Mid-West Conference on Occupational Diseases, held in Cleveland, Ohio in June. The second exhibit was a booth on the new occupational disease law for the Manufacturers' Products Exhibit, held in Baltimore in October.

Some progress was made in promoting further the Baltimore Plan for Syphilis Control in Industry. Several visits were made to industrial physicians and, as a result, a number of them have signed applications with the City Health Department, cooperating with its plan. A number of firms employing many persons have the matter under consideration.

Consultation Services

The use of the bureau as a source of information about occupational diseases has shown a steady increase, particularly in the number of physicians requesting information. In former years, most inquiries had been about dermatitis but in 1939 the range of interests has been much wider. The inquiries from lay persons were about the same in number in 1939 as in previous years but the character of questions has changed from paint for use on cribs to a wide variety of occupational disease subjects. In some cases visits were made to physicians' offices and to industrial plants in order to give the fullest possible service to questions asked.

Studies Begun

In collaboration with the Bureau of Food Control, a beginning was made in investigating the problem of dermatitis among dishwashers at soda fountains. Although the investigation is not yet complete, it can be said that a good deal of information has already been gained as to the cause of dermatitis in dishwashers and the Health Department is in a position to give helpful suggestions about cleansing methods which will reduce the incidence of this type of dermatitis.

It was decided to make an investigation of the lead content of enamels sometimes recommended for the refinishing of children's furniture and it was a surprise to discover that most yellow, green and orange enamels contain amounts of lead compounds as pigments that may be injurious to children in the same manner as lead paints. It is planned to include lacquers in this study.

Lead Poisoning in Children

Lead poisoning was known to have affected at least 14 Baltimore children during the year. Of these, 4 were known to have died. Cases and deaths

due to lead poisoning occurring in Baltimore children for the last six years are given in the following tabulation:

PLUMBISM IN BALTIMORE CHILDREN—1934-1939

YEAR	CASES	DEATHS
1939	14	4
1938	14	6
1937	8	1
1936	23	8
1935	20	10
1934	11	6

Personnel

John M. McDonald, M.D., D.P.H., Director
E. H. Einwachter, Senior Stenographer

BUREAU OF CHILD HYGIENE

BUREAU OF CHILD HYGIENE

William K. Skilling, M.D.

Director

The resident infant mortality rate for Baltimore reached an all-time low of 40.8 per 1,000 live births in 1939. The maternal mortality rate among residents for the year was 3.6 per 1,000 live births as compared with 3.3 in 1938, 3.4 in 1937 and 4.2 in 1936. Both the maternal mortality and infant mortality in 1939 gratifyingly reflect the results of continuing Health Department efforts directed toward the conservation of the lives of mothers and young children. Much remains to be done, however, further to lower these rates through the prevention of avoidable loss of life in both these fields.

The Baltimore Physicians' Conference on Maternal Mortality was organized on April 27 to give the physicians of the city an opportunity to participate actively in the work of lowering maternal mortality. Meetings were held each month to discuss and analyze deaths associated with childbearing which have been investigated by the Joint Committee on Maternal Mortality of the Health Department and the City Medical Society.

There were 6,631 infants registered at the infant and preschool hygiene clinics in 1939, an increase of 491 in the figure for the preceding year. The clinic visits totaled 32,079 as compared with 28,111 for 1938. The visits to the clinics of children in the one to five year age group increased from 8,960 in 1938 to 11,351 in 1939. A rise of 19.5 per cent in the number of children under one year of age inoculated against diphtheria in 1939 as compared with 1938 is an indication of a more intensive follow-up of infants by public health nurses.

A major outbreak of measles beginning in the fall of 1938 continued through the first five months of 1939. Visitors to child-caring institutions were prohibited and no children were admitted during the period of the outbreak. These precautions which were strictly enforced as Health Department requirements were undoubtedly important factors in the prevention of measles deaths among institutionalized children in the city.

Public Health Nursing Staff

The disposition of *Records of Child Under Six Years* forwarded to the Bureau of Public Health Nursing is given in the following tabulation:

NEONATAL RECORDS ASSIGNED

	1939	1938
Neonatal cards, received, total	14,894	15,444
Assigned for visitation or mailing	14,514	15,126
Basis of assignment of neonatal cases for visitation:		
On telephone calls to physicians:		
Cases to be visited	1,108	1,324
Cases not to be visited	929	1,184
On physicians' statement on birth certificate or previous telephone call:		
Cases to be visited	8,902	9,150
Cases not to be visited	3,513	3,368
Telephone calls to physicians	2,212	2,181
Cases assigned for diphtheria prevention visits	9,951	10,906

Ophthalmia Neonatorum

The possible permanent injury to sight caused by eye infections in infants was again emphasized in 1939 and public health nurses, non-official organization nurses and midwives were instructed to make prompt reports. These reports are received by the Bureau of Child Hygiene and when the family is not in a position to secure the services of a private physician the case is assigned to the Health Department service. Reports of 586 sore eye cases were received in 1939 and of these 442 were treated by a Department physician or nurse in the home or at Sydenham Hospital. It is regrettable that in 1939 the first case resulting in some slight impairment to the sight of one eye was reported, the first instance of the kind known to the Health Department since 1929. This baby was born in a hospital on December 9, 1938 and had received silver nitrate in each eye at the time of birth. It was taken home on December 18 with both eyes apparently normal. A public health nurse making a home visit on December 30 discovered the condition of the baby's eyes and made a report to the Bureau of Child Hygiene. A private physician had been called by the family on the same day and he immediately had the baby hospitalized. The cause of the ophthalmia was a pneumococcal conjunctivitis with corneal ulceration.

A summary of the activities of the Bureau of Child Hygiene in the care of ophthalmia neonatorum cases is given in the following tabulation:

	1939	1938
Cases assigned to special nurse	249	296
Total visits	1,464	942
Average number of visits per case	5.1	3.6
Number of smears made	159	108
Number of smears showing Gram-negative intracellular diplococci	4	8
Cases in which prophylactic was said to have been used	202	192
Cases sent to hospital for treatment	1	2

Unreported Births

Efforts were made to record the birth of every baby born in Baltimore that came to the attention of the Health Department in which no certificate of birth could be found. Such cases are visited by a public health nurse who tries to secure the complete natal history from the parents. With this information the Director of the Bureau of Child Hygiene frequently succeeds in having a certificate of birth placed on record in the Bureau of Vital Statistics and in 1939 there were 30 births thus entered. Nine of these births occurred in 1939, twelve in 1938, three each in 1937 and 1935, and one each in 1933, 1932 and 1931.

Clerical Staff

Information from 15,106 birth certificates was transcribed to *Records of Child Under Six Years*, 7,960 *Records of Toxoid Inoculation* were checked with *Records of Child Under Six Years*, 2,090 *Prenatal Histories* were summarized and the same number of *Records of Maternity Hygiene Visits* were completed by the clerical staff in 1939. The disposition of notifications of birth registration follows:

	1939	1938
Notifications of birth registration mailed	4,606	4,699
Residents	2,192	2,583
Non-residents (Maryland)	2,314	2,022
Non-residents (other States)	100	94
Corrections on notifications of birth registration	5,095	7,441

Infant and Preschool Hygiene Clinics

A new infant and preschool hygiene clinic with two weekly conferences was opened in the Druid Health Center on November 27. The establishment of this clinic and the rearrangement of boundaries within the Western Health District relieved attendance that had reached the congestion point in two neighboring clinics. At the close of the year there were twenty infant and preschool hygiene clinic locations at which the bureau conducted a total of thirty-six sessions each week. Eleven of the clinic locations were for colored children.

An appointment system for mothers bringing children to the infant and preschool hygiene clinics in the Western Health District was inaugurated on July 31. The new procedure worked satisfactorily and improved the service by decreasing congestion and the associated confusion.

A new and improved method of cod liver oil distribution was adopted on July 17, when the product was dispensed in labeled, eight ounce amber bottles. Previous to this time cod liver oil had been dispensed by the nurse in each clinic from gallon bottles into smaller bottles supplied by the mothers.

Diphtheria Prevention and Vaccination Clinics

A once-a-week clinic session for toxoid inoculation and smallpox vaccination was opened on April 17 in the day nursery of the Servants of Mary Immaculate at 102 S. Patterson Park Avenue in the Southeastern Health District. Special diphtheria prevention clinics were conducted in connection with National Negro Health Week, the Flower Mart of the Women's Cooperative Civic League and eight outings of the Free Summer Excursion Society. In the clinics of the Babies' Milk Fund Association 2,013 children were inoculated against diphtheria as compared with 1,386 in 1938.

Reports of 4,000 children inoculated against dipththeria were made to the bureau by 348 different private physicians as compared with 2,774 by 264 different physicians in 1938.

There follows a summary of inoculations against diphtheria and vaccinations against smallpox as performed in the various infant and preschool clinics in the city:

	1939	1938
Children inoculated at clinics	7,432	7,775
Children vaccinated at clinics	7,715	7,220

Licensed Children's Institutions

The activities of the bureau in connection with licensed children's institutions have continued to increase steadily each year. A large part of the assistant director's time was devoted to securing compliance with the Requirements Governing Child-Caring Institutions in Baltimore City, which were adopted by the State Department of Public Welfare on March 24, 1938. Ten institutions were inspected and the results reported to the State Department of Public Welfare and the Department of Public Welfare of Baltimore City.

Staffs of the day nurseries and nursery schools in the city cooperated with the Health Department in a concerted effort to prevent communicable diseases among the children in their care. Children under three years of age were excluded during the period of the measles outbreak.

There was only one death in the group of 1,342 children living in boarding homes licensed by the Bureau of Child Hygiene. This death of an infant two and a half months old was due to accidental mechanical suffocation.

Maternity Hygiene

In 1939 there were delivered at the Baltimore City Hospitals 1,986 patients who had received prenatal care at the Health Department clinics. Two deaths occurred in this series of registered mothers, one of which was

not due to causes associated with childbirth. The maternal mortality rate in this group was 0.50 per 1,000 live births and the mortality rate for the first ten days of life for those infants delivered alive was 4.2 per 1,000.

The death rate, including stillbirths and deaths within ten days, for the entire group was 19.6 per 1,000 total births. There were 25 new cases referred to the Health Department clinics for prenatal care by midwives.

Maternal Mortality

The following are histories of the two patients registered with the Division of Maternity Hygiene who died:

MATERNAL DEATHS

1. Health Department Registration No. 7415: Toxemia of Pregnancy.
   Age 18, colored, para 0-0-0-0, serologic test for syphilis negative, pelvis normal, past history negative. Patient admitted to hospital in early active labor following normal prenatal course with normal blood pressure and urine throughout. Marked edema, hypertension and albuminuria on admission thirteen days after last clinic visit, the patient having failed to keep her weekly appointment. Labor progressed normally and she was delivered by low forceps after a nine and one-half hour labor. Postpartum shock and pulmonary edema developed within a few hours. Blood pressure rose to 110/75 with treatment and edema improved but two days following delivery, respirations suddenly ceased. Before expiration there was evidence of nitrogenous retention and severe anemia. Death was probably due to one of the toxemias of pregnancy.

NON-MATERNAL DEATHS

1. Health Department Registration No. 5937: Lobar Pneumonia, Empyema.
   Age 30, white, para 3-0-0-3, serologic test for syphilis negative, pelvis normal. Estimated date of confinement March 2, 1939. Admitted February 23 because of severe cold of two weeks' duration. Temperature 102°, pulse rate 140, respirations 40. Fluid at left base necessitated left thoracotomy. Lobar pneumonia developed and three days after admission respirations ceased. Stillborn child delivered by post mortem section.

Maternity Hospitals

The following tabulation is a summary of the maternity hospitals licensed and inspected in 1939:

Licensed as of December 31, 1939	22
New licenses issued	0
Relicensed	22
Inspected	22
Discontinued	0

Midwives

Midwives were responsible for the delivery of 2.2 per cent of the total babies born in the city in 1939 as compared with 2.8 per cent in 1938.

There follows a tabulation compiled as of December 31, 1939 of the number of midwives licensed to practice in Baltimore:

	Total	White	Colored
Total midwives registered as of December 31, 1939	118	87	31
Registered midwives in active practice as of December 31, 1939	30	20	10
Midwives licensed in 1939	0	0	0

During the year 1939 the Bureau of Laboratories distributed 1,868 ampules of 1 per cent silver nitrate as follows:

	1939	1938
Total	1,868	1,295
To midwives	424	396
To physicians	432	438
To hospitals	1,012	461

Personnel

William K. Skilling, M.D., Director
Mary C. Willis, M.D., Assistant Director
M. Alexander Novey, M.D., Obstetrician
John M. Haws, M.D., Health Officer
Isadore Siegel, M.D., Health Officer
W. A. Deckert, M.D., Health Officer
Walter E. Grempler, M.D., Health Officer
J. W. V. Clift, M.D., Health Officer
Harry F. Brown, M.D., Health Officer
Henry L. Whittle, M.D., Health Officer
Albert Jaffe, M.D., Health Officer
Meyer Miller, M.D., Health Officer
Albert Scagnetti, M.D., Health Officer
Ella B. M. Cohen, Senior Stenographer
Melva Hubbard, Junior Stenographer
Lillian Marley, Junior Typist
Mary A. Atkins, Statistical Clerk
Ida S. Blum, Junior Clerk
Josephine Roemer, Addressograph Operator

TABLE NO. 1

REPORT OF INFANT AND PRESCHOOL HYGIENE CLINICS

Clinic	Children on Register Jan. 1, 1939		New Children Registered During 1939		Total Children Registered During 1939		Children on Register Dec. 31, 1939		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	4,032	3,445	2,895	331	6,631	3,766	3,827	4,338	17,833	11,020	20,728	11,351
White												
Total White Clinics	1,589	1,668	972	120	2,561	1,804	1,516	1,571	7,876	4,483	8,848	4,603
Public School No. 86	2	3	77	8	79	11	60	23	669	240	746	248
Public School No. 60	237	248	159	15	396	264	245	222	1,190	579	1,349	594
Public School No. 65	276	532	151	20	427	552	159	344	813	472	964	492
Public School No. 97A	43	4	7	2	50	6	0	0	17	10	24	12
2817 Oakley Ave.	156	249	129	21	285	270	163	330	1,600	974	1,729	995
Public School No. 225	64	7	17	2	81	24	59	9	238	130	255	132
Public School No. 220	83	148	45	5	128	153	104	170	464	388	509	393
Public School No. 68	122	138	57	8	179	146	115	178	618	532	675	540
University of Maryland	130	15	104	10	234	25	170	4	438	206	542	216
Public School No. 22	266	268	107	12	373	280	219	142	793	570	900	582
Public School No. 98	210	56	119	17	329	73	222	149	1,036	382	1,155	399
Colored												
Total Colored Clinics	2,443	1,777	1,923	211	4,070	1,962	2,311	2,767	9,957	6,537	11,880	6,748
Public School No. 140	20	13	95	9	115	22	65	72	430	249	525	258
Public School No. 176	592	79	248	16	840	95	212	544	1,335	769	1,583	785
Public School No. 129	306	243	115	10	421	253	425	254	591	822	706	832
Metropolitan Church	130	477	276	24	410	475	134	451	1,751	1,169	2,027	1,193
Public School No. 122	702	218	452	21	1,154	239	710	343	2,095	1,087	2,547	1,108
Douglass High School	181	467	209	23	390	490	261	611	1,239	550	1,448	573
Public School No. 106	146	79	97	32	243	111	215	71	469	343	566	375
Public School No. 104	194	187	162	15	356	202	111	483	1,014	602	1,176	617
University of Maryland	172	14	177	45	349	59	176	112	537	426	714	471
Public School No. 116A	0	0	92	16	92	16	92	16	496	520	588	536

TABLE NO. 2

SUMMARY OF THE ACTIVITIES OF SUPERVISION OF BOARDING HOMES, DAY NURSERIES AND NURSERY SCHOOLS AND CHILDREN'S INSTITUTIONS—1939

Licenses and Visits	Boarding Homes	Day Nurseries and Nursery Schools	Children's Institutions
Total licensed	414	33	0
White	331	27	0
Colored	83	6	0
New licenses issued	92	9	0
White	77	7	0
Colored	15	2	0
Visits	2,453	104	43
By assistant director	324	57	11
By nurse	2,129	47	32

SUMMARY OF CHILDREN IN LICENSED BOARDING HOMES—1939

Age	Total During Year			Remaining December 31, 1939		
	Total	White	Colored	Total	White	Colored
All Ages	1,342	1,083	259	957	753	204
Birth to 6 months	18	11	7	3	2	1
6 months to 1 year	25	20	5	16	11	5
1 to 2 years	55	44	11	34	26	8
2 to 3 years	35	32	3	19	18	1
3 to 6 years	145	118	27	86	64	22
6 years and over	1,064	858	206	799	632	167

BOARDING HOMES REFERRED TO THE BUREAU FOR SUPERVISION AND NUMBER OF NEW CHILDREN PLACED IN BOARDING HOMES—1939

Organization	Homes Referred	New Children Placed
All Organizations	172	266
Babies' Milk Fund Association	1	0
Baltimore County Children's Aid Society	2	0
Bureau of Catholic Charities	33	69
Bureau of Food Control	1	0
Bureau of Public Health Nursing	2	0
Children's Home of Baltimore	1	3
German-Jewish Children's Aid Inc.	11	18
Harriet Lane Home	1	0
Henry Watson Children's Aid Society	60	117
Jewish Family and Children's Bureau	28	18
Maryland Children's Aid Society	0	2
Police Department	1	0
Prisoners' Aid Society	1	0
Private Individuals	11	38
Southeastern Health District	2	0
State Department of Public Welfare	4	0
The Sun	8	0
Western Health District	5	0

SUMMARY OF CASES OF COMMUNICABLE DISEASES IN LICENSED DAY NURSERIES AND NURSERY SCHOOLS TOGETHER WITH AVERAGE MONTHLY ENROLLMENT AND AVERAGE DAILY ATTENDANCE—1939

Enrollment and Disease	Day Nurseries			Nursery Schools		
	Total	White	Colored	Total	White	Colored
Average monthly enrollment	593	404	189	933	672	261
Average daily attendance	414	164	150	737	520	217
Communicable diseases	28	28	0	163	134	29
Chickenpox	11	11	0	32	26	6
German measles	0	0	0	1	1	0
Gonorrhea	0	0	0	1	0	1
Measles	17	17	0	122	101	21
Mumps	0	0	0	6	5	1
Scabies	0	0	0	1	1	0

TABLE NO. 3
REPORT OF PRENATAL CLINICS

Cases and Visits	Grand Total	All Clinics		1313 Druid Hill Ave.**	914 W. 36th Street	South Baltimore General Hospital		Public School No. 99	Southeastern Health District	Public School No. 220	Women's Hospital
		White	Colored	Colored	White	White	Colored	White	White	White	White
Cases carried over from 1938	634	391	243	223	47	53	20	67	159	23	42
New Cases Admitted	2,090	1,077	1,013	936	107	117	77	216	392	100	145
Total Case Load	2,724	1,468	1,256	1,159	154	170	97	283	551	123	187
Discharged Cases											
Total	2,142	1,210	932	846	128	142	86	222	435	109	174
Not pregnant	33	14	19	19	3	1	0	1	6	1	2
Delivered in hospital*	1,986	1,132	854	775	117	128	79	213	417	101	156
Delivered at home	30	9	21	17	1	4	4	1	2	1	0
Transferred	93	55	38	35	7	9	3	7	10	6	16
Cases carried over to January 1940	582	258	324	313	26	28	11	61	116	14	13
Clinic Visits											
Total	13,466	7,902	5,564	5,115	705	820	449	1,553	3,242	708	874
Antepartum											
First visits	2,090	1,077	1,013	936	107	117	77	216	392	100	145
Revisits	9,846	5,835	4,011	3,674	535	621	337	1,123	2,421	520	615
Postpartum											
Registered	777	502	275	257	31	44	18	107	218	44	58
Infants, neonatal	753	488	265	248	32	38	17	107	211	44	56
Analysis of New Cases											
Duration of pregnancy											
Not pregnant	16	6	10	10	0	0	0	1	3	1	1
Under 12 weeks	83	66	17	17	6	3	0	13	35	4	5
12-23 weeks	478	321	157	148	17	22	9	70	151	25	36
24-27 weeks	537	276	261	235	28	48	26	59	102	20	19
28-31 weeks	375	159	216	207	15	12	9	29	55	24	24
32-35 weeks	366	148	218	199	32	18	19	31	22	17	28
36 weeks and over	235	101	134	120	9	14	14	13	24	9	32

* Baltimore City Hospitals.
** Prior to November both White and Colored patients attended clinic located at 1516 Madison Avenue.

TABLE NO. 4

REPORT OF MIDWIFE CASES SEEN IN PRENATAL CLINICS

Cases and Visits	Grand Total	All Clinics		1313 Druid Hill Ave.*	914 W. 36th Street	South Baltimore General Hospital		Public School No. 99	South-eastern Health District	Public School No. 220	Women's Hospital
		White	Colored	Colored	White	White	Colored	White	White	White	White
Cases carried over from 1938	27	18	9	9	7	0	0	1	6	0	4
New Cases Admitted	25	9	16	15	3	0	1	1	3	0	2
Total Case Load	52	27	25	24	10	0	1	2	9	0	6
Discharged Cases											
Total	40	20	20	20	7	0	0	2	7	0	4
Delivered by midwife	18	8	10	10	2	0	0	2	4	0	0
Transferred	18	10	8	8	5	0	0	0	2	0	3
Not Pregnant	4	2	2	2	0	0	0	0	1	0	1
Cases carried over to January 1940	12	7	5	4	3	0	1	0	2	0	2
Clinic Visits											
Total	88	36	52	51	10	1	1	10	8	0	7
Antepartum											
First visits	25	9	16	15	3	0	1	1	3	0	2
Revisits	63	27	36	36	7	1	0	9	5	0	5
Analysis of New Cases											
Duration of pregnancy											
Under 12 weeks	1	1	0	0	0	0	0	0	0	0	1
12-23 weeks	2	2	0	0	0	0	0	0	1	0	1
24-27 weeks	5	2	3	3	0	0	0	1	1	0	0
28-31 weeks	6	2	4	4	2	0	0	0	0	0	0
32-35 weeks	8	2	6	5	1	0	1	0	1	0	0
36 weeks and over	3	0	3	3	0	0	0	0	0	0	0

* Prior to November both white and colored patients attended clinic located at 1516 Madison Avenue.

TABLE NO. 5

ANALYSIS OF PHYSICAL EXAMINATIONS ON REGISTRATION AT PRENATAL CLINICS

Findings	Number			Percentage Distribution		
	Total	White	Colored	Total	White	Colored
REGISTERED FOR DELIVERY AT HOSPITALS*						
Primipara	483	223	260	23.3	20.8	26.0
Multipara	1,591	848	743	76.7	79.2	74.0
Pelvis						
Normal	1,601	928	673	77.2	86.7	67.2
Borderline	361	115	246	17.4	10.7	24.5
Contracted	92	17	75	4.4	1.6	7.5
Funnel	20	11	9	1.0	1.0	0.8
Serologic Test for Syphilis						
Positive	101	11	90	4.9	1.0	9.0
Negative	1,973	1,060	913	95.1	99.0	91.0
Other Findings						
Toxemia	70	39	31	3.4	3.6	3.1
Heart Murmur	179	92	87	8.6	8.6	8.6
REGISTERED FOR DELIVERY BY MIDWIFE						
Primipara	4	2	2	16.0	22.2	12.5
Multipara	21	7	14	84.0	77.8	17.5
Pelvis						
Normal	21	8	13	84.0	87.5	81.2
Borderline	4	1	3	16.0	12.5	18.8
Serologic Test for Syphilis						
Positive	1	0	1	4.0		6.2
Negative	24	9	15	96.0	100.0	93.8

* Baltimore City Hospitals.

TABLE NO. 6

ANALYSIS OF PRENATAL SERVICES RECEIVED AND OUTCOME OF DELIVERY FOR 1,945 REGISTERED PATIENTS

Duration of Pregnancy on Registration	Patients	Prenatal Service				Outcome of Delivery											
		Clinic Service		Nursing Service		Mother			Baby								
									Liveborn			Stillborn			Died in 10 days		
		Visits	Visits per Patient	Visits	Visits per Patient	Lived	Died	Maternal Mortality Rate*	Total	Full Term	Premature	Full Term	Premature	Miscarriage	Full Term	Premature	Sets of Twins
Total																	
All Patients	1,945	11,190	5.8	5,566	2.9	1,943	2	0.5	1,901	1,795	106	22	16	26	0	8	20
Under 12 weeks	58	570	9.8	318	5.5	58	0		54	49	5	1	0	4	0	2	0
12-23 weeks	433	3,496	8.1	1,936	4.5	432	1		415	388	27	5	2	12	0	2	3
24-27 weeks	512	3,195	6.2	1,572	3.1	512	0		501	466	35	4	6	7	0	2	6
28-31 weeks	355	1,782	5.0	835	2.3	354	1		347	329	18	4	8	2	0	1	6
32-35 weeks	360	1,517	4.2	662	1.8	360	0		357	340	17	5	0	1	0	1	2
36 weeks and over	227	630	2.8	243	1.1	227	0		227	223	4	3	0	0	0	0	3
White																	
All Patients	1,078	6,769	6.3	3,474	3.2	1,076	1	*	1,055	1,019	36	13	8	14	0	4	12
Under 12 weeks	48	478	9.6	268	5.6	48	0		45	41	4	1	0	2	0	2	0
12-23 weeks	301	2,455	8.1	1,410	4.7	300	1		289	281	8	2	2	8	0	1	0
24-27 weeks	289	1,912	6.6	928	3.2	289	0		284	272	12	3	2	3	0	1	3
28-31 weeks	182	913	5.0	448	2.5	181	0		181	176	5	2	4	0	0	0	5
32-35 weeks	154	698	4.5	303	2.0	154	0		151	144	7	3	0	1	0	0	1
36 weeks and over	104	313	3.0	117	1.1	104	0		105	105	0	2	0	0	0	0	3
Colored																	
All Patients	867	4,421	5.1	2,084	2.4	867	1	1.1	846	776	70	9	8	12	0	4	8
Under 12 weeks	10	92	9.2	50	5.0	10	0		9	8	1	0	0	1	0	0	0
12-23 weeks	131	1,041	7.9	518	4.0	132	0		126	107	19	3	0	5	0	1	3
24-27 weeks	223	1,283	5.8	644	2.9	223	0		217	194	23	1	4	4	0	1	3
28-31 weeks	174	869	5.0	387	2.2	173	1		166	153	13	2	4	2	0	1	0
32-35 weeks	206	819	4.0	359	1.7	206	0		206	196	10	2	0	0	0	1	2
36 weeks and over	123	317	2.6	126	1.0	123	0		122	118	4	1	0	0	0	0	0

* Non-maternal deaths omitted from rate.

TABLE NO. 7

ANALYSIS OF STILLBIRTHS OCCURRING AMONG 1,945 PATIENTS DELIVERED AT THE BALTIMORE CITY HOSPITALS

Causes	Grand Total	Full Term			Premature			Miscarriage		
		Total	White	Colored	Total	White	Colored	Total	White	Colored
All Causes	64	22	13	9	16	8	8	26	14	12
Syphilis	5	0	0	0	2	0	2	3	0	3
Abruptio placentae	3	1	0	1	2	2	0	0	0	0
Intrauterine asphyxia	11	10	5	5	1	0	1	0	0	0
Toxemia	12	5	3	2	5	3	2	2	2	0
Monstrosity	3	2	2	0	1	0	1	0	0	0
Hydatidiform mole	1	0	0	0	0	0	0	1	1	0
Undetermined	29	4	3	1	5	3	2	20	11	9

TABLE NO. 8

ANALYSIS OF DEATHS IN TEN DAYS OCCURRING AMONG INFANTS BORN TO 1,945 PATIENTS DELIVERED AT THE BALTIMORE CITY HOSPITALS

Causes	Grand Total	Full Term			Premature		
		Total	White	Colored	Total	White	Colored
All Causes	8	0	0	0	8	4	4
Prematurity	5	0	0	0	5	3	2
Atelectasis	1	0	0	0	1	1	0
Syphilis	1	0	0	0	1	0	1
Undetermined	1	0	0	0	1	0	1

SCHOOL HYGIENE

DIVISION OF SCHOOL HYGIENE

H. Warren Buckler, M.D.

Chief

With the opening of the new Druid Health Center in 1939 and the enlargement of the Eastern Health District in 1938, the administrative work of the Division of School Hygiene has been somewhat reduced. At the close of 1939 there were five health districts under the direct supervision of the Chief of the Division of School Hygiene. The data given in this report, however, include the work of the division in the public and parochial schools for the entire city since the health officers of the established health districts transmit their school hygiene records currently to the central office. As in former years, the report that follows has been divided into two parts: (1) the method practiced for the control of communicable diseases among children of school age and (2) physical examinations of children for the detection and correction of defects that may have a bearing upon their health, growth and scholastic standing.

Control of Communicable Diseases in Schools

Tuberculosis

The policy of the Health Department in former years has been for the Director of the Bureau of Tuberculosis to report to the Chief of the Division of School Hygiene all contacts of school age from homes in which an active case of pulmonary tuberculosis exists. Every effort was made by the division to have these children given a tuberculin test and if necessary an X-ray examination. Such a procedure required the child to visit one of the tuberculosis clinics and as usual in many instances the parents of the child failed to heed the advice given. For this reason, the Chief of the Division of School Hygiene strongly urged tuberculin testing of this group of children in the monthly clinics maintained in the schools for vaccination and toxoid purposes and an X-ray examination at a clinic if such children were positive reactors. This procedure for tuberculosis contacts is of particular importance among children in the Negro schools, since it is not an uncommon occurrence for Negro children of elementary school age to show physical evidence of active pulmonary tuberculosis of the adult type.

Diphtheria

The steady decrease in the incidence of diphtheria among children of elementary school age since the inauguration of the monthly toxoid clinics

in schools was most remarkable and encouraging. In 1937 there were 115 cases of clinical diphtheria reported in children of school age, in 1938 there were 68 cases and in 1939 only 31 cases among a school population of approximately 100,000 children. A survey made of all elementary public and parochial schools at the end of the scholastic session of 1938–1939, with the exception of those schools located in the Eastern Health District, showed that approximately 76 per cent of the children had received some form of protection against diphtheria. There were 67 cases of diphtheria of all ages reported in the city for the year 1939 and 31 or approximately 50 per cent of these were children of school age. Of these 31 cases of the disease in school children, 17 or a trifle over 50 per cent had no history of having received a protective dose of toxoid.

Vaccinations Against Smallpox

The records of 83,948 children were reviewed at the end of the 1938–1939 scholastic year and 530 children failed to show evidence of past successful vaccinations. Of this number only 25 were among white children in the elementary public and parochial schools and 505 were among colored children. The relatively unsatisfactory showing in the latter group is due partly to the non-observance of the compulsory vaccination law and partly to the constant and frequent change of residence among the colored population of the city. Before the close of school in 1939, however, all these Negro children who could be located were successfully vaccinated.

In the monthly vaccination clinics in schools, the number of children of preschool age as well as those entering school has increased steadily since the establishment of these clinics in September, 1938. In 1939 there was a total of 3,189 children of school and preschool age vaccinated under the auspices of the Division of School Hygiene as compared with 2,544 in 1938 and 1,467 in 1937.

Other Communicable Diseases

On the whole, with the exception of measles, there was a decrease in the usual reportable diseases among the school population in 1939. Scarlet fever cases declined from 675 in 1938 to 322 cases in 1939 and whooping cough from 357 cases in 1938 to 270 in 1939. There was also a decrease in the number of cases of chickenpox reported in 1939 as compared with 1938; there were 1,178 cases in the former year and 2,051 in the latter. The year 1939 was what is termed a "measles year" and of a total of 11,876 cases reported, 5,391 were among children of elementary school age as compared with 416 cases in the same age group in the year 1938.

The number of cases of communicable skin diseases and head infestations has been gradually reduced from year to year. In 1939 there were

621 cases of communicable skin diseases as compared with 916 in 1938 and 931 cases of pediculosis capitis in 1938 as compared with 816 in 1939.

Detection and Correction of Physical Defects

There were 45,055 routine physical examinations made by the health officers in the public and parochial schools in 1939. These for the most part were the newly entering pupils and those of the third and fifth grades. Infected tonsils and adenoids were the most frequently discovered defects. These findings were important from a public health standpoint, since this condition has a bearing upon the child's general nutritional condition, is a common cause of beginning deafness and makes the child a possible carrier of infection. There were 10,497 such children reported during the year and 2,890 had their tonsils and adenoids removed. There were 11,987 children found to be in need of dental attention and 4,812 received such service either at one of the clinics maintained by the Health Department or through private sources. There were 4,446 cases of malnutrition discovered in the grade groups examined, in accordance with established routine, in 1939; and 4,579 in 1938, a total of 9,025 cases of malnutrition in the public and parochial schools of Baltimore. Each of these cases was studied and depending upon whether the malnutrition was of physiological, pathological or sociological etiology, the case was handled according to the findings. A total of 3,100 children was found to have some defect in vision and of this number 1,738 obtained glasses. Approximately 55 per cent was refracted in the Department eye clinic and 10 were recommended for the sight saving classes of the Department of Education. There were 2,129 children who received treatment in the eye clinic in 1939 for various diseases of the eye as compared with 2,183 in 1938.

The patronage of the ear clinic has increased progressively year by year so that the advisability of an additional clinic session should be considered. Hypertrophied tonsils and adenoids were found to be the chief cause of impaired hearing and of a total of 185 such cases 59 had their tonsils and adenoids removed. A group of 27 children whose adenoids had returned after operation were sent to the Howard A. Kelly Hospital for radium treatment. Detailed results of this type of treatment will be published by the physician in charge of the ear clinic. There were 1,588 children treated in the ear clinic in 1939 as compared with 1,299 in 1938 and 1,096 in 1937.

Special Examinations of the Handicapped Child

All suspected cases of mentally or physically handicapped children are given special examinations. In 1939 there were 66 cases recommended for orthopedic classes, 8 for cardiac classes, 25 for sight saving classes,

141 for open air classes and 66 for lip reading instructions. There were 105 children confined to their homes for more than three months, due to some disability, for whom home teachers were recommended.

Acknowledgments

Special thanks are given to Dr. Curtis Burnam and Dr. William Neill of the Howard A. Kelly Hospital for their generous treatment with radium of those children sent from the Health Department ear clinic.

Personnel

H. Warren Buckler, M.D., Chief
Harry C. Grant, M.D., Health Officer
M. Breitstein, M.D., Health Officer
Thomas R. O'Rourk, M.D., Health Officer

TABLE NO. 1
REPORT OF PUPILS EXAMINED AND DEFECTS FOUND

Defects	Total	Public Elementary Schools		Parochial Schools White and Colored
		White	Colored	
Number of pupils examined	45,055	23,783	10,801	10,471
Number of pupils defective	21,855	11,203	5,523	5,129
Tonsils	10,497	5,497	2,464	2,536
Adenoids	10,497	5,497	2,464	2,536
Teeth	11,987	6,180	2,868	2,939
Eyes	3,100	1,542	854	704
Ears	122	102	9	11
Heart	630	377	104	149
Vaccinations in schools	3,189	1,866	1,128	195
Cases of malnutrition	4,446	2,124	1,392	930

TABLE NO. 2
REPORT OF CORRECTIONS OF PHYSICAL DEFECTS OF SCHOOL CHILDREN

Defects Corrected	Total	Public Elementary Schools		Parochial Schools White and Colored
		White	Colored	
Tonsils and adenoids	2,890	1,855	245	790
Other operations	164	106	25	33
Teeth	4,812	2,673	1,017	1,122
Eyes refracted and glasses obtained	1,738	1,112	217	409
Eyes refracted and glasses not necessary	60	35	11	14
Skin eruption	621	352	176	93
Pediculosis	816	634	..	182
Children treated for minor ailments, accidents and emergencies	1,578	147	1,164	267
Children taken to dispensaries	1,464	843	271	350

DIVISION OF DENTAL CLINICS

DIVISION OF DENTAL CLINICS

Morris Cramer, D.D.S.

Supervisor

There were more requests for dental treatment received in the Division of Dental Clinics during 1939 than in any previous year. The staff, consisting of four part time dentists and a part time supervisor, made every effort to meet the increased demand. Most distressing conditions were again found in examining the children who were brought to the sixteen dental clinics located in public schools. A large number of pupils required fillings in every tooth and many of them showed permanent molars badly broken down, infected and far beyond repair. Because of the very limited staff, most of the work consisted of extractions only. The dentists were unable to devote much time to treating and filling teeth or to dental health education, but whenever possible, pupils were instructed in the proper care of their mouths.

During the summer recess of schools the dental equipment was moved from Public School No. 70A in Curtis Bay to Public School No. 203 in Brooklyn. This change was made in accordance with a request by the Department of Education because of lack of space at Public School No. 70A.

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

Pupils registered at clinics	4,726
Visits of pupils to clinics	5,785
Prophylactic treatments given	2,894
Teeth filled	1,253
Temporary teeth extracted	7,780
Permanent teeth extracted	2,300
Pupils completed and discharged	4,012

Special Preschool Dental Study in Western Health District

The preschool dental clinic at the University of Maryland School of Dentistry continued to function during 1939 in cooperation with the Health Department infant and preschool hygiene clinic in the Western Health District. Senior students in the dental school examined and treated children ranging from eighteen months to school age. These students worked under the supervision of a Health Department dentist. Accurate records were kept of the treatments and findings with periodic follow-up. During 1939 a total of 69 children was treated as compared with 37 during

1938. There were 43 teeth extracted, 10 amalgam fillings done and 38 prophylactic treatments given. A total of 92 visits was made.

Recommendations

Between 90 and 95 per cent of all children examined need dental treatment. Decay of the teeth is so prevalent among school children that steps should be taken to meet these needs. The demand for treatment and fillings are mounting higher each year and the limited facilities of the Health Department cannot meet these demands. Many children are referred to the University of Maryland School of Dentistry, but are not treated because they are unable to pay the small charge. It is therefore obvious that some provision should be made for these and other such medically indigent persons, and it is hoped that a plan may be worked out to meet this city-wide problem by those interested in the new Committee on Medical Care of the State Planning Commission.

Personnel

Morris Cramer, D.D.S., Supervisor
John H. Hoffman, D.D.S., Dentist
Charles Highstein, D.D.S., Dentist
Nathan Scherr, D.D.S., Dentist
Lucius A. Butler, D.D.S., Dentist

TABLE NO. 1
REPORT OF THE WORK DONE IN THE DENTAL CLINICS—1939

Month	New Patients	Visits	Prophylaxis	Amalgam Fillings	Cement Fillings	Gutta Percha	Treatments	Carbo-eugonol	Emergency	Extraction of Permanent Teeth	Extraction of Temporary Teeth	Completed and Discharged
Total	4,726	5,785	2,894	817	347	7	85	89	338	2,300	7,780	4,012
January	566	707	339	90	48	3	19	15	53	411	848	439
February	489	637	303	79	33	..	9	15	35	238	930	443
March	668	802	426	130	47	..	14	15	43	297	1,128	589
April	473	595	293	94	42	..	5	8	33	252	830	429
May	587	747	384	105	38	1	10	10	45	283	999	547
June	232	317	159	40	21	..	10	3	27	141	381	241
October	693	742	368	106	44	2	8	14	32	241	933	494
November	591	700	353	108	53	1	9	4	40	226	1,014	470
December	427	538	269	65	21	..	1	5	30	211	717	360

BUREAU OF PUBLIC HEALTH NURSING

BUREAU OF PUBLIC HEALTH NURSING

Jane B. Laib, R.N.

Director

The establishment of the Eastern, Western and Southeastern Health Districts and of the Druid Health Center has undoubtedly been of great value in rendering to the public an improved public health nursing service. By the end of 1939 there were sixty-three public health nurses and five supervising nurses working from district headquarters. The health service is virtually brought to the doors of the community served and the public health nurse can render more efficient service. She is nearer her area of assignment, her transportation time is reduced to a minimum and her time in the field and clinics is correspondingly increased.

From March 27 to May 6, seven public health nurses were assigned to assist in a census-survey of the Baltimore Housing Authority's slum clearance area "K", located in the Eastern Health District. In addition, two colored graduate affiliate nurses from the Western Health District volunteered to assist for ten days during this survey period. With the closing of schools in June, thirty-six public health nurses were sent to the Eastern Health District to assist nine other Health Department Eastern District nurses in the triennial census-survey of the population of the district. This work was done under the direction of Dr. George Badger, Associate in Biostatistics of the Johns Hopkins School of Hygiene and Public Health and Dr. W. Thurber Fales, Director of the Bureau of Vital Statistics of the City Health Department. Survey records for 15,986 families were completed by the nurses from March 27 to August 5.

Twelve colored public health nurses and one white supervisor were transferred from the central office to the Druid Health Center on September 1. Because of the large colored population in this area and the small number of colored field nurses, a redistribution of assigned public health nursing areas was made in the entire Western Health District. The fifteen colored field nurses of the Department carry on a generalized nursing service in the Druid Health Center area and in addition are assigned several schools and clinics outside the area.

Personnel

One white and one colored public health nurse were selected in January from the eligible list of the City Service Commission to fill new positions created through special appropriation for syphilis control. Six public

health nurses were appointed to temporary positions through special appropriation of the Board of Estimates, four to assist in the census-survey in the Eastern Health District and two to fill substitute positions in the places of public health nurses on sick leave.

Two public health nurses resigned and one retired and the positions were filled from the City Service eligible list. There were three nurses appointed during the summer to fill substitute positions of public health nurses on leaves of absence without pay.

General Services

Maternity Hygiene

In 1939 public health nurses made 10,451 visits to maternity hygiene cases. This is an increase of 3,723 visits over that of the preceding year. There is strong evidence that clinic and home nursing visits made by the field nurses in this program have been an important factor in the maintenance of the relatively low maternal mortality rate recorded in the city.

The procedure of having the public health nurses make blood pressure readings on prenatal patients visited, was begun in the Western Health District on November 1, 1938 on a six months' trial basis and was completed on April 30, 1939. A total of 238 such visits was made to 132 patients. This study resulted in a valuable interchange of information between the nurse and the physicians in the clinics. Recommendations were made to continue this procedure in the Western Health District and subsequently to extend it to the entire city.

Infant and Preschool Hygiene

The public health nurse participates actively in the infant and preschool hygiene service. Considerable emphasis has been placed on the importance of recording information obtained at the time of the home visit on the clinic records for the guidance of the physicians and nurses in the infant and preschool hygiene clinics. There were 73,527 home visits made by these nurses in the interest of the infant and preschool child in 1939. In addition, public health nurses spent 12,888 nurse hours assisting Department physicians in conducting infant and preschool hygiene clinics. The low infant mortality rate recorded in the city during 1939 serves as an incentive to increasing efforts on the part of the nursing staff.

On October 1, 1938 the public health nurses in the Southeastern Health District had begun weighing babies when making neonatal visits. This procedure was begun on a six months' trial basis before its adoption in the city as a whole. The study was completed in April, 1939 and a total of 600 neonatal visits was made by the field nurses in the district. It was

generally agreed that the weighing of neonatal cases in the home makes for a better understanding between the public health nurse and the mother and its continuation was recommended.

School Hygiene

A special review was made by the public health nurses of the school records of approximately 85,000 children in the public and parochial schools at the request of the Chief of the Division of School Hygiene. The review was made in order to determine the number of school children recorded as having been vaccinated against smallpox and inoculated against diphtheria. It was found that approximately 99 per cent of the children had been vaccinated against smallpox and about 76 per cent had been inoculated against diphtheria. Public health nurses assisted the school physicians in making 45,055 physical examinations of children in the elementary schools and made 15,976 visits to homes for correction of remediable defects. The field nurses treated 79,676 children for minor ailments, accidents and emergencies which occurred in schools.

Communicable Diseases

Upon receipt of a report of certain of the communicable diseases, visits to the homes are made by public health nurses and instructions given to the parents or guardians for the isolation of the patient. A total of 37,568 such visits was made by the nurses during the year. Emphasis was placed upon the child's being protected against smallpox by vaccination and against diphtheria by the protective dose of toxoid at the same time, thereby necessitating only one visit of the mother to her physician or to a clinic.

Tuberculosis

At the close of the year the public health nurses carried a case load of 4,561 tuberculosis cases as part of their generalized program. A total of 32,916 visits was made to the homes of these cases according to instructions from the Director of the Bureau of Tuberculosis. Every possible effort was made to disseminate necessary advice and to urge the examination of contacts by private physicians or at one of the Department's tuberculosis clinics. Particular emphasis was placed upon the examination of children and many were recommended for a summer stay of three weeks or longer at the Claiborne Miracle House of the Maryland Tuberculosis Association.

Several procedures formerly carried out by public health nurses, such as visits to patients for delivery of vacancy announcements for sanatorium beds and visits in connection with a follow-up study to post-sanatorium

cases, were transferred to two field nurses appointed for a special tuberculosis control program by the Board of Managers of the Maryland Tuberculosis Sanatorium Commission, through funds granted by the Maryland Tuberculosis Association. Weekly conferences were held for discussion and advice in this field of public health nursing and were attended by the Director of the Bureau of Tuberculosis, the Director of the Bureau of Public Health Nursing and the supervising nurse from each of the districts.

Special Services

Following numerous conferences of the Commissioner of Health with superintendents and instructors of hospital schools of nursing affiliating with the Health Department, a new program for student affiliation was outlined and became effective on September 5. The theory of public health nursing is to be taught by the instructors in the hospital schools of nursing and students are assigned to the established health districts for observation of field work only. In order to familiarize the instructor in the hospital schools with the field and clinic activities of the public health nurse, a series of discussions was held by the teaching supervisor in the Western Health District and a copy of the mimeographed book entitled *An Outline for Affiliate Instruction in Public Health Nursing* was given to each instructor as a guide. In addition, all students were required to attend the ten lectures on public health in the central lecture course given by the Assistant Commissioner of Health to senior students in hospital schools of nursing. During the year a total of fifty-five students affiliated with the Department for periods of eight weeks each.

Ten graduate nurses were accepted as "volunteer affiliates" for a period of four months each. These nurses were given a two months' introductory course of instruction in the Western Health District before assignment to one of the health districts for field and clinic apprenticeship. This was a means of recruiting eligible candidates for vacancies in the bureau and following the fitness test given by the City Service Commission, a number of the nurses who had volunteered their services were appointed to the regular staff.

The director of the bureau again acted as chairman of the committee for periodic health examinations. There were 350 members of the Department who presented themselves voluntarily for this service; of this number 125 were public health nurses. For the year 1938 these figures were 266 and 112 respectively.

Staff Education

Regular semimonthly conferences were held by the director of the bureau with the supervising nurses either in the central office or in one of the dis-

trict health offices. As in the past, many of these meetings were attended by the Commissioner of Health or the Assistant Commissioner of Health. Bureau directors of the Medical Section who attended a number of these meetings discussed the work carried on by the field nurses for their bureaus and presented the new developments in their work. Weekly consultative conferences were held by the supervisors with the public health nurses under their supervision and at this time demonstrations and case studies were presented by members of the group.

Supervisors and field nurses attended the Nineteenth Annual Meeting of the State Department of Health and the Training Course for County Health Officers and Public Health Nurses on Pneumonia Control. Public health nurses attended the meeting of the Maryland State Organization of Public Health Nursing held in Cumberland, Maryland and as in previous years, attended the joint meetings of the three Maryland nursing organizations. The director of the bureau attended the Fifth Regional Conference of Public Health Nursing Executives held in Providence, Rhode Island on December 7 and 8. The conference was devoted to a consideration of the cooperative relationship between official and non-official groups and there was a profitable discussion on student affiliation.

Personnel

Jane B. Laib, Director
E. M. H. Brown, Assistant Director
Grace S. Eyler, Senior Stenographer
Sara H. Ford, Senior Stenographer
M. Alice Caron, Senior Supervisor of Field Nurses
Adelaide G. Smith, Senior Supervisor of Field Nurses
Ethel Gluck, Senior Supervisor of Field Nurses
Ola C. Early, Senior Supervisor of Field Nurses

Public Health Nurses

Marianna P. Aiau
Mary Bacon
Romaine S. Basford
Pauline K. Benfer
Ruth Bennett
Grace Berger
Marian Bowden
Marie V. Buckless
Elevian R. Carter
Mary E. Carver
Sarah Case
Florence Collins
Ruby Collins
Helen L. Collins
E. Murray Cox
Grace C. Crawford
Bertie B. Davidson
Ethelyn B. Dever
Alice E. Diver
Emily Ely
Ruth F. Eckman
Edna J. Faith
Rose M. Fields
Ethel V. Finneyfrock
Virgie M. Finneyfrock
Helen H. Galloway
Geneva N. S. Gartside
Margaret H. Harbaugh
Fannie Hough
Margaret B. Hoyt

George A. Hutton
Constance Jacobs
Ruth Jones
Ethel L. Kallinsky
Edna Kenney
Elsa Kittel
Rose B. McDonnell
Winifred Moore
Roberta S. Pinckard
Carolyn Kling Preston
Helen B. Reutter
Elizabeth Rutter
Carolyn M. Shaffer
Helen B. Sharpe
Ann E. Smith
Alice K. Stevenson
Ruth Stoneham
Mary I. Streckfus
Mary B. Tewell
Birdie M. Thearle
Marian E. Timbs
Violet Weber
Helen L. Wells
Alva M. Williams
Edna V. Yates

TABLE NO. 1

SUMMARY OF ACTIVITIES OF PUBLIC HEALTH NURSES IN THE PUBLIC AND PAROCHIAL SCHOOLS

Activity	All Schools	White Schools	Colored Schools
Pupils prepared for examinations	58,248	45,439	12,809
Inspection of contacts of communicable diseases and sick absentees	25,439	24,375	1,064
Classroom inspections for communicable diseases	7,642	7,494	148
Special examinations	113,925	104,996	8,929
Treatment of minor ailments and accidents	79,676	73,888	5,788
Children excluded from classroom	4,768	4,627	141
Assist with immunizations	4,030	3,035	995
New children with physical defects	13,807	9,993	3,814
Interviews with parents	15,389	12,725	2,664
Children taken to clinics	6,076	4,956	1,120

TABLE NO. 2
SUMMARY OF FIELD VISITS OF PUBLIC HEALTH NURSES—1939

Service and Type of Visit	Entire City			Eastern Health District*		Western Health District		South-eastern Health District*		Remainder of City	
	Total	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored
All Field Visits	210,965	155,594	55,371	23,046	18,026	17,058	27,939	41,143	1,834	74,347	7,572
Maternity hygiene	12,684	6,984	5,700	2,187	2,426	375	2,505	3,047	196	1,375	573
Infant health supervision	53,629	38,667	14,962	4,977	3,850	4,538	8,898	12,704	489	16,448	1,725
Preschool health supervision	39,257	26,670	12,587	4,360	4,981	3,393	6,062	11,169	437	7,748	1,107
School health supervision	19,636	18,535	1,101	3,377	283	1,428	452	1,605	208	12,125	158
Tuberculosis	32,916	20,569	12,347	2,946	3,706	2,525	6,800	4,660	372	10,438	1,469
Venereal disease	338	18	320	6	311	..	8	5	..	7	1
Acute communicable disease	37,568	32,449	5,119	4,437	1,761	4,301	2,283	4,001	75	19,710	1,000
Other morbidity	12,602	9,904	2,698	688	666	470	907	3,911	55	4,835	1,070
Boarding homes, day nurseries and nursery schools	2,019	1,559	460	..	..	..	..	..	..	1,559	460
Unclassified	316	239	77	68	42	28	24	41	2	102	9
Total Home Visits	179,811	133,936	45,875	19,040	14,816	14,596	22,967	34,064	1,519	66,236	6,573
Maternity hygiene	8,937	4,807	4,130	1,536	1,915	269	1,691	1,990	123	1,012	401
Infant health supervision	42,994	30,717	12,277	4,035	3,179	3,625	7,258	10,043	406	13,014	1,434
Preschool health supervision	33,632	22,674	10,958	3,791	4,429	2,889	5,169	9,190	375	6,804	985
School health supervision	17,824	16,867	957	2,759	205	1,344	422	1,468	194	11,296	136
Tuberculosis	25,666	16,217	9,449	2,065	2,587	1,882	5,383	3,631	205	8,639	1,184
Venereal disease	238	13	225	3	218	..	6	3	..	7	1
Acute communicable disease	36,157	31,334	4,823	4,196	1,645	4,107	2,143	3,895	69	19,136	966
Other morbidity	12,127	9,580	2,547	629	617	458	876	3,809	55	4,684	999
Boarding homes, day nurseries and nursery schools	2,015	1,555	460	..	..	..	..	..	..	1,555	460
Unclassified	221	172	49	26	21	22	19	35	2	89	7
Maternity Hygiene Service											
All visits	12,684	6,984	5,700	2,187	2,426	375	2,505	3,047	196	1,375	573
Home visit											
Antepartum	8,230	4,537	3,693	1,271	1,482	267	1,688	1,990	123	1,009	400
Postpartum	707	270	437	265	433	2	3	..	..	3	1
Home visit, not seen	3,516	2,054	1,462	586	432	106	800	1,023	72	339	158
Visit in behalf of case	231	123	108	65	79	..	14	34	1	24	14
Infant Health Supervision Service											
All visits	53,629	38,667	14,962	4,977	3,850	4,538	8,898	12,704	489	16,448	1,725
Home visit, clinic case											
Neonatal	5,543	2,687	2,856	492	745	464	1,792	500	..	1,231	319
Subsequent	21,347	13,147	8,200	2,262	2,164	2,120	5,071	6,301	288	2,464	677
Home visits, other cases											
Neonatal	3,908	3,591	317	424	111	308	173	446	..	2,413	33
Subsequent	128	104	24	5	9	34	6	3	1	62	8
Home visit, diphtheria prevention	12,068	11,188	880	852	150	699	216	2,793	117	6,844	397
Home visit, not seen	9,896	7,397	2,499	859	533	906	1,610	2,536	81	3,096	275
Visit in behalf of case	739	553	186	83	138	7	30	125	2	338	16
Preschool Health Supervision Service											
All visits	39,257	26,670	12,587	4,360	4,981	3,393	6,062	11,169	437	7,748	1,107
Home visit, clinic case	26,972	16,864	10,108	3,467	4,351	2,081	4,682	7,794	369	3,522	706
Home visit, other cases	237	216	21	8	2	30	10	..	..	178	9
Home visit, diphtheria prevention	6,423	5,594	829	316	76	778	477	1,396	6	3,104	270
Home visit, not seen	5,323	3,763	1,560	508	496	498	885	1,857	62	900	117
Visit in behalf of case	302	233	69	61	56	6	8	122	..	44	5
School Health Supervision Service											
All visits	19,636	18,535	1,101	3,377	283	1,428	452	1,605	208	12,125	158
Home visit, correction of physical defect	15,976	15,133	843	2,691	199	1,025	338	1,247	191	10,170	115
Home visit, other	1,848	1,734	114	68	6	319	84	221	3	1,126	21
Home visit, not seen	1,608	1,478	130	544	66	83	30	103	14	748	20
Visit in behalf of case	204	190	14	74	12	1	..	34	..	81	2

* Include visits by public health nurses of the Babies' Milk Fund Association.

TABLE NO. 2—Continued
SUMMARY OF FIELD VISITS OF PUBLIC HEALTH NURSES—1939

Service and Type of Visit	Entire City			Eastern Health District*		Western Health District		South-eastern Health District*		Remainder of City	
	Total	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored
Tuberculosis Service											
All visits	32,916	20,569	12,347	2,946	3,706	2,525	6,800	4,660	372	10,438	1,469
Home visit, pulmonary case											
Presanatorium	7,597	3,596	4,001	610	1,135	655	2,400	603	117	1,728	349
Postsanatorium	9,559	8,120	1,439	775	417	536	668	1,883	69	4,926	285
Home visit, childhood type											
Presanatorium	4,414	2,079	2,335	233	426	310	1,495	558	56	978	358
Postsanatorium	995	794	201	38	19	139	135	152	7	465	40
Home visit, other forms	86	20	66	10	24	3	29	1	..	6	13
Home visit, suspect	282	156	126	29	45	26	63	45	7	56	11
Home visit, contact living case	1,260	810	450	205	199	95	194	239	18	271	39
Home visit, contact dead case	1,473	642	831	165	322	118	399	150	21	209	89
Home visit, not seen	6,096	3,688	2,408	578	748	627	1,366	939	47	1,544	247
Visit in behalf of case	1,154	664	490	303	371	16	51	90	30	255	38
Venereal Disease Service											
All visits	338	18	320	6	311	..	8	5	..	7	1
Home visit, care	220	12	208	3	203	..	4	2	..	7	1
Home visit, contact or suspected case	18	1	17	..	15	..	2	1	..	..	..
Home visit, not seen	95	5	90	3	90	..	..	2	..	..	..
Home visit, in behalf of case	5	..	5	..	3	..	2	..	..	..	..
Acute Communicable Disease Service											
All visits	37,568	32,449	5,119	4,437	1,761	4,301	2,283	4,001	75	19,710	1,000
Home visit, quarantine (total)											
Chickenpox	2,050	1,791	259	213	34	138	197	152	7	1,288	21
Measles	23,521	21,153	2,368	3,263	1,017	2,538	1,007	2,805	43	12,547	301
Whooping cough	4,054	2,747	1,307	270	424	713	693	362	1	1,402	189
Other	119	110	9	14	6	2	2	9	..	85	1
Home visit, contact or suspected case											
Chickenpox	345	331	14	23	1	14	11	20	..	274	2
Measles	4,525	4,059	466	344	141	663	188	454	17	2,598	120
Whooping cough	442	380	62	30	15	29	39	60	1	261	7
Scarlet fever	136	133	3	20	1	4	.	25	..	84	2
Other	309	300	9	12	4	4	3	5	..	279	2
Home visit, cultures for typhoid	656	330	326	7	2	2	3	3	..	318	321
Home visit, not seen	1,336	1,076	260	211	84	193	139	104	5	568	32
Visit in behalf of case	75	39	36	30	32	1	1	2	1	6	2
Other Morbidity Service											
All visits	12,602	9,904	2,698	688	666	470	907	3,911	55	4,835	1,070
Home visit, sore eye case	3,510	1,833	1,677	..	..	311	752	887	22	635	903
Home visit, patient under one year											
Diarrhea or dysentery	128	56	72	18	44	7	22	12	..	19	6
Other diseases	1,022	871	151	104	113	16	25	738	6	13	7
Home visit, patient 1-5 years											
Diarrhea or dysentery	70	32	38	10	23	3	8	3	..	16	7
Other diseases	1,678	1,418	260	158	231	37	17	1,178	6	45	6
Home visit, school child	5,522	5,255	267	304	161	65	28	975	20	3,911	58
Home visit, adult	197	115	82	35	45	19	24	16	1	45	12
Home visit, not seen	434	301	133	54	40	11	29	100	..	136	64
Visit in behalf of case	41	23	18	5	9	1	2	2	..	15	7
Boarding Homes, Day Nurseries and Nursery Schools											
All visits	2,019	1,559	460	..	..	..	..	..	..	1,559	460
Inspections	160	121	39	..	..	..	..	..	..	121	39
Routine visit	1,817	1,413	404	..	..	..	..	..	..	1,413	404
Other	38	21	17	..	..	..	..	..	..	21	17
Visit, not seen	4	4	..	..	..	..	..	..	..	4	..
Visit in behalf of case	..	..	..	..	..	..	..	..	..	..	..
Other and Unclassified Services											
All visits	316	239	77	68	42	28	24	41	2	102	9
Home visit, sanitary investigation	23	21	2	1	..	4	2	2	..	14	..
Home visit, vital statistics investigation	88	62	26	7	12	8	9	20	2	27	3
Home visit, other	110	89	21	18	9	10	8	13	..	48	4
Home visit, not seen	44	27	17	7	11	6	5	3	..	11	1
Visit in behalf of case	51	40	11	35	10	..	..	3	..	2	1

SANITARY SECTION

SANITARY SECTION

Personnel

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

SANITARY SECTION

R. S. Craig **Wilmer H. Schulze, Phar.D.**

Directors

Mr. R. Sewell Craig, Director of the Sanitary Section, died on September 3, 1939. This vacancy was filled on October 23 by the appointment of Dr. Wilmer H. Schulze, formerly Director of the Bureau of Environmental Hygiene, who had been acting as Assistant Director of the Sanitary Section since June 1, 1939.

The death of Mr. Craig, after more than twenty-five years of service in the Health Department, resulted in the loss of an able leader and administrative officer. Loyalty, initiative and enthusiasm were outstanding characteristics of this effective public official who gave unselfishly of his time and energy to encourage and assist his co-workers in attaining a really broad conception of public health.

Originally appointed as a chemist on the Health Department staff on January 1, 1913, Mr. Craig was successively Chief of the Division of Chemistry, Assistant Director and then Director of the Bureau of Chemistry and Food. On September 10, 1932 he was promoted to the newly created position of Director of the Sanitary Section and was made responsible for practically all of the nonmedical part of the Health Department program. Mr. Craig was a man of vision and over the years contributed largely to the development of the present high sanitary quality of the Baltimore water, milk and food supplies. Under his leadership also, the city established the prevention and control of carbon monoxide poisoning from gas-fired appliances, an industrial hygiene program, and many other services pertaining to the close relationship of environment to health.

While the guidance and advice of Mr. Craig will be sorely missed by his teammates, the standards and ideals of service to which he rigidly adhered will continue to be a stimulus and an inspiration to his former associates in their efforts to carry on and to improve their various fields of public service as integral parts of the broad public health program of the Commissioner of Health.

The activities of the bureaus in the Sanitary Section are interrelated in many ways and the section as a whole is indirectly associated with a number of the medical services of the Department. In order to integrate the section work more closely monthly meetings of its staff were resumed late in 1939 after a lapse of several years.

The need for sanitary sewers in outlying sections of the city is of press-

ing public health importance. Following the failure of the voters of the city to authorize in May a loan for the extension of the sanitary sewerage system to areas badly in need of such facilities, an ordinance was passed creating a sewer loan for Baltimore as an emergency measure. The legality of this ordinance was being contested at the close of the year. Since 1933 the Health Department has been endeavoring to keep additional sewage pollution of the streams in the city at a minimum because the occurrence of sporadic cases of typhoid fever has indicated that such streams were the probable source of these infections. Although notable improvements have been made by removing a major part of the sewage from Gwynns Falls and Herring Run, there exists an urgent need for eliminating the gross sewage pollution of such streams and particularly those in the bed of Vail Street and in the vicinity of Cold Spring Lane and Greenspring Avenue, and for the extension of the sewerage system to other sections of the city. During 1939 an intensive study was made, in cooperation with the Sewerage Engineer of the Department of Public Works, of the need for sanitary sewers in the Graceland Park-Dundalk area and in the Brooklyn-Curtis Bay area. The results were presented to the Board of Estimates and to the Commission on City Plan with the recommendation that adequate sanitary sewers be provided with as little delay as possible in order to remove potential and actual menaces to the health of the people of the city. Other of the larger unsewered areas were studied also with a view toward determining the relative need for extending sanitary sewers to these sections.

The reports of the bureau directors of the Sanitary Section show that in addition to the continuation of efforts to improve the sanitation of food, milk, meat and numerous environmental conditions, a number of new health measures were established for providing increased protection to the public in these fields of sanitation service. Some of the more important accomplishments of this character in 1939 were the following: The enforcement of a regulation prohibiting the distribution of bulk milk for other than manufacturing or cooking purposes, and the discontinuance of its use in bulk for fluid consumption in institutions and other places; the adoption of regulations for the sanitary control of goat milk; improvements in the methods of cleansing and disinfecting food utensils at restaurants and soda fountains in conformity with specific regulations of the Maryland State Board of Health; advancements in sanitation and improvements in sanitary equipment in municipally inspected meat establishments; the demolition of a group of slum dwellings known as St. John's Court and an increase in the study of housing conditions; the reduction and prevention of additional sewage pollution of streams in outlying sections of the city; enforcement of the psittacosis control ordinance which became effec-

tive on December 10, 1938; and the reduction, below the physiological limit, of toxic materials in industrial workroom atmospheres, together with improvement in other related health factors of working environments.

Cooperation was given members of the Medical Section in studying the sanitary aspects of problems primarily medical, such as tularemia, typhus fever, trench mouth, food poisoning, typhoid fever and occupational diseases. Lasting improvements in sanitation are gained chiefly by educational methods and efforts along this line were continued throughout the year by talks, exhibits and demonstrations to a large number of groups and individuals. In addition, printed materials on various subjects relating to sanitation were distributed in connection with field visits and upon request.

Some of the more urgent matters which were given special study during the year were the following: The formulation of tentative regulations governing the ratproofing of buildings; methods of sewage disposal in unsewered areas of the city; the review of tentative drafts for the revision of the City Building Code; a request for permission to standardize milk; and improvement of the technical services in industrial hygiene.

A policy of strict economy in expenditures was followed throughout the year without detriment to any of the essential services rendered by the individual bureaus of the section. Although a need for the expansion and improvement of some of the sanitary services was indicated, the most important ones were maintained and strengthened throughout the year by the continued effort, cooperation and teamwork of the bureau directors, division chiefs and other members of the Sanitary Section.

BUREAU OF MILK CONTROL

BUREAU OF MILK CONTROL

Ivan M. Marty

Director

It was necessary for the Bureau of Milk Control to devote a relatively large amount of time and effort in writing and revising regulations governing the production, handling, distribution and sale of milk and milk products in order to facilitate the Health Department's rigid sanitary control of the city milk supply. To meet requests that goat milk be made available to the consumer market a regulation was adopted by the Commissioner of Health on December 21 which defines goat milk and requires that the production, handling, pasteurization, processing, distribution and sale of goat milk shall be identical with the requirements established by ordinance and regulation for cow's milk. Two milk plant regulations designed to eliminate certain practices of dispensing bulk milk for fluid consumption, and thus further to reduce the possibility of outbreaks of milk-borne disease, were adopted and became effective on March 13. Some difficulty in enforcement was encountered, because the regulations prohibit the sale of bulk milk for fluid consumption and certain institutions and dealers were temporarily unwilling to purchase milk in glass containers. However, through the combined efforts of the Bureau of Milk Control and the Bureau of Food Control together with the cooperation of most of the pasteurization plants and institutions, an encouraging degree of compliance with the regulations had been obtained by the close of the year.

The Health Department Dairy Farm Regulations which were completely revised in 1937 and again in 1938 were adopted by the Commissioner of Health on February 16. The new regulations include provisions for the issuance of dairy farm permits to producers located beyond the limits of inspection for dairy farms as established by regulation in 1936. Although the regulations place the burden of inspection expenses in such outlying instances upon the producer, approximately 150 applications from farms located in Virginia and on the Eastern Shore of Maryland had been received and 61 permits had been issued following the adoption of the regulation and before the close of the year.

A decision by Judge Samuel K. Dennis in the Circuit Court of Baltimore City on December 9, 1938 upheld the right of the Commissioner of Health to hold a hearing in connection with the revocation of the Health Department permit of the Sunset Farms Dairy, Incorporated. The hearing began on February 9 and was continued for twenty-three

days with day and night sessions and terminated on April 24 when the Commissioner of Health rendered the decision that while the charges had been substantiated improvements in the sanitary condition and management of the milk plant prior to and during the hearing were such as to warrant a continuation of operation until the expiration of the plant's permit on July 1, 1939. The milk plant permit of this company was renewed in July and in September following a reorganization of the corporation, the name of the Sunset Farms Dairy, Incorporated, was changed to Kemp's Dairy, Incorporated. The dairy farm permit of the Chestnut Farms Dairy was revoked on November 10 by the Commissioner of Health because of a long series of willful and repeated violations of the city milk ordinance and Health Department regulations, which had extended over a period of twenty-five years and had begun with a prosecution in the Criminal Court of Baltimore City for shipping adulterated milk into Baltimore.

The reduction in the retail selling price of milk in November by the largest local milk distributor jeopardized seriously the financial condition of a number of the milk pasteurization plants and by the end of 1939 four retail milk distributing companies had been forced out of business. During such periods of economic stress strict compliance with Health Department requirements is more difficult to secure and invariably the tendency to violate regulations increases. Consequently, it was necessary for the bureau inspection staff to intensify its efforts in order to control the situation and to maintain satisfactory milk plant operation.

Representatives of approximately 80 per cent of the milk producers requested the Commissioner of Health to adopt regulations which would permit the standardization of the butterfat content of milk distributed in Baltimore. After many conferences and discussions between representatives of the producers and the Health Department, particularly in connection with the labeling of such a product, the guidance of the Department of Law was sought because of possible conflict with State legislation concerning milk.

Dairy Farm Inspection

Incoming Milk

An excellent bacteriologic standard for the raw milk brought into the city for pasteurization was maintained throughout the year. There was a decrease in the average per cubic centimeter bacterial plate count of the raw milk from 65,000 in 1938 to 64,000 for 1939. This reduction indicates the value of the Health Department's program of close supervision of the 3,619 Baltimore milk producers and of the producers' increasing desire

to improve the quality of the milk supply. Of the 27,426 samples of individual producers' milk analyzed during the year 96.99 per cent was below the ordinance requirement of 200,000 bacteria per cubic centimeter.

Dairy Farm Program

The dairy farm improvement program continued to gain momentum and more major corrections in buildings and equipment were effected in 1939 than in any previous year. The annual Sanitary Milk Production Contest, which since its inauguration in 1932 has played an important part in the dairy farm improvement program, was won by the Delta High School of York County, Pennsylvania. From the 19 schools enrolled in the contest, there were 425 participants most of whom were sons of Baltimore milk producers. The interest and enthusiasm exhibited by the students has increased steadily from year to year and the annual improvement in the quality of the city milk supply is unquestionably due in large measure to the training that hundreds of young farmers receive in preparation for the contest.

Pasteurization Plant Inspection

Pasteurized Milk

The average bacterial plate count of the pasteurized milk sold throughout the city was maintained, as in 1938, at 600 bacteria per cubic centimeter. The most noteworthy point, however, in relation to the safety of the city milk supply is the fact that according to the phosphatase test for pasteurization, only six improperly pasteurized samples of milk were collected in the city during the entire year. It is gratifying that since the withdrawal in October of one of the two farms supplying certified raw milk to the city, the percentage of raw milk sold within the city dropped to a new low of 1.09 per cent as compared with the previous low record of 1.5 per cent. Of the average daily milk consumption in Baltimore of 49,514 gallons during 1939, the percentage that was pasteurized was 98.72.

Ice Cream

The best bacteriologic standard ever recorded by the Health Department for ice cream manufactured by the pasteurizing plants was maintained throughout the year. The average per cubic centimeter bacterial plate count was 2,400 as compared with 3,100 for 1938 and 2,900 for 1935 which is the next lowest annual count on record. This reduction is probably due to the fact that since the adoption of regulations governing cream for manufacturing purposes on August 28, 1936 there has been a steady improvement in the sanitary condition of plants shipping cream into Balti-

more. Six cream plants located in Virginia and Wisconsin having fully complied with City Health Department regulations were awarded the first permits which have been issued since the adoption of the regulations.

Special Activities

Coliform Organisms

The concentrated efforts of the bureau to reduce the coliform organism content of the city milk supply have produced encouraging results. Although there was a marked decrease in the percentage of milk products samples showing positive coliform tests throughout the year, it is hoped that the results of the educational activities of 1939 will be more apparent in 1940.

Sampling Changes

Changes made in sample collection methods in 1938 accomplished the maintenance of a more rigid supervision of the city milk supply. Several additional changes were made in 1939 in order to increase the efficiency of the bureau inspection staff. Inspectors previously assigned to both inspection and sampling duties were required to focus their efforts on either one activity or the other. Under this plan a more complete and effective inspection service was secured and many additional city-wide random truck and doorstep samples were collected, thus making possible a closer check on the safety of the city milk supply.

Personnel

Ivan M. Marty, Director
Marie Huppman, Senior Stenographer
Lillian Rodbell, Senior Stenographer
Jennie G. Moore, Senior Clerk
Carl D. Storey, Chief, Division of Milk Plant Inspection
Robert F. Gaddis, Dairy Farm Supervisor
Courtney C. Buck, Dairy Farm Supervisor
Leroy C. Shearer, Dairy Farm Supervisor
Harry H. Shaffer, Dairy Farm Supervisor
Lawrence Wagner, Dairy Farm Inspector
Charles H. O'Donnell, Dairy Farm Inspector
John J. McKann, Dairy Farm Inspector
William M. Hoffacker, Food Inspector
Clarence L. Scheiblein, Food Inspector
Charles W. Smither, Food Inspector
Philip H. Strauss, Food Inspector
Joseph Wenk, Food Inspector

TABLE NO. 1

SUMMARY OF DAIRY FARM ACTIVITIES FOR 1939 AS COMPARED WITH 1938

Area of Baltimore Milkshed..... 2,600 Square Miles (Approximate)
Active Shippers..... 3,619

ACTIVITIES	1939	1938
DAIRY FARM INSPECTIONS		
Total	6,406	7,199
Routine inspections	2,413	3,484
Special inspections	3,140	2,889
Application inspections	853	826
OTHER ACTIVITIES		
Violation notices issued	1,253	1,588
Gallons of milk condemned	0	0
Permits issued	165	87
Permits cancelled	94	141
Hearings	81	55
Permittees warned at hearings	72	32
SUSPENSIONS OF PERMITS		
Total	317	271
Department	9	27
Field	308	244

TABLE NO. 2

BACTERIAL COUNTS AND PERCENTAGE BUTTERFAT FOR PREPASTEURIZED AND PASTEURIZED MILK—1939 AND 1938

MONTH	SELECTED MILK PREPASTEURIZED				SELECTED MILK PASTEURIZED (BOTTLED)			
	Average Bacterial Count		Average Per Cent Butterfat		Average Bacterial Count		Average Per Cent Butterfat	
	1939	1938	1939	1938	1939	1938	1939	1938
Entire Year	68,200	69,700	4.06	4.07	600	600	4.06	4.09
January	49,000	31,000	4.09	4.16	400	400	4.12	4.21
February	44,000	28,000	4.08	4.12	500	400	4.10	4.13
March	61,000	47,000	4.09	4.05	400	700	4.04	4.03
April	44,000	53,000	4.06	4.01	400	500	4.06	4.03
May	65,000	72,000	4.09	4.00	400	500	4.07	4.01
June	97,000	79,000	3.98	3.99	800	500	4.00	4.00
July	98,000	110,000	3.93	3.97	600	1,000	3.97	3.99
August	120,000	180,000	3.95	3.95	1,200	1,100	3.93	4.00
September	92,000	100,000	4.02	4.13	1,000	900	4.01	4.15
October	77,000	55,000	4.20	4.20	1,200	700	4.19	4.21
November	37,000	42,000	4.18	4.19	500	400	4.19	4.20
December	35,000	40,000	4.09	4.15	500	500	4.09	4.13

TABLE NO. 3

SANITARY CONDITIONS OF BOTTLES PRIOR TO FILLING FOR EACH CLASS OF MILK

Type of Milk	Percentage of Bottles Containing (Weighted Average)		
	Less than 10 Bacteria	50 or Less Bacteria	500 or Less Bacteria
Selected Milk Pasteurized			
1939	92.14	96.42	98.67
1938	94.69	97.03	98.55
Selected Raw Milk			
1939	95.51	96.15	98.07
1938	95.38	98.97	99.48
Certified Milk			
1939	92.75	97.10	99.27
1938	97.72	99.24	100.00

TABLE NO. 4

AVERAGE BACTERIAL COUNTS OF ICE CREAM 1939 AND 1938

Month	Average Bacterial Count For Plants Pasteurizing on Premises		Average Bacterial Count For Plants Buying Pasteurized Ingredients	
	1939	1938	1939	1938
Entire Year	2,400	3,100	18,900	10,100
January	3,100	3,800	20,000	9,600
February	1,100	1,900	3,900	10,000
March	1,100	2,300	6,100	3,900
April	1,700	1,500	17,000	3,600
May	1,000	1,700	13,000	4,700
June	1,600	2,200	31,000	18,000
July	2,800	8,500	19,000	23,000
August	5,900	4,400	18,000	21,000
September	2,000	6,800	39,000	8,600
October	4,900	1,900	34,000	3,600
November	3,000	1,600	16,000	8,100
December	1,000	1,300	9,900	7,300

TABLE NO. 5

SUMMARY OF INSPECTIONS OF CITY MILK PLANTS—1939 AND 1938

TYPE OF PLANT	INSPECTIONS	AVERAGE NUMBER OF INSPECTIONS PER MONTH PER PLANT	CORRECTION NOTICES ISSUED
Milk Plants			
1939	3,059	10.79	1,035
1938	1,185	4.35	1,060
Ice cream plants pasteurizing on premises			
1939	831	4.41	508
1938	531	2.65	494
Ice cream plants buying pasteurized ingredients			
1939	1,160	3.68	623
1938	766	2.36	717

TABLE NO. 6

SUMMARY OF MILK AND MILK PRODUCT SAMPLES COLLECTED—1939 AND 1938

TYPE OF SAMPLE	1939	1938
ALL SAMPLES	9,682	9,311
Milk	3,969	3,871
Cream	751	1,045
Ice cream	1,471	1,507
Ice cream mix, evaporated and condensed milk	29	28
Empty bottles	3,199	2,669
Water samples	140	116
Miscellaneous samples	123	75
Dairy products cans inspected	20,616	29,534

BUREAU OF FOOD CONTROL

BUREAU OF FOOD CONTROL

Ferdinand A. Korff

Director

In 1939 the efforts of the Bureau of Food Control were focused upon a program of food protection for the consumers within the city. The serving of bulk milk in institutions and hospitals was discontinued by regulation as were also the few remaining pumps for dispensing milk at soda fountains. Bakers were repeatedly advised at regular inspection visits to rebake all custard-filled pastries and Department recommendations were followed by nearly all such manufacturers. The sale of oysters and clams was allowed only from sources approved by the U. S. Public Health Service and complete records of receipts and sales were kept by seafood dealers. An uninterrupted search during routine inspections was made for the presence of poisonous spray residues on fruits and vegetables.

Food Establishment Inspection

Retail Food Establishments

The percentage of "entirely satisfactory" food establishments was less in 1939 than in previous years. The undesirable conditions found, however, were not of types such as would affect the health of the individual. The following table shows the percentage of entirely satisfactory food establishments for the past seven years:

Year	Per Cent of Retail Food Establishments Entirely Satisfactory
1939	48.8
1938	58.4
1937	57.1
1936	52.7
1935	50.9
1934	55.0
1933	41.9

The method of rating food establishments as satisfactory or not satisfactory has proved effective in securing corrections in that it stimulates the owners of the establishments to strive for a perfect record. When the scoring items "display of permits" and "protection of food" are excluded from the analysis, it is found that 80.1 per cent of the retail stores of the city would fall within a status that could be classified as satisfactory. This compares favorably with the findings of previous years.

Food-utensil washing and disinfecting was emphasized throughout the year. At each visit to lunch rooms, restaurants, soda fountains, saloons and taverns the inspector gave detailed instructions to the food handlers regarding the disinfection of glasses, spoons, cups and forks by using a dilute chlorine solution in concentrations of 100 parts per million, or by scalding after washing, in water at a temperature of 180° Fahrenheit. A bacteriologic study was made of swabbings of washed glasses from a number of restaurants and lunch rooms located in different sections of the city. Cultures of these swabbings showed that improvements had been effected in the sanitation of food utensils since the adoption of regulations by the Maryland State Board of Health in 1938. The following table gives the results of bacteriologic examinations of the swabbings made in 1939:

NUMBER OF BACTERIA PER RIM OF GLASS

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
94	32	34.0	16	17.0	6	6.3	20	21.3	20	21.3

The director of the bureau collaborated with the Board of Liquor License Commissioners of Baltimore City which was interested in food-utensil cleansing in the taverns of the city. On July 1 the Board incorporated in their enforcement procedures the 1938 regulations of the Maryland State Board of Health relative to the cleansing of food containers.

Wholesale Food Establishments

Weekly inspection visits were made to all wholesale food establishments in the city and observations were made of the quality of the food entering the city, as delivered from railroad stations, wharves and truck terminals and as sold by commission merchants. Fruits and vegetables were scrutinized for the presence of poisonous spray residue. Only one truck load of cabbage was found with excessive quantities of a poisonous spray residue and this was destroyed after report was made to the Food and Drug Administration of the U. S. Department of Agriculture. A number of samples of oysters were collected and submitted to the Bureau of Laboratories for bacteriologic examination and the results, reported to the U. S. Public Health Service and to the Maryland State Department of Health are given in the following table:

BACTERIOLOGIC EXAMINATION OF OYSTERS

Number of Samples	Coliform Group								Fecal B. coli Present	
	American Public Health Association Score				Most Probable Number					
	Less than 50	Per Cent	Over 50	Per Cent	150 or less	Per Cent	Over 150	Per Cent	Number	Per Cent
110	96	83.6	14	16.4	55	50	55	50	19	17.2

Manufacturing Food Establishments

By far the largest group of manufacturing food establishments in the city are bakeries which numbered 465 at the close of the year. Of these, approximately 20 per cent manufactured custard-filled pastries at some period of the year. When the food inspectors observed the process of manufacture it was found that nearly all the bakers were reheating custard-filled pastries, such as éclairs, cream puffs or other types of custard products, at 180° Fahrenheit or above. Bacteriologic examination of the finished products gave indications that a low bacterial content of the custard within the pastry could be used as evidence that the rebaking process had been carried out. The difficulties encountered in the control procedure included: (1) proof that the pastry was reheated so that the custard within the shell reached 180° Fahrenheit or above and (2) assurance that the finished product was stored and distributed in such a manner that the outer shells containing the custard would not break or crack and thus expose the custard. Other types of manufacturing food establishments were visited at regular intervals and corrections of undesirable conditions were made promptly.

Special Activities

Field Inspection Kit

In order to aid bureau inspectors in determining the sanitary quality of foods examined, field inspection kits were devised containing equipment for making simple tests for the detection of spoilage and the presence of adulterants in food. Aside from being useful in discovering adulteration and food decomposition not usually observed by the five senses, the portable testing outfit gives assurance to the inspector that the food is free from substances that might be deleterious to the health of the consumer.

Institution Milk

The Commissioner of Health adopted a regulation on March 13 prohibiting the sale of bulk milk by dairies except for use in manufacturing or cooking purposes. This regulation was enforced jointly by the Bureau

of Milk Control and the Bureau of Food Control. At the close of the year all institutions in the city were serving bottled milk to patients and employees.

Dermatitis among Food Handlers

Following reports of cases of dermatitis among food handlers, the director of the bureau collaborated with the Director of the Bureau of Occupational Diseases in making a survey of several groups of soda fountains in order to learn what types of washing compounds were used by dishwashers. Tentative recommendations were made to employers that included the daily use of emollients by the food handlers and the discontinuance of high alkaline content soaps.

Permit Issuing

A uniform system of issuing and filing permits relating to the retail sale of milk, meat, and gas appliances, the operation of boarding and rooming houses and the licensing of gas fitters was completed on October 1. The new procedure made records more accurate and more readily available and increased the speed of issuing such permits.

Preconvention Inspections

Immediately preceeding a very large convention in the city in June, daily inspections were made of the temporary food-dispensing facilities, premises of caterers, hotel kitchens, concessions and transportation terminals. Insanitary and hazardous food-handling procedures were pointed out and immediate corrections were made. No illness due to food was reported among any of the visitors who attended the convention.

Other Activities

An ultraviolet ray method for the disinfection of food utensils was investigated and found to be less effective than chlorine or hot water as required by the Maryland State Board of Health regulations enforced in the city by the Bureau of Food Control. Fumigators were advised to report all instances where they used poisonous gases in the course of disinfecting activities in food establishments. In such cases inspections were made of the premises following the fumigation and tests were made for the presence of traces of the gas in the food before its sale was permitted.

Food Poisoning

In 1939 a team consisting of representatives of the Bureau of Food Control, the Bureau of Communicable Diseases and the Bureau of Lab-

oratories, the so-called "Food-Poisoning Team," investigated thirty-six alleged and actual outbreaks of food poisoning, most of which were reported by one or more of the individuals involved. The following is a tabular summary of outbreaks in which it was found that a specific food was the cause of the illness:

OUTBREAK	PERSONS INVOLVED	FOOD REPORTED AS CAUSE	PROBABLE CAUSE
No. 1	3	Custard layer cake	Enterotoxin-producing *Staphylococcus*
No. 2	43	Crab salad	Unrefrigerated crab salad
No. 3	38	Crab salad	Unrefrigerated crab salad
No. 4	5	Custard-filled pastries, napoleons	Enterotoxin-producing *Staphylococcus*
No. 5	6	Mushrooms	Inedible mushrooms
No. 6	12	Imperial crabs	Improperly heated imperial crabs
No. 7	13	Imperial crabs	Improperly heated imperial crabs
No. 8	3	Mushrooms	Inedible mushrooms, *Russula*

There are given below sample summaries of three food-poisoning outbreaks investigated during 1939 by the Department food-poisoning team:

Outbreak No. 2. Crab salad was prepared and served to forty-three nurses and interns at a local hospital. Within six hours all of the persons who ate the crab salad became ill with diarrhea, vomiting and abdominal pains and all showed a slight elevation of temperature. Portions of the food were not available for examination. At the investigation it was learned that the salad was prepared many hours before it was served and not refrigerated adequately during the storage period.

Outbreak No. 6. A group of teachers secured from a local department store lunches that included imperial crabs for a picnic. The lunches were stored without refrigeration for about six hours before eating. About seven hours after the imperial crabs were eaten all of the persons were made ill with vomiting, diarrhea, abdominal pains and all showed a slight rise of temperature. It was learned that the imperial crabs had not been heated thoroughly during the baking process, and the crab meat within the center of the stuffed crab shells was practically at incubation temperature for several hours.

Outbreak No. 8. A family ate a miscellaneous assortment of wild mushrooms that had been gathered by one of its members. Some of the mushrooms eaten were identified as belonging to the genus *Russula*, an inedible variety.

Following outbreaks Nos. 2, 3, 6 and 7 public warnings were issued concerning the preparation and storage of crab meat preparations with the advice that crab salads should be kept refrigerated during the entire storage period and that imperial crabs should be heated so that all portions of the food would reach 180° Fahrenheit or above. Two outbreaks of illness resembling food poisoning that occurred among children in a nursery

and students in a private school were also investigated. In both instances carriers of *Shigella sonnei* were found who probably spread the infection through the medium of food handling or related activities.

The following table summarizes the investigation of food-poisoning outbreaks made by members of the Department for the past ten years:

Year	All Outbreaks		Major Outbreaks			
	Number	Persons Made Ill	Number	Persons Made Ill		Public Eating Places Involved
				Each Outbreak	Total	
Total	225	1,692	31		1,096	14
1939	36	213	6	43; 38; 5; 6; 12; 13	117	2
1938	41	333	7	2; 100; 15; 100; 9; 5; 40	271	1
1937	21	108	6	5; 17; 10; 22; 4; 4	64	2
1936	33	137	3	15; 12; 8	35	3
1935	23	106	2	27; 9	36	2
1934	29	197	1	102	102	0
1933	20	128	1	69	69	1
1932	9	361	3	9; 29; 300	338	2
1931	10	92	2	50; 14	64	1
1930	2	17	0	0	0	0

Personnel

Ferdinand A. Korff, Director
Etta Levin, Senior Stenographer
Julius A. Messina, Senior Food Inspector
John Behr, Food Inspector
W. W. Stanton, Food Inspector
L. E. Gerstmyer, Food Inspector
Charles H. Roehner, Food Inspector
Morris Cohen, Food Inspector

TABLE NO. 1

INSPECTIONS OF RETAIL, WHOLESALE AND MANUFACTURING FOOD ESTABLISHMENTS, 1939 AND 1938

INSPECTIONS	1939	1938
All Inspections	35,398	37,304
RETAIL ESTABLISHMENTS		
Total	10,146	11,111
Initial inspections	7,617	7,903
Special inspections including school cafeterias and homes	1,381	1,417
Reinspections	1,148	1,791
Ratio of reinspections to initial and special inspections	0.13:1	0.19:1
MANUFACTURING ESTABLISHMENTS		
Total	2,398	2,686
Initial inspections	1,050	1,042
Special inspections	554	640
Reinspections	794	402
Ratio of reinspections to initial and special inspections	0.50:1	0.24:1
WHOLESALE ESTABLISHMENTS		
Total	8,002	9,420
Initial inspections	1,458	1,409
Special inspections	0	0
Reinspections	6,544	8,011
Ratio of reinspections to initial and special inspections	4.4:1	5.6:1
MARKET STALLS		
Total	14,095	13,145
Initial inspections	5,500	5,500
Reinspections	8,595	7,645
Ratio of reinspections to initial and special inspections	1.56:1	1.39:1
MISCELLANEOUS ESTABLISHMENTS		
Total	757	942

TABLE NO. 2

ACTIVITIES IN RETAIL, WHOLESALE AND MANUFACTURING FOOD ESTABLISHMENT INSPECTION, 1939 AND 1938

ACTIVITIES	1939	1938
RETAIL ESTABLISHMENTS		
Violation notices issued	76	72
Items on violation notices	151	140
Percentage of items issued for:		
Insanitary premises	13	24
Delinquent permits	10	5
Insanitary utensils	27	31
Uncleanliness of personnel and protection of food	15	14
Unwholesome food	35	26
Pounds of food condemned	2,077	566
Hearings within bureau	40	25
Samples of food obtained for examination	273	816
WHOLESALE ESTABLISHMENTS		
Violation notices issued	12	14
Hearings within bureau	9	12
Samples of food obtained for examination	241	184
MANUFACTURING ESTABLISHMENTS		
Violation notices issued	9	5
Hearings within bureau	5	16
Samples of food obtained for examination	62	204

TABLE NO. 3

POUNDS OF FOOD CONDEMNED IN WHOLESALE AND MANUFACTURING FOOD ESTABLISHMENTS, 1939 AND 1938

TYPE OF FOOD	TOTAL	FOUND BY INSPECTIONS	REQUESTED FOR DECISION
1939			
ALL TYPES OF FOOD	51,492	32,652	18,840
WHOLESALE FOOD ESTABLISHMENTS			
All types of food	49,199	31,398	17,801*
Vegetables and fruit	9,760	7,390	2,370
Meats	452	163	289
Sea Food	7,551	725	6,826
Poultry and game	1,365	286	1,079
Groceries	9,233	6,614	2,619
Canned and bottled goods	2,311	1,881	430
Baking supplies	1,403	30	1,373
Milk and cream	900	850	50
Nuts, cakes and candies	16,224	13,459	2,765
MANUFACTURING FOOD ESTABLISHMENTS			
All types of food	2,293	1,254	1,039**
Canned and bottled goods	1,334	295	1,039
Baking supplies	294	294	..
Nuts, cakes and candies	665	665	..
1938			
ALL TYPES OF FOOD	160,533	14,854	145,679
WHOLESALE FOOD ESTABLISHMENTS			
All types of food	154,867	14,408	140,459†
Vegetables and fruit	18,323	..	18,323
Meats	373	..	373
Sea Food	13,264	3,397	9,867
Poultry and game	1,163	54	1,109
Groceries	112,766	3,936	108,830
Canned and bottled goods	2,492	1,257	1,235
Baking supplies	4,530	4,530	..
Milk and cream	64	64	..
Nuts, cakes and candies	1,892	1,170	722
MANUFACTURING FOOD ESTABLISHMENTS			
All types of food	5,666	446	5,220‡
Canned and bottled goods	392	392	..
Baking supplies	4,464	..	4,464
Nuts, cakes and candies	810	54	756

* Includes 1,565 pounds of food damaged at fires.

** Includes 1,039 pounds of food damaged at fires.

† Includes 108,800 pounds of food damaged at fires.

‡ Includes 5,220 pounds of food damaged at fires.

TABLE NO. 4

DISTRIBUTION OF INSPECTIONS OF WHOLESALE AND MANUFACTURING FOOD ESTABLISHMENTS ACCORDING TO TYPE OF ESTABLISHMENT, 1939 AND 1938

Type of Establishment	Number of Establishments in City, 1939	Number of Inspections	
		1939	1938
Total	8,765*	25,252*	26,193*
Wholesale and distributing establishments	1,458	8,002	9,420
Hucksters, loaded trucks	1,155	1,652	1,760
Commission merchant houses	137	4,245	5,391
Wholesale groceries and warehouses	51	222	174
Candy jobbing houses	48	134	119
Wharves	18	908	1,040
Butter and egg distributing and breaking plants	14	44	31
Markets	13	502	627
Auction houses	10	222	208
Cold storage warehouses	5	5	5
Railroad terminals	7	68	65
Manufacturing food establishments	1,050	2,398	2,686
Bakeries	465	1,330	1,505
Poultry killing—Wholesale and retail	210	136	144
Candy manufacturing plants	100	260	305
Oyster packing plants	90	225	257
Soft drink bottling plants	51	89	83
Pickling plants	19	71	77
Canning plants	21	65	67
Salad manufacturing plants	24	80	69
Noodle and potato chip plants	7	35	29
Cod fish cake manufacturing plants	7	32	31
Extract bottling plants	16	32	38
Caterers and sandwich plants	33	36	73
Ice cream cone plants	7	7	8
Market stalls	5,500	14,095	13,145
Others, refineries, empty buildings and so forth	757	757	942

* Includes miscellaneous establishments and market stalls.

BUREAU OF MEAT INSPECTION

BUREAU OF MEAT INSPECTION

William Brenner, D.V.S.

Chief

The maintenance of high standards of efficiency of inspection again in 1939 permitted the slaughtering in approved local plants of cattle reacting to tuberculosis or Bang's disease, or showing signs of mastitis or Johne's disease. Such cattle are earmarked by Federal and State officials for immediate slaughter and local inspection is accepted on the condition that findings are immediately reported on required forms to the Federal and State Departments. During the year the Bureau of Meat Inspection inspected 1,074 cattle with suspected tuberculosis and Bang's disease of which two were condemned.

The principal prevailing diseases found in livestock as causes for condemnation on inspection were: (1) pyemia, hog cholera, tuberculosis, pneumonia, bruises, immaturity and emaciation in whole carcasses, and (2) parasites, actinomycosis, abscesses and cirrhosis in parts of carcasses. Improvements in sanitation in plants during the year consisted of installation of more modern equipment, renovations and new additions.

It is very gratifying to report that all manufacturers operating under the inspection of the bureau have complied with a regulation issued by the Commissioner of Health on October 20, 1938 relative to packaging and labeling of meat products.

Inspections made of meat food products shipped into the city from sources outside the State and those manufactured in Federal establishments within the city revealed that such products, in many instances, have no marks of identification either on the product or on the container. Others bear the Federal inspection legend, the trade name and in some instances the common name of the product although the true character of the product is not stated. It is hoped that compliance can be secured by educational methods rather than by resort to law enforcement.

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

Inspection service provided to establishments	132
Supervision maintained over Federal establishments	12
Inspection service provided to out-of-State shippers	85
Inspection service inaugurated at establishments	5
Establishments discontinuing business	9
Federal establishments discontinuing business	3
Private slaughterers operating in Federal establishments	3
Operators changing classification	1

Personnel

William Brenner, D.V.S., Chief
John R. Saunders, D.V.M., Veterinary Inspector
Charles D. Skippon, D.V.M., Veterinary Inspector
Franklin C. Herndon, D.V.S., Veterinary Inspector
Robert M. Cory, D.V.M., Veterinary Inspector
Edward P. Roberts, D.V.M., Veterinary Inspector
Theodore S. List, D.V.M., Veterinary Inspector
Edward J. Moylan, D.V.M., Veterinary Inspector
Bert W. Bierer, D.V.M., Veterinary Inspector
Charles W. Smith, Meat Inspector
Matthew N. Bean, Meat Inspector
Henry A. Miller, Meat Inspector
Lawrence Stettmeier, Meat Inspector
Philip A. Ottenritter, Meat Inspector
Ernest H. Smith, Meat Inspector
Lewis A. List, Meat Inspector
Thomas J. Morris, Meat Inspector
Adolph Wobbeking, Jr., Meat Inspector
Elmer J. Frederick, Meat Inspector
Helen B. Siemers, Senior Clerk
Elizabeth C. Elliott, Senior Stenographer

TABLE NO. 1
LIVESTOCK INSPECTED, CONDEMNATION OF ANIMALS, PRIMAL AND EDIBLE PARTS

Year	Cattle			Calves			Sheep			Swine			Goats	
		Condemned			Condemned			Condemned			Condemned			
	Inspected	Carcasses	Parts	Inspected	Carcasses	Parts	Inspected	Carcasses	Parts	Inspected	Carcasses	Parts	Inspected	Condemned Parts
1939	26,827	91	1,424	90,118	52	586	104,188	29	4,269	100,853	139	33,589	36	14
1938	20,346	18	1,010	87,854	68	756	106,594	36	4,945	81,103	129	28,256	33	..
1937	22,472	28	1,997	97,372	82	543	94,834	22	5,142	86,769	179	26,004	18	..
1936	23,211	38	2,303	95,987	74	717	97,275	19	4,946	81,739	126	24,558	15	..
1935	27,707	90	4,939	95,017	36	1,158	117,284	23	7,290	81,569	474	28,077	92	..
1934	27,355	175	5,448	94,002	56	1,302	97,854	39	5,773	138,116	870	44,105	10	..
1933	16,632	68	3,125	83,278	53	2,211	114,782	30	8,873	148,960	320	49,179	41	..
1932	21,028	101	3,269	85,618	42	2,328	134,380	23	13,363	167,782	384	51,813	14	..
1931	22,403	159	3,286	87,117	57	1,287	130,494	55	10,161	162,312	525	45,344	12	..
1930	27,131	248	5,629	89,420	76	825	129,185	47	12,827	153,755	551	34,145	6	..
1929	22,837	154	4,119	78,400	44	915	105,548	63	17,827	137,374	774	41,990	13	..
1928	10,885	81	1,141	31,857	13	430	51,616	54	8,292	122,939	893	36,232	..	..

TABLE NO. 2

POUNDS OF MEAT CONDEMNED ON REINSPECTION

YEAR	TOTAL	PORK	BEEF	MUTTON	VEAL	MEAT PRODUCTS	MIXED PRODUCTS
1939	30,630	10,604	7,384	670	497	3,799	7,676
1938	41,021	7,243	11,704	1,926	3,726	8,685	7,727
1937	35,324	9,450	15,414	454	557	7,707	1,742
1936	41,413	10,628	16,413	443	588	2,885	10,458
1935	33,024	10,511	7,888	1,202	503	6,374	6,546
1934	86,038	49,139	16,094	1,884	877	4,332	12,712
1933	38,967	20,761	5,456	307	283	2,509	9,651
1932	60,306	21,155	10,196	278	250	4,154	24,273
1931	50,202	20,528	9,349	1,134	1,903	4,070	13,218
1930	58,467	30,383	5,937	485	116	5,738	15,808
1929	32,861	16,056	4,754	309	45	11,697	..
1928	42,270	15,147	6,617	1,272	161	19,073	..

TABLE NO. 3

POUNDS OF MEAT AND MEAT FOOD PRODUCTS PREPARED

TYPE OF MEAT PRODUCT	CITY	COUNTIES
Total pounds	10,571,807	2,155,516
Meat products (fresh)	614,936	675
Meat products (smoked)	1,639,071	398,290
Meat food products (fresh)	1,219,765	378,351
Meat food products (smoked)	3,216,567	341,020
Meat food products (cooked)	1,195,626	343,717
Meat food products (boiled)	701,711	87,520
Lard	825,035	605,693
Lard compound	159,096	250

BUREAU OF ENVIRONMENTAL HYGIENE

BUREAU OF ENVIRONMENTAL HYGIENE

Wilmer H. Schulze, Phar.D.

Director

The establishment of a new classification, senior inspector of industrial hygiene, and the addition to the bureau staff of a third inspector of industrial hygiene made possible an advancement in the technical industrial hygiene services to industry. In order to evaluate the extent of health hazards in industrial plants visited during the year 117 technical studies were made. In many instances industry has shown an increased interest and cooperation in the elimination of or in providing adequate control of working conditions of health significance. Community sanitation activities of major importance included: The elimination of a group of slum dwellings unfit for habitation, a study of the need for sanitary sewerage systems in the larger unsewered areas of the city, studies of the extent of rat infestation in connection with reported cases of typhus fever and continued effort to reduce sewage pollution of streams within the city limits. A closer relationship was established with the Buildings Engineer to guard against structural defects in buildings as a result of plumbing installations and to pave the way for more extensive Health Department work in the field of housing.

Industrial Hygiene

In order to have available a more complete file of industrial hygiene data on plants surveyed a record card was devised and placed in use at the beginning of the year. Services of both a technical and medical character were extended to a number of manufacturing plants in conjunction with the Bureau of Occupational Diseases. In addition to the provision of adequate control of exposures to toxic materials above the physiological limits of such substances as silica and lead containing dusts, carbon monoxide, chromic acid mists and volatile solvents numerous other improvements of health significance were attained and included: Provision by plant managements of salt tablets for the prevention of heat effects and proper goggles for the protection of eyes against harmful light rays; improvements in lighting and ventilation; supplying adequate and sanitary drinking, washing, and toilet facilities; reduction in atmospheric pollution and advancement in good housekeeping.

Special Activities

Carbon Monoxide

The occurrence of one death and a number of non-fatal poisonings caused by carbon monoxide arising from industrial types of gas and kerosene-fired equipment led to a study of such apparatus in neighborhood tailoring shops and clothing manufacturing establishments. Where actual or potential carbon monoxide hazards were found, corrective measures were attained with the cooperation of the Buildings Engineer.

Dust Exposures in Glass Manufacture

The presence of silica-containing dusts in some operations in glass manufacture was studied in three plants. Where concentrations were found to be above the physiological limit, control measures were recommended. In two of the establishments adequate exhaust systems were installed and in the third, respirators of an approved type were supplied as a tentative method for control of the dust hazard.

Chromic Acid Mists in Chromium Plating

Evaluation of the amounts of chromic acid mists to which workers engaged in chromium plating were exposed in two plants revealed excessive concentrations, due in one instance to an inefficient exhaust system and in the other to the mist being blown back into the workroom through an open window. Recommended corrective measures were carried out and elimination of the hazard was determined by subsequent air analyses.

Volatile Solvents

A hazardous exposure to carbon tetrachloride in one plant was eliminated by the substitution of a less volatile but equally efficient solvent. Analyses of the workroom air showed concentrations of the new solvent to be well below the the physiological limit. Investigations of possible exposures to carbon tetrachloride in dry-cleaning operations in three establishments disclosed leakages of the solvent which were corrected promptly.

Miscellaneous Activities and Studies

1. Technical studies of exposures to lead and arsenic compounds in the manufacture of insecticides in one plant demonstrated the need for reducing the concentrations of these materials in the workroom atmosphere.
2. Investigations of health hazards in felt hat manufacturing plants begun in 1938 failed to reveal significant concentrations of mercury in the workroom of any of the plants.

3. In a number of instances improvements in industrial lighting were attained after making studies of illumination facilities available.
4. Cooperation was given the Director of the Bureau of Occupational Diseases in the investigation of alleged occupational diseases.
5. The following laboratory determinations exclusive of those done by the Bureau of Laboratories were made by way of appraising the extent of exposures of employees to hazardous materials:

Dust concentrations in air	17
Carbon tetrachloride	10
Chromic acid	3
Perchlorethylene	3

6. In the study of environmental conditions in industrial plants the following field determinations were made:

Carbon monoxide	242
Illumination intensities	589
Temperature and relative humidity	93
Air velocities	118
Mercury	4
Halogenated hydrocarbons	90
Volatile solvents	23

Gas Appliance Ordinance

Two devices, one a solid top for placement on open-burner gas ranges and the other a cooker base, were withdrawn from distribution in the city when the potential carbon monoxide hazard involved in their use was demonstrated to the distributors. During the year 942 secondhand gas appliances of a hazardous nature, due to deterioration, were scrapped voluntarily by dealers.

A summary of the more important routine activities pertaining to the enforcement of the Gas Appliance Ordinance follows:

GAS APPLIANCE ORDINANCE—ENFORCEMENT ACTIVITIES

ACTIVITIES	1939	1938
Inspections	2,951	3,118
Violations	216	100
Detentions of unapproved appliances	148	433
Hearings of violators	4	2
Gas appliances registered	851	117
Gas fitters registered	17	32

GAS APPLIANCE DEALERS

LICENSES ISSUED	1939	1938
Total	390	526
New	4	3
Renewal	386	523

Community Sanitation

Although it was necessary for the sanitary inspectors to devote a large percentage of their time to the handling of 5,411 nuisance complaints, effort was made to concentrate as much attention as possible on environmental conditions of most health significance. A greater portion of these were in the 3,186 special sanitary investigations made during the year.

Housing

Inspections of a group of nine dwellings known as St. John's Court revealed what was probably the worst example of slums in the city. Two communal frostproof toilets and a hydrant in the court yard comprised the entire facilities of this type available to the tenants. The dwellings were in a state of disrepair throughout. On the recommendation of the Commissioner of Health, based on their unfitness for human habitation, the entire group was demolished by order of the Buildings Engineer.

Unsewered City Areas

In conjunction with the Sewerage Engineer and at the request of the Commission on City Plan surveys of methods of sewage disposal were made in nine of the larger unsewered areas of the city. The study indicated a pressing need for the extension of the sanitary sewerage system to these areas, particularly in the Graceland Park-Dundalk and Brooklyn sections.

Stream Pollution

Continued attention was given the potential hazard of water-borne diseases resulting from sewage-polluted streams. In several instances it was possible to have sewage diverted from streams to the sanitary sewerage system and several requests for permission to use streams for sewage disposal were disapproved.

Rat Control

Complaints of rat infestations in various sections of the city indicated the need for continuation of the educational program of rat control on a neighborhood basis. Following inspections of such areas steps were taken

to have rat harborages destroyed, sources of food supply eliminated, and ratproofing done where needed in addition to the distribution of Department literature on rat control methods. Reinspections of 109 rat-infested areas showed a marked improvement in 107 instances.

Water Supplies

The sanitary quality of the city water supply was appraised by the collection and testing of 1,349 samples from taps throughout the city distribution area. Of these samples only 2.0 per cent of the ten cubic centimeter portions showed the presence of *E. coli.* An automatic chlorinator was placed in service at the Ashburton Secondary Reservoir. It is planned to provide similar added protection for the Guilford and Towson reservoirs in 1940. Other water supplies inspected and sampled included public and semi-public springs, private wells on request, commercial bottled waters, and those at a number of resorts.

Swimming Pools

Swimming pool sanitation at all indoor and outdoor pools was evaluated by periodic inspections and sampling the pool water throughout the operating season. There continues a need for modernizing the sanitary control of the water in the public park pools to conform with recognized standards for swimming pool sanitation.

Miscellaneous Activities

1. Cooperation was given railroad officials in providing safe and adequate water, bathing facilities and methods of sewage disposal for "Pullman hotels" at railroad terminals during a large convention in this city.
2. The first trailer camp located within the city limits complied with recommended sanitary requirements.
3. Assistance was given the Board of Liquor License Commissioners in formulating sanitation requirements for taverns and similar places.
4. Periodic inspections were made of the stocks of dealers in psittacine birds in order to assure compliance with the psitacosis control ordinance.
5. Inspections were made of the sanitary conditions of a number of the large shore resorts and summer camps in Maryland with representatives of the Maryland State Department of Health.
6. Investigations were made of the probable relationship of rat infestations to cases of typhus fever and of insanitary drinking fountains to cases of trench mouth in cooperation with the Director of the Bureau of Communicable Diseases.

7. Inspections of environmental sanitation in eight child-caring institutions were made with the Assistant Director of the Bureau of Child Hygiene.

Plumbing

Two direct cross-connections of hazardous types, one a water-powered pump installed on a cesspool and the other an interconnection of a private well with the city water supply, were eliminated with the cooperation of the Water Engineer. In addition, 2,102 potential cross-connections were prevented or eliminated. Toward the close of the year a procedure was established whereby structural defects to buildings caused during the installation of plumbing and found at the time of inspection of the plumbing were reported promptly to the Buildings Engineer.

Percentage of Sewer-Connected Properties

Records kept of properties connected to sewers during the year and of properties disconnected because of demolition showed that at the end of the year 97.3 per cent were connected within the old city limits and 86.8 per cent were connected in the annexed area. For the city as a whole 94.9 per cent of all buildings were provided with sanitary connections.

Personnel

——— ———, Director
Ruth Rubin, Senior Stenographer
Phyllis C. Beck, Senior Stenographer
Charles E. Couchman, Senior Inspector of Industrial Hygiene
Albert J. Grossman, Inspector of Industrial Hygiene
Charles M. Kenealy, Inspector of Industrial Hygiene
Benjamin W. Ellis, Inspector of Industrial Hygiene
Howard R. Coggins, Food Inspector
John A. Zerhusen, Food Inspector
George W. Schucker, Chief, Division of Community Sanitation
John H. Pike, Plumbing Inspector
Henry G. Rausch, Plumbing Inspector
James B. Richardson, Plumbing Inspector
William J. Wheeler, Plumbing Inspector
Joshua L. Norris, Plumbing Inspector
George O. Motry, Senior Sanitary Inspector
Carroll H. Reynolds, Chief Inspector of Plumbing
Charles B. Creighton, Plumbing Inspector
George J. Fitch, Plumbing Inspector
Joseph P. Reynolds, Plumbing Inspector
Benjamin F. Schwarzmann, Plumbing Inspector
Walter Underwood, Plumbing Inspector
Daniel B. Yeagle, Plumbing Inspector
Jacob G. Vogtmann, Principal Clerk

James J. Hurwitz, Senior Clerk
Donald A. Stockley, Senior Clerk
Frederick Sauers, Laborer

TABLE NO. 1

HEALTH AND ACCIDENT HAZARDS ELIMINATED IN INDUSTRIAL PLANTS

CORRECTIONS AND IMPROVEMENTS	TOTAL	
	1939	1938
Accident Hazards	30	33
Atmospheric Pollution	16	12
Drinking Facilities:		
Adequacy	6	1
Common Cup Eliminated	8	7
Insanitary Facilities Corrected	11	10
Contaminated Water Supply Eliminated	0	1
Cross Connections Eliminated	10	..
Exposure to Carbon Monoxide Eliminated	12	16
Exposure to Other Toxic Materials Eliminated	12	9
First Aid Kits Provided	3	0
Gas Appliances:		
Approved Tubing Installed	1	0
Defective Appliances Corrected	8	12
Venting of Appliances	3	4
Goggles for Ultra-Violet and Infra-Red Rays Provided	1	0
Insanitary Premises Corrected	14	24
Lighting Improved	36	21
Lockers Provided	6	3
Medical Examinations Instituted	1	1
Noise Eliminated	0	1
Odors Eliminated	0	1
Rodents and/or Vermin Eliminated	2	4
Salt Tablets Provided	5	0
Toilet Facilities:		
Adequate Facilities Provided	16	10
Defects Corrected	22	2
Improved	1	2
Sanitation Improved	39	22
Ventilation Improved	12	7
Washing Facilities Provided:		
Adequate Facilities Provided	6	6
Common Towel Eliminated	0	3
Improved	6	3
Showers Installed	3	0
Other Improvements:		
New Building and Equipment	8	2
Separate Building for Sanitary Facilities	0	1
Drainage	4	0
Rest Room Provided	2	0

TABLE NO. 2

SUMMARY OF INDUSTRIAL PLANTS SURVEYED, CLASSIFIED ACCORDING TO TYPE OF PLANT AND POTENTIAL HAZARDOUS MATERIALS

Type of Plant	Number of Plants	Number of Employees	Hazards																							
			Dust			Gases				Vapors					Metals					Miscellaneous						
			Silica	Other Inorganic	Organic	Carbon Monoxide	Halogen	Sulfur Dioxide	Others	Amino Compounds	Benzene	Chlorinated Hydrocarbons	Varnish	Others	Arsenic	Chromium	Lead	Mercury	Zinc	Acids	Alkalies	Dyes	Oils	Tars	Skin Irritants	Infections
All Plants Surveyed	86	3063	9	25	30	36	3	2	10	7	4	1	5	24	1	2	11	1	1	8	9	8	7	4	28	3
Advertising	1	11	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Automotive: Miscellaneous	2	14	..	1	..	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Automotive: Repairs	4	78	..	2	..	4	..	..	2	..	2	..	1	1	..	..	1	..	..	..	1	..	2	..	2	1
Brick, Clay and Cement Products	1	26	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brush and Broom Manufacturing	1	37	1	1	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Building Construction	1	4	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Carbon Paper, Ink Manufacturing	1	4	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..
Chemical Manufacturing	8	294	1	3	2	1	..	..	3	1	1	..	..	3	1	..	2	..	..	4	4	1	3	2	3	..
Clothing Manufacturing	14	570	..	..	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clothing Wash Dresses	3	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clothing Fur and Raw Hides	1	8	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Clothing Hat Manufacturing	1	76	1	..	1	1	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..
Clothing Service—Cleaning and Dyeing	4	19	..	..	..	3	..	..	..	..	..	1	..	2	..	..	..	..	..	..	1	1	..	..	3	..
Electrical Apparatus Manufacturing	1	353	1	1	1	1	..	1	1	1	..	..	1	2	..	1	1	..	..	1	1	1	1	1	2	..
Electro and Other Plating	1	27	..	1	..	1	1	1	1	..	..	..	..	..	..	..	1	..	1	1	..	..	..	..	..	..
Food Industry	1	44	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Furniture Manufacturing	1	22	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Glass Manufacturing	1	25	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lacquer and Paint Manufacturing	1	4	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..
Laundries	1	8	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..
Leather Goods Manufacturing	2	47	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Metal Goods Manufacturing	7	83	2	4	..	4	..	..	2	..	..	..	..	6	..	..	2	..	..	2	..	3	..	..	1	..
Paper Goods Manufacturing	6	289	..	2	5	1	..	..	..	1	..	..	..	..	..	1	1	..	..	..	..	..	..	..	4	..
Printing and Lithographing	1	17	..	1	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1	..
Rag Industry	2	29	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..
Rubber Goods Manufacturing	1	5	..	..	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Shoe and Sundries Manufacturing	2	130	1	..	2	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Textile Manufacturing	5	74	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..
Transportation	1	208	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	1	..	..	..	..
Umbrella Manufacturing	1	192	..	1	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Woodworking	6	270	2	1	6	1	..	..	..	1	..	..	1	3	..	..	1	..	..	..	..	..	..	..	2	..
Wrecking and Junk	2	19	..	2	1	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	1	..
Warehouse, Stevedoring	1	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE NO. 3

ACUTE CASES OF CARBON MONOXIDE POISONING (ILLUMINATING GAS)—1923-1939

Year	Total Cases	Suicides and Attempted Suicides	Accidents
1939	202	77	125
1938	130	82	48
1937	114	71	43
1936	218	63	155
1935	130	80	50
1934	154	100	54
1933	157	100	57
1932	172	101	71
1931	152	93	59
1930	184	96	88
1929	142	78	64
1928	136	75	61
1927	154	81	73
1926	211	87	124
1925	130	60	70
1924	166	49	117
1923	241	75	166

TABLE NO. 4

NON-FATAL AND FATAL ACCIDENTS FROM ILLUMINATING GAS AND DEFECTIVE APPLIANCES FOUND—1930-1939

Year	Total	Accidents from Unburned Gas		Accidents from Incomplete Combustion of Gases		Defective Appliances Causing Accidents
		Non-Fatal	Fatal	Non-Fatal	Fatal	
1939	125	32	9	83	1	7
1938	48	30	12	6	0	0
1937	43	31	11	1	0	1
1936	155	131	22	2	0	0
1935	50	33	17	0	0	1
1934	54	41	13	0	0	3
1933	57	36	21	0	0	2
1932	71	36	29	5	1	6
1931	59	36	20	3	0	5
1930	88	55	28	2	3	9

TABLE NO. 5

COMPLAINTS, PATROL AND SPECIAL INVESTIGATIONS

Type of Inspection	Complaints Received		Patrol and Special Investigations Made	
	1939	1938	1939	1938
Total	5,411	5,341	3,186	2,282
Complaints				
Ashes and garbage	205	259	896	18
Building defects	16	27	8	6
Choked sewers	59	55	11	13
Dead animals	23	44	3	6
Defective drainage	196	177	67	25
Defective plumbing	153	145	25	52
Defective toilet facilities	385	288	19	42
Fowls and animals	66	66	45	35
Grass and weeds	289	328	40	70
Insanitary conditions	1,790	1,996	261	330
Insects	83	14	9	6
Insufficient heat	29	30	4	0
Miscellaneous	276	285	70	22
Privies and cesspools	34	39	12	11
Rats	944	857	45	23
Water in cellar	863	731	55	48
Special Investigations				
Barber shops	..	..	1	1
Carnivals	..	..	1	1
City dumps	..	..	4	2
Color tests	..	..	494	383
Filling stations	..	..	0	1
Moving picture houses	..	..	1	29
Night soil dumps	..	..	2	6
Pet shops	..	..	48	38
Rat surveys	..	..	133	132
Rat resurveys	..	..	109	102
Rooming houses				
New	..	..	173	182
Renewal	..	..	630	648
Refused permits on first inspection	..	..	5	17
Schools	..	..	3	0
Slum area surveys	..	..	1	1
Unsewered area surveys	..	..	11	2
Vacant buildings	..	..	0	30

TABLE NO. 6

COMPLAINTS

ACTION TAKEN	1939	1938
Handled by inspectors	5,279	5,134
Referred direct to other bureaus or departments	91	125
Investigated and referred to other bureaus or departments	1,830	1,782
Investigated and referred to police for follow-up	2,547	2,227
Notices issued to abate nuisances	2,951	2,536
Hearings for failure to comply with notices	64	81
Summons issued for failure to comply with notices	3	7
DISPOSITION	**1939**	**1938**
Total	5,370	5,259
Abatement by inspector	717	989
Cancelled (withdrawn or corrected before inspection)	1,786	1,444
Conditions of no health significance	946	919
Direct reference to other bureaus or departments	91	125
Investigated and referred to other bureaus or departments	1,830	1,782
Reported abated by police	2,064	2,261
Complaints pending	286	280

TABLE NO. 7

METHODS OF SEWAGE DISPOSAL

METHOD OF DISPOSAL	TOTAL TO DECEMBER 1939	NEW CONNECTIONS	DISCONNECTED
Connections to sanitary sewers	166,004	1,886	911
Private drains to sanitary sewers	15,095	10	..
Connections to storm water outlets	10,754	101	..
Privies	..	..	31
Cesspools	..	..	78

TABLE NO. 8

PERMITS, PLUMBING INSPECTIONS AND PLUMBING FIXTURES INSTALLED

GROUP	1939	1938
Total permits issued	12,079	12,527
Permits for sanitary sewer connections	2,092	1,824
Permits for plumbing installations	9,987	10,703
Inspections of plumbing	24,004	23,310
Plumbing fixtures installed	25,773	27,464
Bathtubs	4,426	4,725
Miscellaneous	951	1,019
Sinks	4,372	4,564
Slophoppers	73	84
Urinals	238	263
Washbasins	6,155	6,539
Water closets	7,676	8,200
Wash trays	1,882	2,070

TABLE NO. 9

CROSS CONNECTIONS PREVENTED OR CORRECTED

TYPE	1939	1938
Total	2,104	1,886
Air conditioning unit	15	50
Frostproof closet	895	1,435
Drinking fountain	2	6
Bar and soda fountain	18	18
Water closet	100	74
Bathtubs	75	165
Washbasin	951	112
Dish washer	3	3
Steam table	11	5
Swimming pool	0	1
Cellar drainer	2	1
Industrial	5	8
Tank	20	7
Compressor	3	0
Direct connection	2	1
Developing tank	2	0

TABLES OF VITAL STATISTICS

TABLES OF VITAL STATISTICS

1939

TABLE NO. 13. CASES OF REPORTABLE DISEASES CLASSIFIED ACCORDING TO SEX, COLOR AND AGE PERIODS—1939.

TABLE NO. 14. REPORTED CASES AND CASE RATES PER 100,000 POPULATION FROM CERTAIN COMMUNICABLE DISEASES FOR TOTAL, WHITE AND COLORED POPULATION—1920–1939.

TABLE NO. 1

ESTIMATED POPULATIONS AND RECORDED DEATH RATES; TOTAL, WHITE, COLORED, BALTIMORE—1890-1939

Year	Estimated Population as of July 1			Death Rates Per 1,000 Population		
	Total	White	Colored	Total	White	Colored
1939	868,990	695,508	173,482	12.52	12.04	14.44
1938	862,059	691,900	170,159	12.86	12.30	15.17
1937	855,127	688,290	166,837	13.78	13.01	16.97
1936	848,196	684,681	163,515	13.58	12.58	17.76
1935	841,264	681,072	160,192	13.25	12.26	17.46
1934	834,333	677,463	156,870	13.32	12.42	17.20
1933	827,401	673,854	153,547	13.05	12.23	16.03
1932	820,470	670,245	150,225	13.13	12.03	18.06
1931	813,538	666,635	146,903	14.16	12.90	19.89
1930	806,607	663,026	143,581	13.93	12.70	19.62
1929	799,675	659,417	140,258	14.54	13.26	20.55
1928	792,744	655,808	136,936	15.05	13.67	21.65
1927	785,812	652,198	133,614	14.73	13.20	22.22
1926	778,881	648,590	130,291	15.68	14.21	22.97
1925	771,949	644,980	126,969	15.09	13.51	23.12
1924	765,018	641,372	123,646	14.78	13.51	21.42
1923	758,086	637,762	120,324	15.29	13.96	22.29
1922	751,155	634,153	117,002	14.41	13.29	20.50
1921	744,223	630,544	113,679	13.95	12.85	20.05
1920	737,291	626,934	110,357	15.40	14.00	23.35
1919	728,145	620,527	107,618	15.70	14.33	23.64
1918	623,626	522,054	101,572	25.71	23.58	36.62
1917	615,690	516,125	99,565	18.46	16.20	30.15
1916	607,754	510,196	97,558	17.64	15.65	28.04
1915	599,818	504,267	95,551	16.68	14.92	25.92
1914	591,882	498,338	93,544	17.83	15.88	28.19
1913	583,946	492,409	91,537	17.41	15.49	27.78
1912	576,010	486,480	89,530	18.13	16.14	28.92
1911	568,074	480,551	87,523	18.31	16.15	30.22
1910	560,138	474,622	85,516	19.20	17.16	30.49
1909	554,514	469,846	84,668	18.71	16.58	30.53
1908	549,499	465,373	84,126	18.99	16.92	30.44
1907	544,483	460,900	83,583	20.55	18.18	33.64
1906	539,468	456,428	83,040	19.93	17.60	32.76
1905	534,452	451,955	82,497	20.01	17.57	33.41
1904	529,437	447,482	81,955	20.43	18.09	33.21
1903	524,421	443,009	81,412	19.34	17.29	30.49
1902	519,406	438,536	80,870	19.74	17.63	31.16
1901	514,390	434,063	80,327	20.37	18.10	32.65
1900	509,375	429,591	79,784	21.01	18.84	32.68
1899	502,126	423,528	78,598	20.22	18.33	30.38
1898	494,674	417,320	77,354	20.99	18.95	32.02
1897	487,223	411,113	76,110	19.15	17.42	28.46
1896	479,771	404,905	74,866	20.67	18.80	30.82
1895	472,319	398,698	73,621	21.81	19.77	32.83
1894	464,867	392,490	72,377	20.41	18.45	31.00
1893	457,415	386,283	71,132	20.89	19.08	30.70
1892	449,963	380,075	69,888	23.52	21.99	31.78
1891	442,512	373,868	68,644	22.76	20.96	32.56
1890	435,060	367,660	67,400	23.44	21.83	32.23

For corresponding figures from 1875 to 1889, see Annual Report of 1930, page 162.

TABLE NO. 2
ESTIMATED POPULATION, MARRIAGES, RECORDED AND RESIDENT BIRTHS AND DEATHS BY RACE AND CORRESPONDING RATES PER 1,000 POPULATION, 1930-1939

Year	Total		White		Colored	
	Number	Rate	Number	Rate	Number	Rate
Estimated population as of July 1, 1939	868,990	..	695,508	..	173,482	..
Marriages						
Recorded						
1939	8,501	9.8	6,569	9.4	1,932	11.1
1938	8,521	9.9	6,578	9.5	1,943	11.4
1937	8,849	10.3	6,763	9.8	2,086	12.5
1936	8,134	9.6	6,208	9.1	1,926	11.8
1935	7,254	8.6	5,695	8.4	1,559	9.7
1934	7,235	8.7	5,494	8.1	1,741	11.1
1933	5,804	7.0	4,278	6.3	1,526	9.9
1932	5,345	6.5	4,069	6.1	1,276	8.5
1931	6,116	7.5	4,720	7.1	1,396	9.5
1930	6,557	8.1	5,159	7.8	1,398	9.7
Births						
Resident						
1939	12,525	14.4	9,211	13.2	3,314	19.1
1938	13,208	15.3	9,892	14.3	3,316	19.5
1937	12,516	14.6	9,370	13.6	3,146	18.9
1936	11,801	13.9	8,956	13.1	2,845	17.4
1935	12,332	14.7	9,363	13.7	2,969	18.5
1934	12,201	14.6	9,196	13.6	3,005	19.2
1933	12,189	14.7	9,130	13.5	3,059	19.9
1932	12,785	15.6	9,737	14.5	3,048	20.3
Recorded						
1939	14,887	17.1	11,350	16.3	3,537	20.4
1938	15,275	17.7	11,763	17.0	3,512	20.6
1937	14,272	16.7	10,921	15.9	3,351	20.1
1936	13,277	15.7	10,272	15.0	3,005	18.3
1935	13,641	16.2	10,521	15.4	3,120	19.5
1934	13,453	16.1	10,308	15.2	3,145	20.0
1933	13,409	16.2	10,211	15.2	3,198	20.8
1932	14,007	17.1	10,833	16.2	3,174	21.1
1931	14,166	17.4	11,012	16.5	3,154	21.5
1930	14,948	18.5	11,696	17.6	3,252	22.7
Deaths						
Resident						
1939	10,386	12.0	7,907	11.4	2,479	14.3
1938	10,618	12.3	8,034	11.6	2,584	15.2
1937	11,244	13.1	8,415	12.2	2,829	17.0
1936	11,058	13.0	8,134	11.9	2,924	17.9
1935	10,707	12.7	7,917	11.6	2,790	17.4
1934	10,764	12.9	8,049	11.9	2,715	17.3
1933	10,505	12.7	7,923	11.7	2,582	16.8
1932	10,309	12.6	7,622	11.4	2,687	17.9
Recorded						
1939	10,879	12.5	8,374	12.0	2,505	14.4
1938	11,091	12.9	8,509	12.3	2,582	15.2
1937	11,790	13.8	8,958	13.0	2,832	17.0
1936	11,516	13.6	8,612	12.6	2,904	17.8
1935	11,149	13.3	8,352	12.3	2,797	17.5
1934	11,116	13.3	8,417	12.4	2,699	17.2
1933	10,797	13.0	8,243	12.2	2,554	16.6
1932	10,775	13.1	8,060	12.0	2,715	18.1
1931	11,522	14.2	8,600	12.9	2,922	19.9
1930	11,238	13.9	8,422	12.7	2,816	19.6

TABLE NO. 3

MONTHLY DISTRIBUTION OF RESIDENT LIVE BIRTHS AND STILLBIRTHS CLASSIFIED ACCORDING TO COLOR AND SEX—1939

Month	Live Births							Stillbirths						
	Total	White			Colored*			Total	White			Colored		
		Total	Male	Female	Total	Male	Female		Male	Female	Unknown Sex	Male	Female	Unknown Sex
Total	12,525	9,211	4,735	4,476	3,314	1,715	1,599	648	206	146	51	126	92	27
January	1,096	812	415	397	284	152	132	52	15	11	6	10	5	5
February	1,077	811	428	383	266	137	129	50	21	5	3	11	7	3
March	1,037	766	374	392	271	143	128	50	17	10	7	10	6	..
April	930	660	349	311	270	155	115	49	17	5	6	10	10	1
May	973	705	375	330	268	149	119	62	20	16	5	11	9	1
June	984	743	381	362	241	114	127	48	13	12	3	9	8	3
July	1,161	842	446	396	319	159	160	61	17	17	1	8	13	5
August	1,114	791	402	389	323	180	143	51	15	11	6	11	7	1
September	1,037	766	394	372	271	137	134	61	21	16	4	14	4	2
October	1,077	819	410	409	258	113	145	58	17	14	3	13	7	4
November	991	721	361	360	270	131	139	62	18	22	3	9	9	1
December	1,048	775	400	375	273	145	128	44	15	7	4	10	7	1

* Includes 3 male and 3 female Chinese, 1 male Japanese.

TABLE NO. 4
LIVE AND STILLBIRTHS CLASSIFIED ACCORDING TO ATTENDANCE, HOSPITALIZATION, TERM, PLURALITY AND NATIVITY—1939

Group	Recorded			Resident		
	Total	White	Colored	Total	White	Colored
Attendant and Place of Birth						
Live Births						
Total	14,887	11,350	3,537	12,525	9,211	3,314
Physician	14,561	11,182	3,379	12,200	9,044	3,156
Home	*3,089*	*1,822*	*1,267*	*3,093*	*1,831*	*1,262*
Hospital	*11,472*	*9,360*	*2,112*	*9,107*	*7,213*	*1,894*
Midwife	326	168	158	325	167	158
Premature Birth	606	410	196	513	330	183
Physician	604	410	194	511	330	181
Home	*126*	*72*	*54*	*125*	*71*	*54*
Hospital	*478*	*338*	*140*	*386*	*259*	*127*
Midwife	2	..	2	2	..	2
Full Term	14,156	10,842	3,314	11,854	8,751	3,103
Physician	13,855	10,693	3,162	11,554	8,603	2,951
Home	*2,875*	*1,683*	*1,192*	*2,875*	*1,688*	*1,187*
Hospital	*10,980*	*9,010*	*1,970*	*8,679*	*6,915*	*1,764*
Midwife	301	149	152	300	148	152
Term Not Stated	125	98	27	158	130	28
Physician	102	79	23	135	111	24
Home	*88*	*67*	*21*	*93*	*72*	*21*
Hospital	*14*	*12*	*2*	*42*	*39*	*3*
Midwife	23	19	4	23	19	4
Stillbirths						
Total	722	467	255	648	403	245
Physician	669	423	246	595	359	236
Home	*238*	*99*	*139*	*237*	*99*	*138*
Hospital	*431*	*324*	*107*	*358*	*260*	*98*
Midwife	9	3	6	9	3	6
Foundling	44	41	3	44	41	3
Plural Births						
Sets of Twins	168	125	43	137	100	37
Both born alive	145	109	36	117	86	31
One born alive, 1 stillborn	16	11	5	14	9	5
Both stillborn	7	5	2	6	5	1
Nativity						
Live Births, Total	14,887	11,350	3,537	12,525	9,211	3,314
Both parents, native-born	13,607	10,317	3,290	11,409	8,324	3,085
One parent, native-born; one parent, foreign-born	719	694	25	615	590	25
Both parents, foreign-born	226	220	6	208	202	6
One or both parents' birthplace unknown	335	119	216	293	95	198
Stillbirths, Total	722	467	255	648	403	245
Both parents, native-born	595	366	229	527	307	220
One parent, native-born; one parent, foreign-born	32	29	3	29	26	3
Both parents, foreign-born	16	16	..	16	16	..
One or both parents' birthplace unknown	79	56	23	76	54	22

TABLE NO. 5

RESIDENT DEATHS CLASSIFIED BY COLOR, SEX, AND AGE AND DISTRIBUTED BY COLOR AND AGE BY MONTHS—1939

Age	Grand Total	Entire Year						Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
		White			Colored																										
		Total	Male	Female	Total	Male	Female	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored
Total, all ages	10,386	7,907	4,205	3,702	2,479	1,312	1,167	782	233	823	221	727	232	689	225	673	220	557	170	587	199	538	196	546	161	632	193	647	216	706	213
Under 1 month	300	194	120	74	106	66	40	14	11	17	4	15	11	21	3	19	7	16	9	16	10	10	14	17	8	20	8	11	15	18	6
1 to 2 months	67	38	21	17	29	16	13	4	5	3	3	4	3	4	3	3	4	3	..	3	..	1	4	4	3	2	2	4	..	3	2
3 to 11 months	144	70	39	31	74	33	41	12	4	4	13	6	7	3	5	8	1	6	2	6	3	4	10	2	3	5	7	6	7	8	12
Total under 1 year	511	302	180	122	209	115	94	30	20	24	20	25	21	28	11	30	12	25	11	25	13	15	28	23	14	27	17	21	22	29	20
1 year	59	30	17	13	29	11	18	3	3	5	3	3	6	..	1	1	1	2	4	2	..	2	1	2	..	1	1	5	3	4	6
Total under 2 years	570	332	197	135	238	126	112	33	23	29	23	28	27	28	12	31	13	27	15	27	13	17	29	25	14	28	18	26	25	33	26
2 to 4 years	75	46	24	22	29	14	15	3	1	6	4	8	3	3	2	3	5	2	3	3	1	3	..	7	3	3	6	2	..	3	1
Total under 5 years	645	378	221	157	267	140	127	36	24	35	27	36	30	31	14	34	18	29	18	30	14	20	29	32	17	31	24	28	25	36	27
5 to 9 years	71	51	26	25	20	13	7	5	1	5	1	3	..	4	3	11	3	7	3	4	1	7	..	3	2	..	3	1	2	1	1
10 to 14 years	70	41	27	14	29	9	20	1	1	5	4	5	2	3	4	4	5	6	2	4	1	3	2	1	1	1	4	6	2	2	1
15 to 19 years	146	67	34	33	79	42	37	6	4	6	4	6	4	8	8	..	9	11	7	6	11	8	11	3	3	5	5	2	6	6	7
20 to 24 years	195	93	49	44	102	50	52	11	10	10	4	11	8	6	12	7	14	8	7	5	6	9	8	6	8	7	6	8	11	5	8
25 to 29 years	238	130	71	59	108	57	51	9	13	11	12	12	13	11	12	9	7	16	7	10	4	15	6	6	8	13	7	6	13	12	6
30 to 34 years	257	133	71	62	124	62	62	10	10	13	12	9	9	10	18	5	15	10	9	11	7	19	12	11	5	11	13	9	7	15	7
35 to 39 years	375	198	121	77	177	86	91	19	14	17	9	15	18	16	20	18	15	15	10	16	19	12	15	18	12	17	12	21	16	14	17
40 to 44 years	545	316	192	124	229	124	105	37	20	30	20	40	15	23	17	23	25	28	11	17	20	20	20	23	16	22	18	29	21	24	26
45 to 49 years	674	417	243	174	257	134	123	36	28	39	26	39	20	27	24	47	25	26	19	31	19	36	22	31	25	40	13	32	20	33	16
50 to 54 years	856	580	346	234	276	157	119	58	34	62	22	64	32	47	26	55	22	42	19	33	23	32	19	44	13	42	23	46	18	55	25
55 to 59 years	970	770	452	318	200	107	93	82	23	78	13	74	22	76	17	64	16	53	19	56	18	52	15	51	11	59	16	56	15	69	15
60 to 64 years	1,027	840	480	360	187	110	77	100	18	74	17	65	24	78	18	61	11	50	13	67	18	59	11	65	9	64	14	82	17	75	17
65 to 69 years	1,130	960	525	435	170	84	86	89	9	98	19	89	9	93	14	81	16	64	11	70	18	63	16	61	12	102	14	76	17	74	15
70 to 74 years	1,148	1,021	527	494	127	64	63	99	15	115	15	89	16	94	8	84	9	61	8	88	7	71	5	65	10	71	10	79	13	105	11
75 to 79 years	959	885	392	493	74	44	30	71	3	98	12	85	7	76	4	74	6	71	5	65	8	54	2	63	7	68	3	76	9	84	8
80 to 84 years	666	636	279	357	30	15	15	64	4	80	3	47	1	57	1	54	2	38	1	50	2	40	2	44	2	46	6	59	2	57	4
85 to 89 years	291	279	110	169	12	8	4	34	1	39	1	24	2	19	3	28	..	15	1	17	1	12	1	15	..	23	1	23	1	30	..
90 to 94 years	98	91	32	59	7	3	4	13	1	7	..	8	..	9	2	11	..	6	..	6	1	5	..	4	..	8	1	7	1	7	1
95 to 99 years	22	19	7	12	3	2	1	1	..	1	..	5	..	1	..	3	1	1	..	1	1	1	..	..	..	2	..	1	..	2	1
100 years and over	3	2	..	2	1	1	..	1	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Age not specified	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE NO. 6

INSTITUTIONAL DEATHS OCCURRING IN BALTIMORE, CORONER'S CERTIFICATES AND CERTIFICATES RECORDING AUTOPSY CLASSIFIED ACCORDING TO COLOR AND SEX—1939

Institution	Grand Total	White			Colored		
		Total	Male	Female	Total	Male	Female
Hospital and Institutional Deaths	5,813	4,321	2,568	1,753	1,492	872	620
Baltimore City Hospitals							
Residents	1,447	815	549	266	632	349	283
Non-residents	28	26	21	5	2	2	..
Sydenham Hospital							
Residents	49	29	13	16	20	11	9
Non-residents	18	11	4	7	7	4	3
Other Hospitals							
Residents	2,923	2,271	1,324	947	652	396	256
Non-residents	1,092	930	578	352	162	97	65
City Jail							
Residents	1	..	..	..	1	1	..
Non-residents	..	..	..	..	..	..	..
State Penitentiary							
Residents	7	..	..	..	7	7	..
Non-residents	4	1	1	..	3	3	..
Other Institutions							
Residents	217	211	66	145	6	2	4
Non-residents	27	27	12	15	..	..	..
Death certificates certified by coroners	1,883	1,277	875	402	606	380	226
Death certificates recording an autopsy	1,977	1,312	844	468	665	399	266

TABLE NO. 7

RESIDENT DEATHS UNDER ONE YEAR FROM CERTAIN CAUSES ACCORDING TO AGE AND MONTH OF DEATH—1939

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	511	143	100	57	67	62	82	50	44	46	39	42	36	38	43	37	44	43	49
		W	302	89	71	34	38	35	35	30	24	25	28	30	25	25	15	23	27	21	29
		C	209	54	29	23	29	27	47	20	20	21	11	12	11	13	28	14	17	22	20
7	Measles	W	2	..	..	..	1	..	1	2	..	..	..	..	..	..	..	..	..	..	..
		C	1	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..
9	Whooping cough	W	2	..	..	..	..	1	1	..	..	1	..	..	..	..	..	..	1	..	..
		C	3	..	..	..	..	..	3	..	2	..	..	..	..	..	..	..	..	..	1
11	Influenza	W	3	..	..	..	..	1	2	2	..	..	..	..	..	..	..	..	..	..	1
		C	6	..	..	..	..	3	3	1	1	2	..	..	..	..	..	..	1	..	1
13b	Dysentery, bacillary	W	3	..	..	..	..	2	1	..	..	..	..	..	1	..	1	..	..	..	1
		C	5	..	..	1	..	2	2	..	1	..	..	..	..	1	3	..	..	..	..
15	Erysipelas	C	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
18	Epidemic cerebrospinal meningitis	W	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..
23	Tuberculosis of the respiratory system	W	1	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..
		C	9	..	..	..	2	..	7	1	2	..	1	1	1	1	1	..	..	1	..
34	Syphilis	W	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
		C	5	..	..	1	2	2	..	1	..	1	..	1	..	..	..	..	1	1	..
35	Gonococcus infection	C	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
46b	Cancer of stomach	W	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..
63	Rickets	W	1	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..
		C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..
67	Diseases of the thymus gland	W	2	..	..	..	2	..	..	..	..	1	..	..	..	1	..	..	..	..	..
		C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..
79a	Simple meningitis	W	3	..	..	1	1	1	..	..	1	1	..	1	..	..	..	..	..	..	..
		C	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
89a	Diseases of the ear and mastoid process	W	2	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	1	..	..
		C	3	..	..	..	..	3	..	..	1	..	..	..	..	..	..	1	..	..	1
93a	Acute bacterial myocarditis	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..
106a	Bronchitis, acute	W	3	..	..	..	..	1	2	1	..	2	..	..	..	..	..	..	..	..	..
107a	Bronchopneumonia	W	27	..	1	5	8	6	7	3	2	1	6	3	..	1	1	1	1	2	6
		C	30	..	..	3	12	6	9	3	6	4	4	2	..	..	1	1	2	1	6

TABLE NO. 7—Continued

RESIDENT DEATHS UNDER ONE YEAR FROM CERTAIN CAUSES ACCORDING TO AGE AND MONTH OF DEATH—1939

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
108	Lobar pneumonia	W	7	..	..	1	1	2	3	..	2	1	2	1	1	..	..	..	..	..	..
		C	11	..	..	2	..	2	7	2	2	1	..	..	1	..	..	..	..	2	3
115	Diseases of pharynx and tonsils	C	1	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..
119	Diarrhea and enteritis	W	22	..	..	1	7	8	6	2	..	2	1	1	2	2	3	2	3	4	..
		C	21	..	..	3	5	3	10	..	1	2	2	..	..	1	5	3	3	3	1
121	Appendicitis	C	1	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
122	Hernia, intestinal obstruction	W	4	..	..	..	..	1	3	..	..	..	..	1	..	1	..	..	..	1	1
		C	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
157	Congenital malformations	W	46	9	11	7	8	5	6	3	2	5	6	6	5	3	..	4	3	5	4
		C	13	1	5	3	1	2	1	2	..	1	..	1	..	..	1	2	2	4	..
158	Congenital debility	W	4	2	..	2	..	..	..	..	2	..	..	..	..	1	..	..	..	..	1
		C	2	1	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	1
159	Premature birth	W	105	59	30	15	1	..	..	12	7	6	7	11	10	10	8	8	11	6	9
		C	58	38	12	6	1	..	1	6	..	6	2	3	7	7	7	5	4	8	3
160	Injury at birth	W	35	13	19	1	2	..	..	..	6	1	5	3	3	3	2	3	5	1	3
		C	17	7	8	1	1	..	..	2	2	1	..	2	2	2	4	..	2	..	..
161	Other diseases peculiar to early infancy	W	16	6	9	..	1	..	..	2	..	3	1	1	1	2	..	3	1	1	1
		C	10	7	3	..	..	..	..	1	1	1	..	1	..	..	2	1	..	1	2
176–195	Accidental causes	W	4	..	..	..	2	1	1	..	1	..	..	..	..	..	..	1	..	..	2
		C	5	..	..	..	..	3	2	..	1	..	2	..	..	..	..	..	1	..	1
	Other specified causes	W	7	..	..	1	2	4	..	2	..	1	..	1	1	..	..	..	1	1	..
		C	1	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..

TABLE NO. 8

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	By Color		By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
	All Causes	1195.2	10,386	W	7,907	M	4,205	180	17	10	6	8	26	27	34	49	71	71	121	192	243	346	452	480	525	527	392	279	149	....
						F	3,702	122	13	13	4	5	25	14	33	44	59	62	77	124	174	234	318	360	435	494	493	357	242	....
				C	2,479	M	1,312	115	11	7	5	2	13	9	42	50	57	62	86	124	134	157	107	110	84	64	44	15	14	....
						F	1,167	94	18	6	5	4	7	20	37	52	51	62	91	105	123	119	93	77	86	63	30	15	9	....
I	Infectious and parasitic diseases	124.9	1,085	W	486	M	313	8	5	2	1	1	4	4	....	10	18	16	23	29	29	47	27	34	25	15	10	3	2	....
						F	173	5	3	4	....	1	4	....	11	15	21	11	13	9	13	14	12	13	5	6	5	5	3	....
				C	599	M	324	9	5	2	2	2	6	2	19	27	22	19	32	46	36	38	18	19	10	4	5	1	....	....
						F	275	22	7	3	2	....	2	11	28	35	35	26	31	18	17	11	9	9	8	....	1	....	....	....
1	Typhoid fever	0.1	1	W	1	F	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
3	Typhus fever	0.2	2	W	2	M	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....
						F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....
5	Undulant fever	0.1	1	W	1	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....
7	Measles	1.0	9	W	7	M	4	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
						F	3	....	1	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
				C	2	M	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
						F	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
8	Scarlet fever	0.1	1	W	1	F	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....
9	Whooping cough	1.0	9	W	4	M	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
						F	2	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
				C	5	M	2	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
						F	3	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
10	Diphtheria	0.3	3	W	3	M	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
						F	2	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
11a	Influenza with respiratory complications specified	4.2	37	W	29	M	13	1	1	....	....	....	....	1	....	1	....	1	....	....	1	2	....	....	1	....	1	1	2	....
						F	16	1	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	1	2	3	2	2	3	....
				C	8	M	3	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	1	....	....	....
						F	5	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	2	1	....	....	....	....	....

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
11b	Influenza without respiratory complications specified	3.0	26	W	8	M	6	...	1	...	1	1	...	...	...	...	1	...	...	...	...	...	...	...	2	...	...	...	...	...
						F	2	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				C	18	M	6	3	1	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
						F	12	3	3	1	1	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	1	...	...	...
13a	Dysentery, amebic	0.1	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
13b	Dysentery, bacillary	1.4	12	W	6	M	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
						F	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
				C	6	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	5	4	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
15	Erysipelas	0.5	4	W	3	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
						F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...
				C	1	F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	Lethargic or epidemic encephalitis	0.1	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
18	Epidemic cerebrospinal meningitis	0.7	6	W	4	M	3	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...
						F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				C	2	M	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	Tetanus	0.3	3	W	1	M	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				C	2	M	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
23-32	Tuberculosis, all forms	77.4	673	W	336	M	221	1	...	2	...	...	2	1	...	7	16	13	21	24	20	36	22	21	17	11	6	1	...	...
						F	115	...	...	3	...	...	1	...	9	14	21	10	10	7	10	7	8	8	2	1	1	3	...	...
				C	337	M	181	4	2	...	2	1	5	2	19	22	17	14	19	27	18	11	7	4	4	...	2	1	...	...
						F	156	5	3	1	1	...	1	10	26	27	26	16	17	8	6	2	3	2	2	...	...	...	...	...

23	Tuberculosis of the respiratory system	72.6	631	W	316	M	210	1		1			1			9	7	11	13	20	24	20	36	22	21	17	11	4	1		
						F	106			2							14	20	9	10	7	10	6	6	7	2	1	1	2		
				C	315	M	168	4			1		3	1	19	21	16	13	18	27	18	11	6	4	4			2			
						F	147	5	2	1			1	9	24	26	25	14	17	8	6	2	3	2	2						
24	Tuberculosis of the meninges and central nervous system	2.2	19	W	6	M	5			1			1	1			2														
						F	1			1																					
				C	13	M	8		2		1	1	2	1					1												
						F	5		1		1				2			1													
25	Tuberculosis of the intestines and peritoneum	0.7	6	W	2	M	1										1														
						F	1																1								
				C	4	M	1																						1		
						F	3									1	1	1													
26	Tuberculosis of the vertebral column	0.5	4	W	2	M	1												1												
						F	1						1																		
				C	2	M	2									1		1													
27a	Tuberculosis of the bones (vertebral column excepted)	0.1	1	W	1	F	1																1								
27b	Tuberculosis of the joints (vertebral column excepted)	0.3	3	W	1	F	1																	1							
				C	2	M	2										1						1								
29	Tuberculosis of the lymphatic system (bronchial, mesenteric and retroperitoneal glands excepted)	0.1	1	W	1	F	1															1									
30	Tuberculosis of the genito-urinary system	0.8	7	W	7	M	4										2											2			
						F	3										1	1											1		
32a	Disseminated tuberculosis, acute	0.1	1	C	1	F	1							1																	
34	Syphilis	29.7	258	W	62	M	47	1						1			1	1	2	3	8	8	4	9	4	3	1	1			
						F	15											1		1	3	5	2	1	1	1					
				C	196	M	119		1							2	4	5	13	18	14	25	11	14	6	4	2				
						F	77	5					1	1	1	5	8	6	10	8	11	7	5	4	5						
35	Gonococcus infection and other venereal diseases	2.4	21	W	3	M	2																	1			1				
						F	1												1												
				C	18	M	7									2	1			1	2	1									
						F	11	1							1	2	1	3	1	1		1									

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	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 Years and Over	Age Not Specified
36	Purulent infection, septicemia (non-puerperal)	0.8	7	W	5	M	2		1														1							
						F	3						1		1								1							
				C	2	M	2									1						1								
44a	Chickenpox	0.1	1	W	1	M	1						1																	
44d	Tularemia	0.9	8	W	6	M	2													1										
						F	4			1														3						
				C	2	F	2													1			1							
44f	Mumps	0.1	1	W	1	M	1						1																	
II	Cancer and other tumors	147.0	1,277	W	1,086	M	500	2	1				1			1	3	2	9	16	25	41	75	69	80	80	62	21	12	
						F	586			1	1		1	2	1	2	6	10	15	35	40	57	75	78	90	67	69	25	11	
				C	191	M	82									1		2	3	7	13	16	6	9	14	7	3	1		
						F	109			1		1		1		1	1	4	10	10	21	23	10	7	11	5	1	2		
45-53	Cancer and other malignant tumors	142.3	1,237	W	1,060	M	493	1	1				1			1	3	2	9	15	24	41	73	69	79	79	62	21	12	
						F	567			1	1		1	2	1	2	5	8	15	33	36	54	74	75	90	67	68	24	10	
				C	177	M	80											2	3	7	12	16	6	9	14	7	3	1		
						F	97			1		1		1		1	1	2	7	7	19	23	10	6	10	5	1	2		
45	Cancer and other malignant tumors of the buccal cavity and pharynx	4.3	37	W	32	M	29												2	1	1		4	3	3	7	5	2	1	
						F	3																2			1				
				C	5	M	4												1	1	1						1			
						F	1																	1						
46	Cancer and other malignant tumors of the digestive tract and peritoneum	63.4	551	W	469	M	260	1											5	7	8	14	32	36	57	51	34	10	5	
						F	209									1	2	3	4	5	7	22	14	30	37	37	29	13	5	
				C	82	M	49											2	1	4	8	11	3	6	8	4	1	1		
						F	33							1				1		1	8	9	4	1	6	1		1		

47	Cancer and other malignant tumors of the respiratory system	10.5	91	W	82	M	70													2	3	6	14	21	10	3	5	5	1		
						F	12														2		1	2	4	1		2			
				C	9	M	7														1		3		1	1	1				
						F	2					1										1									
48	Cancer and other malignant tumors of the uterus	16.2	141	W	114	F	114									1	2	3	3	10	14	10	18	12	16	9	13	3		
				C	27	F	27												4	3	5	6	2	3	4					
49	Cancer and other malignant tumors of other female genital organs	3.9	34	W	28	F	28											1	3		3	2	6	4	3	1	5			
				C	6	F	6												2			3	1							
50	Cancer and other malignant tumors of the breast	16.8	146	W	126	M	1																			1				
						F	125												4	10	10	13	23	21	19	9	10	3	3	
				C	20	F	20												1	3	4	5	2	1		2	1	1		
51	Cancer and other malignant tumors of the male genito-urinary organs	11.6	101	W	87	M	87					1				1				1	3	9	11	13	13	11	13	6	5	
				C	14	M	14												1		3	1	3	2	1	2	1			
52	Cancer and other malignant tumors of the skin	2.0	17	W	15	M	10														1	2		2		2	1	1	1	
						F	5													1			1			1			2	
				C	2	M	2															1			1					
53	Cancer and other malignant tumors of other or unspecified organs	13.7	119	W	107	M	36		1							1	2	2		3	5	2	5	5	3	2	4	1		
						F	71			1	1		1	2	1		1	1	1	5	2	6	8	4	14	9	9	5		
				C	12	M	4													1					3					
						F	8			1						1	1	1			1		1			2				
54b	Nonmalignant tumors of the uterus	2.8	24	W	12	F	12													2	4	3		1				1	1	
				C	12	F	12											2	3	3	2			1	1					
54d	Nonmalignant tumors of the brain	0.8	7	W	5	M	1														1									
						F	4										1	1					1	1						
				C	2	M	2									1					1									
54e	Nonmalignant tumors of other organs	1.0	9	W	9	M	6	1												1			2		1	1				
						F	3											1						1			1			
III	Rheumatic diseases, nutritional diseases, diseases of the endocrine glands and other general diseases	39.9	347	W	297	M	93	2						2	2		1	2		1	4	6	9	12	23	16	9	4		
						F	204	2				1	1		2			1	1	8	4	14	25	35	39	33	25	12	1	
				C	50	M	15						1	1	1					1		3	2	4	2					
						F	35	2					1	1			1	2	2	3	3	4	6	5	1	1	1	1	1	

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
56	Acute rheumatic fever	1.7	15	W	10	M	7							2	2			2				1								
						F	3					1			1			1												
				C	5	M	2						1		1															
						F	3						1	1					1											
57	Chronic rheumatism, osteo-arthritis	1.7	15	W	15	M	5																		1	2	1	1		
						F	10																		2		2	6		
59	Diabetes mellitus	33.1	288	W	250	M	74										1			1	3	4	9	11	21	13	8	3		
						F	176						1		1					5	3	13	23	32	35	33	23	6	1	
				C	38	M	12							1						1		2	2	4	2					
						F	26											1	1	2	2	4	6	5	1	1	1	1	1	
62	Pellagra	0.7	6	W	4	M	3														1	1		1						
						F	1																1							
				C	2	M	1															1								
						F	1											1												
63	Rickets	0.2	2	W	1	F	1	1																						
				C	1	F	1	1																						
66a	Simple goiter	0.2	2	W	2	M	1																			1				
						F	1													1										
66b	Exophthalmic goiter	1.4	12	W	10	M	1																		1					
						F	9												1	1	1	1	1	2	2					
				C	2	F	2										1				1									
66e	Other diseases of the thyroid and parathyroid glands	0.1	1	C	1	F	1													1										
67	Diseases of the thymus glands	0.3	3	W	2	M	1	1																						
						F	1	1																						
				C	1	F	1	1																						

68	Diseases of the adrenals (Addison's disease, not specified as tuberculous)	0.1	1	W	1	F	1														1												
69	Other general diseases	0.2	2	W	2	M	1	1																									
						F	1																		1								
IV	Diseases of the blood and blood-making organs	8.1	70	W	60	M	34			1			2		1	2	2	1			4	2	4	2	2	5	2	3	1				
						F	26	1				1	1	2	1	1		2	2		2	1	4	1	2	2	2		1				
				C	10	M	5														1		1		3								
						F	5							1				1			1	1	1										
70a	Primary purpuras	0.2	2	W	2	F	2								1			1															
71a	Pernicious anemia	1.4	12	W	11	M	6														2				1	1		1	1				
						F	5	1													1				1		1		1				
				C	1	F	1														1												
72a	True leukemias	4.0	35	W	30	M	19			1			2		1	2		1			2	1	3	1		2	2	1					
						F	11					1	1	1		1		1	2		1		2			1							
				C	5	M	4														1		1		2								
						F	1																1										
72b	Pseudoleukemias (Hodgkin's disease)	1.5	13	W	12	M	7										2				1			1	1	1		1					
						F	5							1										1	1	1	1						
				C	1	M	1																		1								
73	Diseases of the spleen	0.5	4	W	3	M	1																			1							
						F	2																2										
				C	1	F	1															1											
74	Other diseases of the blood and blood-making organs	0.5	4	W	2	M	1																1										
						F	1															1											
				C	2	F	2							1				1															
V	Chronic poisoning and intoxications	2.6	23	W	17	M	13			1								2			1	3	5	1									
						F	4		1	1								1				1											
				C	6	M	4													1	2		1										
						F	2		1							1																	
75	Alcoholism (acute or chronic)	1.8	16	W	12	M	10											2			1	2	4	1									
						F	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, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
76b	Other chronic poisoning by organic substances	0.2	2	W	2	M	2														1	1								
77a	Chronic poisoning by lead	0.6	5	W	3	M	1			1																				
						F	2		1	1																				
				C	2	M	1													1										
						F	1		1																					
VI	Diseases of the nervous system and of the organs of special sense	112.7	979	W	716	M	342	4	1				1	2	1	5	1	2	6	6	18	33	39	35	50	48	45	32	13	
						F	374	3		2	1		4		2	2	4	3	3	14	13	23	35	41	57	54	49	41	23	
				C	263	M	131	2	1						3	4	3	8	10	9	20	19	19	13	7	6	6		1	
						F	132	2	1				1				2	3	14	14	18	19	14	13	15	10	3	3		
78	Encephalitis (nonepidemic)	0.6	5	W	4	M	1														1									
						F	3						1								1					1				
				C	1	F	1						1																	
79a	Simple meningitis	1.5	13	W	8	M	5	3	1														1							
						F	3						1		1							1								
				C	5	M	3		1								1				1									
						F	2	1	1																					
80	Progressive locomotor ataxia (tabes dorsalis)	0.5	4	W	4	M	4																1	1	1	1				
81	Other diseases of the spinal cord	1.4	12	W	9	M	6									1							1			3	1			
						F	3	1															1	1						
				C	3	M	1																			1				
						F	2												1				1							
82a	Cerebral hemorrhage	82.9	720	W	530	M	240							1						4	15	22	24	26	42	34	38	26	8	
						F	290			1						1	1	1	3	11	10	18	26	30	46	46	43	33	20	
				C	190	M	83									1	1	1	5	7	14	13	15	10	5	5	5		1	
						F	107										1	1	8	9	17	17	13	12	13	10	3	3		

82b	Cerebral embolism and thrombosis	7.1	62	W	54	M	28	...	...	...	...	...	...	...	...	...	...	...	...	1	...	4	2	4	3	5	3	3	3	...
						F	26	...	...	...	...	...	...	...	1	...	...	...	...	...	1	2	3	5	5	3	3	3	...	...
				C	8	M	4	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...
						F	4	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	1	...	...	...	...	...
82c	Softening of the brain	0.8	7	W	6	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...
						F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...
				C	1	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
82d	Hemiplegia and other paralysis (cause unspecified)	0.6	5	W	5	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...
						F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	...
83	General paralysis of the insane	5.9	51	W	15	M	14	...	...	...	...	...	...	...	...	...	...	...	3	...	1	6	3	...	...	1	...	...	...	...
						F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
				C	36	M	28	...	...	...	...	...	...	...	...	2	...	4	3	2	5	6	3	3	...	...	...	...	...	...
						F	8	...	...	...	...	...	...	...	...	...	...	...	3	4	...	1	...	...	...	...	...	...	...	...
84	Dementia praecox and other psychoses	4.9	43	W	34	M	18	...	...	...	...	...	...	...	...	...	...	1	1	1	1	...	3	3	2	4	...	2	...	...
						F	16	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	2	2	3	3	1	2	...	...
				C	9	M	6	...	...	...	...	...	...	...	...	1	1	2	2	...	...	...	...	...	...	...	...	...	...	...
						F	3	...	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...
85	Epilepsy	1.5	13	W	10	M	6	...	...	...	...	...	1	...	...	1	...	...	2	...	...	...	1	1	...	...	...	...	...	...
						F	4	...	...	...	...	...	1	...	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...
				C	3	M	2	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
87a	Neuralgia and neuritis	0.1	1	W	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
87b	Other diseases of the nervous system	3.3	29	W	27	M	11	1	...	...	...	...	...	...	1	2	...	1	...	...	...	1	1	...	2	...	1	...	1	...
						F	16	...	...	...	...	...	1	...	...	...	2	...	...	1	...	1	3	2	3	...	...	1	2	...
				C	2	M	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
						F	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
89a	Diseases of the ear	1.4	12	W	7	M	3	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	4	1	...	1	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
				C	5	M	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
						F	2	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
89b	Diseases of the mastoid process	0.2	2	W	2	F	2	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
VII	Diseases of the circulatory system	358.5	3,115	W	2,665	M	1,473	...	...	...	...	...	1	5	6	5	8	10	31	60	71	117	181	204	205	222	152	129	66	...
						F	1,192	...	...	...	...	...	3	4	7	5	3	6	14	19	47	61	91	109	129	204	198	166	126	...
				C	450	M	218	1	...	...	...	...	1	...	2	2	2	2	10	20	25	30	26	33	23	18	11	4	8	...
						F	232	...	...	...	1	...	...	...	2	1	2	6	17	29	30	28	28	18	26	22	12	5	5	...

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
90-95	Diseases of the heart	341.8	2,970	W	2,536	M	1,411							5	6	5	8	10	30	60	69	117	179	197	196	210	142	120	57	
						F	1,125						3	4	7	5	3	6	14	18	47	60	89	108	127	193	181	152	108	
				C	434	M	212	1					1		2	2	2	2	10	19	25	30	26	32	23	18	7	4	8	
						F	222			1					2	1	2	6	16	28	30	25	26	17	26	22	11	5	4	
90	Pericarditis	0.6	5	W	4	M	3							1			1							1						
						F	1																						1	
				C	1	F	1									1														
91a	Acute endocarditis	3.3	29	W	21	M	15								1	2	1			3		4	2		1	1				
						F	6								2	2						1				1				
				C	8	M	5								1	1				1		2								
						F	3											1	1	1										
92a	Endocarditis, specified as chronic, and other valvular diseases	43.4	377	W	291	M	134							2	1	2	2	3	5	13	5	10	12	11	14	14	17	15	8	
						F	157						1	2	2	2	2	1	2	5	9	11	7	12	18	22	24	23	14	
				C	86	M	38										1	2	3	3	2	8	2	7	6	2	1		1	
						F	48										1	1	3	8	9	6	7	4	3	3	2	1		
93a	Acute myocarditis	3.4	30	W	16	M	10								1			1				1	1		1	3		1	1	
						F	6												1		1		1			1	1		1	
				C	14	M	8	1								1				1	2		1		1	1				
						F	6			1								1	1	1			1	1						
93c	Chronic myocarditis and myocardial degeneration	97.6	848	W	762	M	364												3	5	7	16	32	56	47	70	58	47	23	
						F	398											2	2		12	14	27	35	41	69	71	70	55	
				C	86	M	39										1		2	4	1	3	7	7	2	4	2	3	3	
						F	47											2	2	2	5	4	7	5	6	8	3	1	2	
93d	Diseases of the myocardium unspecified	4.1	36	W	32	M	18											1					2	2		6	2	1	4	
						F	14																1	1	2	2	2	3	3	
				C	4	M	3						1								1	1								
						F	1																			1				

94a	Angina pectoris	8.1	70	W	66	M	45	...	...	...	...	...	...	...	...	...	...	1	1	3	5	3	4	8	10	3	3	4	...	...
						F	21	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	3	1	4	5	6	...	...	...
				C	4	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
						F	3	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	1	...	...	...	...
94b	Diseases of the coronary arteries	79.2	688	W	616	M	438	...	...	...	...	...	...	...	...	...	2	2	15	24	33	59	74	75	66	46	20	17	5	...
						F	178	...	...	...	...	...	...	...	...	...	...	...	4	2	5	16	27	19	26	34	24	14	7	...
				C	72	M	36	...	...	...	...	...	...	...	...	...	...	...	...	5	10	3	4	7	2	3	1	...	1	...
						F	36	...	...	...	...	...	...	...	...	...	...	1	4	6	6	4	4	...	5	1	2	2	1	...
95a	Functional diseases of the heart	1.3	11	W	10	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
						F	9	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	2	2	2	...	...	...
				C	1	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
95b	Other and unspecified diseases of the heart	100.8	876	W	718	M	383	...	...	...	...	...	...	2	3	1	2	2	6	12	19	24	52	43	57	67	42	35	16	...
						F	335	...	...	...	...	...	2	2	3	1	1	3	4	10	20	16	23	39	34	57	51	42	27	...
				C	158	M	81	...	...	...	...	...	...	...	1	...	...	...	5	5	9	13	12	10	11	8	3	1	3	...
						F	77	...	...	...	...	...	...	...	2	...	1	...	4	10	10	10	7	7	12	8	4	1	1	...
96	Aneurysm (except of the heart)	1.8	16	W	13	M	9	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	3	3	...	...	...	...
						F	4	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	1	...	...	...	...
				C	3	F	3	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...	...	...	...	...
97	Arteriosclerosis (diseases of the coronary arteries excepted)	11.6	101	W	92	M	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	3	7	8	9	8	...
						F	52	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	7	16	12	16	...
				C	9	M	5	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	4	...	...	...
						F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	1	...
98	Gangrene	1.6	14	W	12	M	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	2	...	...	1	...
						F	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	2	1	...
				C	2	F	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...
99	Other diseases of the arteries	0.7	6	W	6	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	1	...	...	...
						F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...
100	Diseases of the veins (varices, hemorrhoids, phlebitis, etc.)	0.9	8	W	6	M	3	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
						F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...
				C	2	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
						F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
VIII	Diseases of the respiratory system	85.0	739	W	495	M	286	20	2	...	...	2	2	1	2	1	3	3	9	8	17	19	27	31	39	34	27	19	20	...
						F	209	17	4	1	1	...	2	1	1	2	2	6	1	5	13	14	14	11	22	20	33	16	23	...
				C	244	M	130	23	4	2	1	...	...	...	1	2	8	6	8	10	10	15	8	8	8	8	3	4	1	...
						F	114	18	6	...	1	1	...	4	1	2	4	4	5	8	13	14	5	8	4	9	6	1	...	...

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
104b	Diseases of the nasal fossae and annexa	0.3	3	W	2	M	2															1							1	
				C	1	F	1														1									
105	Diseases of the larynx	0.1	1	W	1	M	1		1																					
106a	Bronchitis, acute	1.4	12	W	12	M	8	2	1						1				1									2	1	
						F	4	1																			1	1	1	
106b	Bronchitis, chronic	2.6	23	W	21	M	15														2	1	3	1	3		3	1	1	
						F	6											1		1					1		3			
				C	2	F	2									1		1												
107-109	Pneumonia, all forms	76.9	668	W	431	M	240	18				2	2	1	1	1	3	3	8	6	12	15	19	27	34	32	23	16	17	
						F	191	16	4	1	1		2	1	1	2	1	5	1	4	11	14	13	11	20	19	29	14	21	
				C	237	M	129	23	4	2	1				1	2	8	6	8	10	10	15	8	7	8	8	3	4	1	
						F	108	18	6		1	1		4		1	4	2	5	8	12	13	5	8	4	9	6	1		
107a	Bronchopneumonia	41.6	362	W	249	M	135	16				2			1		1	2	4	3	6	5	10	12	16	19	13	13	12	
						F	114	11	3		1		1	1				2		2	5	4	6	7	10	10	20	12	19	
				C	113	M	57	15	1	1	1						2	1	3	3	1	6	2	4	6	5	1	4	1	
						F	56	14	5			1		2		1	1	1	3	1	2	7	2	4	2	4	5	1		
107b	Capillary bronchitis	0.1	1	C	1	M	1	1																						
108	Lobar pneumonia	35.1	305	W	182	M	105	2					2	1		1	2	1	4	3	6	10	9	15	18	13	10	3	5	
						F	77	5	1	1			1		1	2	1	3	1	2	6	10	7	4	10	9	9	2	2	
				C	123	M	71	7	3	1					1	2	6	5	5	7	9	9	6	3	2	3	2			
						F	52	4	1		1			2			3	1	2	7	10	6	3	4	2	5	1			
110	Pleurisy	0.1	1	W	1	M	1																1							
111b	Congestion, edema and hemorrhagic infarct of lung	0.3	3	W	2	F	2																		1				1	
				C	1	F	1															1								

112	Asthma	2.2	19	W	16	M	12													2			2	3	2	2	1						
						F	4														1		1			1		1					
				C	3	M	1																	1									
						F	2							1			1																
114a	Chronic interstitial pneumonia, including occupational diseases of the respiratory system (tuberculosis excepted)	0.1	1	W	1	M	1														1												
114b	Other diseases of the respiratory system (tuberculosis excepted). Others, including gangrene of the lung	0.9	8	W	8	M	6														2	2	2										
						F	2									1					1												
IX	Diseases of the digestive system	53.4	464	W	360	M	206	19	4		1	2	2	3	4	2	3	6	9	17	22	15	27	17	17	22	6	6	2					
						F	154	8		1			4	1	2	1	5	4	9	13	6	15	15	14	18	16	11	8	3				
				C	104	M	66	15					2	2	3	1	5	3	5	7	6	3	6	3	1	1	1			2			
						F	38	9						2		1	1	3	4	4	5	3	4		1	1						
115a	Diseases of the pharynx and tonsils	1.6	14	W	12	M	5					1	1				1			2													
						F	7						1							1		3			1	1							
				C	2	M	1	1																									
						F	1														1												
115b	Other diseases of the buccal cavity and annexa	0.5	4	W	1	M	1															1											
				C	3	M	3										2		1														
117a	Ulcer of the stomach	3.9	34	W	29	M	24							1						4	5	2	4	1	3	2		1	1				
						F	5										1		1		1			1	1								
				C	5	M	5								1			1			1		1			1							
117b	Ulcer of the duodenum	1.5	13	W	12	M	8								1						2	2	1	2									
						F	4												1	1						1	1						
				C	1	F	1												1														
118	Other diseases of the stomach (cancer excepted)	0.9	8	W	4	M	2																	1		1							
						F	2																		1		1						
				C	4	M	3									1					2												
						F	1																1										
119	Diarrhea and enteritis (under two years of age)	5.2	45	W	24	M	17	15	2																								
						F	7	7																									
				C	21	M	12	12																									
						F	9	9																									

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
120	Diarrhea and enteritis (two years and over)	2.0	17	W	16	M	11					1			1	1			3			1			3	1				
						F	5								1										1		1	2		
				C	1	F	1													1										
121	Appendicitis	8.6	75	W	54	M	26		1		1		1	2	2		1	3	2	1	3	2	1	1	2	2		1		
						F	28			1			2	1	1		1	3	1	6		3	3	3	1	1	1			
				C	21	M	15	1					2	2	2			2	2	1		1	2							
						F	6							2			1			1	1		1							
122a	Hernia	5.8	50	W	41	M	29													1	4	1	6	2	3	5	4	3		
						F	12	1															3	2	2	3	1			
				C	9	M	7												1		1		1	1			1		2	
						F	2															1	1							
122b	Intestinal obstruction	5.9	51	W	31	M	17	3	1												1		1	2	3	4	1		1	
						F	14										1		1	2	1		1		1	1	2	3	1	
				C	20	M	12	1								1	1		1	3		1	2	2						
						F	8												2	2	2	1			1					
123	Other diseases of the intestines	1.6	14	W	12	M	10											1		1	1	1	2	3		1				
						F	2												1						1					
				C	2	M	1													1										
						F	1												1											
124a	Cirrhosis of the liver (specified as alcoholic)	3.0	26	W	26	M	17											1		2	3	1	5	2	2	1				
						F	9										1	1		2	1	2		1	1					
124b	Cirrhosis of the liver (not specified as alcoholic)	4.1	36	W	32	M	16												1	2	1	1	3	2	1	3	1	1		
						F	16						1								1	1	3	2	3	1	1	1	2	
				C	4	M	3													1	1				1					
						F	1											1												

125a	Yellow atrophy of the liver	0.5	4	W	4	M	3									1		1		1												
						F	1									1																
125b	Other diseases of the liver	1.0	9	W	5	M	4	1											3													
						F	1														1											
				C	4	M	1										1															
						F	3											1				1	1									
126	Biliary calculi	3.7	32	W	30	M	9													1	1	2	2	1		2						
						F	21												1			4	4	4	3	2	2	1			
				C	2	F	2											1					1									
127	Other diseases of the gall-bladder and biliary passages	2.6	23	W	21	M	6										1			1	1	1	2									
						F	15												2	1	2	1		1	2	4	1	1			
				C	2	M	1														1											
						F	1																			1						
128	Diseases of the pancreas	0.8	7	W	5	M	1													1												
						F	4										1						1			2						
				C	2	M	2													1		1										
129	Peritonitis, cause not specified	0.2	2	W	1	F	1												1													
				C	1	F	1									1																
X	Diseases of the genito-urinary system	130.3	1,132	W	880	M	418				1				2	4	1	5	10	13	14	25	34	50	62	68	58	49	22			
						F	462	1		1				1		4	2	4	8	11	18	22	35	39	58	74	81	62	41			
				C	252	M	124									1		2	4	5	13	19	17	14	15	14	13	5	2			
						F	128											4	7	17	13	14	13	15	19	14	6	3	3			
130–132	Nephritis, all forms	117.5	1,021	W	793	M	353								2	4	1	4	10	11	14	21	30	43	53	53	46	41	20			
						F	440							1		4	2	2	7	9	15	20	33	38	56	73	79	61	40			
				C	228	M	104									1		2	3	4	11	17	13	13	14	12	8	4	2			
						F	124											4	7	17	13	12	13	15	18	14	6	3	2			
130	Acute nephritis (including unspecified under 10 years of age)	0.5	4	W	3	M	1											1														
						F	2														1				1							
				C	1	F	1													1												
131	Chronic nephritis	117.0	1,017	W	790	M	352								2	4	1	3	10	11	14	21	30	43	53	53	46	41	20			
						F	438							1		4	2	2	7	9	14	20	33	38	55	73	79	61	40			
				C	227	M	104									1		2	3	4	11	17	13	13	14	12	8	4	2			
						F	123											4	7	16	13	12	13	15	18	14	6	3	2			

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
133	Other diseases of the kidneys and ureters (puerperal diseases excepted)	2.8	24	W	17	M	9				1									1		1	1	1		2	1	1		
						F	8	1		1								1				1	1	1			1		1	
				C	7	M	4														1	1	1				1		
						F	3															2			1					
134	Calculi of the urinary passages	1.7	15	W	15	M	9											1		1		1	2	1		2		1		
						F	6											1					1		1	1	1	1		
135	Diseases of the bladder (tumors excepted)	0.2	2	W	2	F	2															1			1					
136a	Stricture of the urethra	0.5	4	W	1	M	1																				1			
				C	3	M	3												1	1						1				
136b	Other diseases of the urethra	0.2	2	C	2	M	2														1		1							
137	Diseases of the prostate	6.4	56	W	46	M	46															2	1	5	9	11	10	6	2	
				C	10	M	10															1	2	1	1	1	4			
138	Diseases of the male genital organs, not specified as venereal	0.1	1	C	1	M	1																				1			
139b	Other diseases of the ovaries and diseases of the tubes and parametrium	0.7	6	W	6	F	6												1	2	3									
139c	Diseases of the uterus	0.1	1	C	1	F	1																						1	
XI	Diseases of pregnancy, childbirth and the puerperal state	5.2	45	W	28	F	28								1	5	7	7	7	1										
				C	17	F	17								3	4	2	7	1											
140	Abortion with septic conditions	1.5	13	W	6	F	6									1	3	1	1											
				C	7	F	7								1	2		3	1											

141	Abortion without mention of septic conditions (including hemorrhages)	0.3	3	W	2	F	2											1	1												
				C	1	F	1									1															
142a	Ectopic gestation with septic conditions specified	0.1	1	C	1	F	1									1															
142b	Ectopic gestation without mention of septic conditions	0.1	1	C	1	F	1										1														
144a	Placenta praevia	0.2	2	W	1	F	1										1														
				C	1	F	1								1																
144b	Other puerperal hemorrhages	0.1	1	W	1	F	1											1													
145a	Puerperal septicemia and pyemia	0.6	5	W	4	F	4								1	1		2													
				C	1	F	1										1														
146	Puerperal albuminuria and eclampsia	0.8	7	W	6	F	6							1	2	1		2													
				C	1	F	1							1																	
147	Other toxemias of pregnancy	0.2	2	C	2	F	2							1			1														
148	Puerperal phlegmasia alba dolens, embolus, sudden death (not specified as septic)	0.1	1	W	1	F	1										1														
149a	Cesarean operation	0.2	2	W	2	F	2										2														
149b	Other accidents of childbirth	0.8	7	W	5	F	5								1	2	1		1												
				C	2	F	2								1		1														
XII	Diseases of the skin and cellular tissue	0.8	7	W	6	M	2							1										1							
						F	4													1			1		2						
				C	1	M	1	1																							
151	Furuncle, carbuncle	0.3	3	W	3	M	1							1																	
						F	2																1		1						
152	Phlegmon, acute abscess	0.3	3	W	2	M	1																	1							
						F	1																		1						
				C	1	M	1	1																							
153	Other diseases of the skin and annexa, and of the cellular tissue	0.1	1	W	1	F	1													1											

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	Totals: By Color		Totals: By Sex		Age Groups: Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
XIII	Diseases of the bones and organs of locomotion	0.3	3	W	3	M	1																			1				
						F	2																1				1			
154	Osteomyelitis	0.1	1	W	1	F	1																1							
155	Other diseases of the bones (tuberculosis excepted)	0.2	2	W	2	M	1																			1				
						F	1																				1			
XIV	Congenital malformations	8.3	72	W	56	M	30	25	3	1							1													
						F	26	21	3			1			1															
				C	16	M	10	8	1		1																			
						F	6	5							1															
157a	Congenital hydrocephalus	1.3	11	W	10	M	5	4		1																				
						F	5	5																						
				C	1	M	1	1																						
157b	Spina bifida and meningocele	0.6	5	W	5	M	3	3																						
						F	2	2																						
157c	Congenital malformations of the heart	4.6	40	W	27	M	17	13	3								1													
						F	10	6	2			1			1															
				C	13	M	8	7	1																					
						F	5	4							1															
157d	Other congenital malformations	1.8	16	W	14	M	5	5																						
						F	9	8	1																					
				C	2	M	1				1																			
						F	1	1																						
XV	Diseases of early infancy	28.4	247	W	160	M	98	98																						
						F	62	62																						
				C	87	M	52	52																						
						F	35	35																						

158	Congenital debility	0.7	6	W	4	M	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				C	2	F	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
159	Premature birth	18.8	163	W	105	M	61	61	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	44	44	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				C	58	M	36	36	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	22	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
160a	Injury at birth, Cesarean operation	0.2	2	W	2	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
160b	Injury at birth, without Cesarean operation	5.8	50	W	33	M	24	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	9	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				C	17	M	10	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	7	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
161a	Atelectasis	2.2	19	W	11	M	5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	6	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				C	8	M	5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
161b	Icterus of the new-born	0.1	1	W	1	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
161d	Other diseases peculiar to early infancy	0.7	6	W	4	M	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				C	2	M	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
						F	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XVI	Senility	0.9	8	W	8	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
						F	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	3	...	...
XVII	Violent and accidental deaths	88.3	767	W	580	M	392	2	1	5	3	3	13	10	15	18	30	21	24	36	38	34	30	26	18	19	20	15	11	...	...	...	...
						F	188	2	2	2	1	1	5	3	4	6	9	7	4	7	17	10	14	17	15	16	19	19	8	...	...	...
				C	187	M	149	4	...	3	1	...	3	4	13	12	17	19	13	16	11	12	5	4	4	6	2	...	...	...	...	...	...
						F	38	1	3	1	2	2	3	...	2	6	3	2	...	1	2	2	4	2	1	1	...	...	...	...	...	...	...
163–171	Suicide	15.5	135	W	131	M	88	...	...	...	...	...	...	1	1	3	8	8	7	7	11	10	9	8	5	5	1	3	1	...	...	...	...
						F	43	...	...	...	...	...	...	...	...	1	1	4	1	3	8	7	9	3	3	1	1	1	...	...	...	...	...
				C	4	M	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...
						F	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...
163	Suicide by solid or liquid poisons or by absorption of corrosive substances	1.8	16	W	16	M	7	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	2	1	1	...	1	...	...	...	...	...	...
						F	9	...	...	...	...	...	...	...	...	1	...	1	1	1	2	...	1	1	...	...	...	1	...	...	...	...	...

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
164	Suicide by poisonous gas (illuminating gas excepted)	0.8	7	W	7	M	7										1	2			2	2								
164a	Suicide by illuminating gas	4.1	36	W	36	M	15												1	2	3	1	2	3	2	1				
						F	21										1	2		1	2	4	7	2	1	1				
165	Suicide by hanging or strangulation	2.2	19	W	18	M	13										3	2	2	1		1		2	1			1		
						F	5											1			2				2					
				C	1	F	1																	1						
166	Suicide by drowning	0.8	7	W	6	M	4									1							1	1		1				
						F	2															2								
				C	1	F	1													1										
167	Suicide by firearms	3.7	32	W	32	M	32							1	1	1	2	2	3	4	4	6	4		1	2		1		
168	Suicide by cutting or piercing instruments	0.6	5	W	5	M	4												1		1			1						1
						F	1														1									
169	Suicide by jumping from high places	1.2	10	W	9	M	5									1		2								1		1		
						F	4													1	1		1				1			
				C	1	M	1												1											
170	Suicide by crushing	0.1	1	W	1	F	1															1								
171	Suicide by other means	0.2	2	W	1	M	1										1													
				C	1	M	1															1								
173-175	Homicides	9.9	86	W	21	M	16								1		2	2	1	3	4	1	1	1						
						F	5									1	2	1	1											
				C	65	M	57								7	8	7	10	6	7	4	3	2		2	1				
						F	8								1	4	1	1			1									

173	Homicide by firearms	4.4	38	W	4	M	3											1	1						1										
						F	1											1																	
				C	34	M	29								4	5	5	5	3	1	1	2	1		1	1								
						F	5									3	1	1																	
174	Homicide by cutting or piercing instruments	3.1	27	W	2	M	1												1																
						F	1										1																		
				C	25	M	22								3	3	2	4	2	4	2	1			1										
						F	3								1	1					1														
175	Homicide by other means	2.4	21	W	15	M	12								1		1	1		3	4	1	1												
						F	3									1		1	1																
				C	6	M	6											1	1	2	1		1												
176-195	Fatal accidents	62.8	546	W	428	M	288	2	1	5	3	3	13	9	13	15	20	11	16	26	23	23	20	17	13	14	19	12	10						
						F	140	2	2	2	1	1	5	3	4	4	6	2	2	4	9	3	5	14	12	15	18	18	8						
				C	118	M	90	4		3	1		3	4	6	4	10	9	6	9	7	8	3	4	2	5	2								
						F	28	1	3	1	2	2	3		1	2	2	1			1	2	4	1	1	1									
177	Accidental poisoning by food	0.2	2	W	1	M	1															1													
				C	1	M	1							1																					
178a	Accidental absorption of illuminating gas	1.2	10	W	8	M	6													1			1			2	2								
						F	2														2														
				C	2	M	2	1										1																	
178b	Accidental absorption gaseous anesthetic for operation	0.5	4	W	3	M	3				1		1										1												
				C	1	M	1														1														
178d	Accidental absorption of carbon monoxide gas (exhaust gas in garage)	0.2	2	W	2	M	2									1				1															
178f	Accidental absorption of poisonous gas, others	0.2	2	W	2	M	2								1					1															
179	Other acute accidental poisonings (gas excepted)	0.9	8	W	6	M	2		1	1																									
						F	4			1	1								1						1										
				C	2	M	1																												
						F	1									1											1								
180	Conflagration	2.5	22	W	10	M	5	1													1	1				1	1								
						F	5						1		1						2					1									
				C	12	M	4	2										1							1										
						F	8		2	1	2	1				1							1												

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
181	Accidental burns (conflagration excepted)	3.1	27	W	17	M	5						2							1			1				1			
						F	12		1	1			2	1		1	1						2			1	1	1		
				C	10	M	6			1							1		1	1						1	1			
						F	4					1	1				1	1												
182a	Accidental mechanical suffocation (in bed)	0.2	2	W	1	F	1	1																						
				C	1	M	1	1																						
182c	Accidental mechanical suffocation (all others)	0.1	1	W	1	M	1													1										
183	Accidental drowning	6.4	56	W	38	M	32			1		1	1	6	2	1	4	1	5	2	3	3	1				1			
						F	6						1		1	1	2				1									
				C	18	M	18						1	1	6	1	1	2		3		3								
184	Accidental traumatism by firearms (wounds of war excepted)	0.8	7	W	4	M	4			1				1		1			1											
				C	3	M	2							1		1														
						F	1						1																	
185	Accidental traumatism by cutting or piercing instruments	0.1	1	W	1	M	1																		1					
186a	Accidental traumatism by fall	22.3	194	W	174	M	99			1			1		2	2	7	4	3	9	6	6	8	8	10	7	8	7	10	
						F	75										1			1	1	1	3	8	9	10	16	17	8	
				C	20	M	12			1							4	1			2		1		1	2				
						F	8	1	1													1	2	1	1	1				
186b	Accidental traumatism by crushing, landslide	3.6	31	W	25	M	20	1		1			1		1	3			2	2	2	1		2	1	2		1		
						F	5					1				1			1			1		1						
				C	6	M	6									2		1		2				1						
190	Excessive cold	0.1	1	W	1	M	1																1							

191	*Excessive heat*	*0.1*	*1*	*W*	*1*	*M*	*1*												*1*														
192	Accidental traumatism due to lightning	0.1	1	W	1	M	1												1														
193	Accidental traumatism due to electric currents	0.6	5	W	3	M	3							1	1		1																
				C	2	M	2						1				1																
194a	Other accidents, foreign bodies	0.7	6	W	5	M	3										1							1			1						
						F	2	1												1													
				C	1	M	1										1																
194b	Other accidents under this title	18.2	158	W	121	M	93				2	2	7	1	6	7	6	3	5	8	11	10	7	6	1	2	5	4					
						F	28		1				1	2	2	1	2	2		2	3	1		5	2	3	1						
				C	37	M	31			1	1		1	1			2	3	4	3	3	5	2	3		2							
						F	6						1		1		1				1	1	1										
195	Violent deaths of which the nature (accident, suicide, homicide) is unknown	0.6	5	W	3	M	3										1	1				1											
				C	2	M	2												1		1												
200	Cause of death not specified or ill-defined	0.7	6	W	4	M	3									1		1		1													
						F	1									1																	
				C	2	M	1											1															
						F	1									1																	

SUPPLEMENT FOR GROUP XVII—VIOLENT AND ACCIDENTAL DEATHS, CROSS CLASSIFICATION OF DEATHS FROM ACCIDENTS†

201	Accidental traumatism in mines and quarries	0.1	1	C	1	M	1												1														
203	Elevator accidents	0.2	2	W	1	M	1										1																
				C	1	M	1																1										
205	Other machinery accidents	0.3	3	W	1	M	1																		1								
				C	2	M	2											1		1													
206	Railroad and automobile collisions	0.2	2	W	2	M	1									1																	
						F	1									1																	
207	Other railroad accidents	1.2	10	W	10	M	9						1		1			2	1	1	2			1									
						F	1							1																			
208	Street car and automobile collisions	0.2	2	W	1	F	1														1												
				C	1	M	1									1																	

TABLE NO. 8—Continued

RESIDENT DEATHS BY CAUSE, SEX, COLOR AND AGE, WITH DEATH RATE PER 100,000 POPULATION—1939

SUPPLEMENT FOR GROUP XVII—Continued

International List No.	Cause	Death Rate per 100,000 Population	Totals: Grand Total	Totals: By Color		Totals: By Sex		Under 1 Year	1 Year	2 Years	3 Years	4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years	50-54 Years	55-59 Years	60-64 Years	65-69 Years	70-74 Years	75-79 Years	80-84 Years	85 Years and Over	Age Not Specified
209	Other street car accidents	0.8	7	W	6	M	3			1															1		1			
						F	3														1			1		1				
				C	1	M	1													1										
210	Automobile accidents	17.7	154	W	123	M	96	1			1	2	8	1	7	8	4	2	6	9	12	10	5	7	1	4	3	5		
						F	27					1	1	1	2	2	2	2	1	2	1	2		5	2	2	1			
				C	31	M	25			1	1		1	1		1	1	2	4		2	3	2	4		2				
						F	6						1		1		1				1	1	1							
211	Motorcycle accidents	0.1	1	W	1	M	1									1														
212	Other land transportation accidents	0.2	2	W	1	M	1																				1			
				C	1	M	1															1								
213	Water transportation accidents	1.6	14	W	13	M	12							1		1	2	3	2	1	1				1					
						F	1										1													
				C	1	M	1											1												

† The supplement for Group XVII is an independent tabulation of deaths from certain accidents included under numbers 176-195.

NOTE.—Deaths by color, include the following non-Negro races:
Influenza without respiratory complications specified—1 male Chinese, 1 year of age.
True leukemia—1 male Filipino, 43 years of age.
Chronic endocarditis—1 male Chinese, 85 years of age.
Other and unspecified diseases of the heart—1 male Chinese, 65 years of age.
Bronchopneumonia—1 male Chinese, 55 years of age.
Chronic nephritis—1 American Indian, 53 years of age.

TABLE NO. 9

RECORDED AND RESIDENT DEATHS AND DEATH RATES PER 100,000 POPULATION FOR CERTAIN CAUSES AND GROUP OF CAUSES, CLASSIFIED BY COLOR—1939

Cause	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	10,879	8,374	2,505	12.5	12.0	14.4	10,386	7,907	2,479	12.0	11.4	14.3
Typhoid and paratyphoid fever (1, 2)	5	2	3	0.6	0.3	1.7	1	1	..	0.1	0.1	..
Typhus fever (3)	2	2	..	0.2	0.3	..	2	2	..	0.2	0.3	..
Smallpox (6)	..	..	..	..	..	..	..	..	..	..	..	..
Measles (7)	10	8	2	1.2	1.2	1.2	9	7	2	1.0	1.0	1.2
Scarlet fever (8)	1	1	..	0.1	0.1	..	1	1	..	0.1	0.1	..
Whooping cough (9)	11	5	6	1.3	0.7	3.4	9	4	5	1.0	0.6	2.9
Diphtheria (10)	9	9	..	1.0	1.3	..	3	3	..	0.3	0.4	..
Influenza (11)	69	40	29	7.9	5.8	16.7	63	37	26	7.2	5.3	15.0
Dysentery (13)	23	11	12	2.6	1.6	6.9	13	7	6	1.5	1.0	3.4
Acute poliomyelitis (16)	2	2	..	0.2	0.3	..	..	..	..	..	..	..
Epidemic cerebrospinal meningitis (18)	6	4	2	0.7	0.6	1.2	6	4	2	0.7	0.6	1.2
Tuberculosis, respiratory system (23)	512	244	268	58.9	35.1	154.5	631	316	315	72.6	45.4	181.6
Tuberculosis, other forms (24-32)	49	23	26	5.6	3.3	15.0	42	20	22	4.8	2.9	12.7
Syphilis (34)	270	62	208	31.1	8.9	119.9	258	62	196	29.7	8.9	113.0
Malaria (38)	..	..	..	..	..	..	..	..	..	..	..	..
Other infectious and parasitic diseases (4, 5, 12, 14, 15, 17, 19, 20-22, 33, 35-37, 39-44)	66	39	27	7.6	5.6	15.6	47	22	25	5.4	3.2	14.4
Cancer and other malignant tumors (45-53)	1,400	1,207	193	161.1	173.5	111.2	1,237	1,060	177	142.3	152.4	102.0
Tumors, nonmalignant (54, 55)	57	41	16	6.6	5.9	9.2	40	26	14	4.6	3.7	8.1
Chronic rheumatism and gout (57, 58)	14	14	..	1.6	2.0	..	15	15	..	1.7	2.2	..
Diabetes mellitus (59)	317	277	40	36.5	39.8	23.0	288	250	38	33.1	35.9	21.9
Pellagra (62)	4	2	2	0.5	0.3	1.2	6	4	2	0.7	0.6	1.2
Alcoholism, acute and chronic (75)	16	12	4	1.8	1.7	2.3	16	12	4	1.8	1.7	2.3
Other general diseases and chronic poisonings (56, 60, 61, 63-69, 70-74, 76, 77)	147	120	27	16.9	17.2	15.6	115	93	22	13.2	13.4	12.7
Tabes dorsalis and general paralysis of the insane (80, 83)	6	5	1	0.7	0.7	0.6	55	19	36	6.3	2.7	20.8
Cerebral hemorrhage, cerebral embolism and thrombosis (82)	792	595	197	91.1	85.5	113.6	794	595	199	91.4	85.5	114.7
Other diseases of the nervous system (78, 79, 81, 84-89)	107	85	22	12.3	12.2	12.7	130	102	28	15.0	14.7	16.1
Diseases of the heart (90-95)	2,978	2,550	428	342.7	366.6	246.7	2,970	2,536	434	341.8	364.6	250.2
Other diseases of the circulatory system (96-103)	144	131	13	16.6	18.8	7.5	145	129	16	16.7	18.5	9.2
Bronchitis (106)	41	39	2	4.7	5.6	1.2	35	33	2	4.0	4.7	1.2
Pneumonia (107-109)	709	461	248	81.6	66.3	143.0	668	431	237	76.9	62.0	136.6

* Except that death rates for all causes are per 1,000 population and for puerperal causes are per 1,000 live births.

TABLE NO. 9—Continued

RECORDED AND RESIDENT DEATHS AND DEATH RATES PER 100,000 POPULATION FOR CERTAIN CAUSES AND GROUP OF CAUSES, CLASSIFIED BY COLOR—1939

Cause	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
Other diseases of the respiratory system (104, 105, 110-114)	46	38	8	5.3	5.5	4.6	36	31	5	4.1	4.4	2.9
Diarrhea and enteritis												
Under 2 years of age (119)	56	32	24	6.4	4.6	13.8	45	24	21	5.2	3.4	12.1
Two years and over (120)	18	17	1	2.1	2.4	0.6	17	16	1	2.0	2.3	0.6
Appendicitis (121)	93	72	21	10.7	10.4	12.1	75	54	21	8.6	7.8	12.1
Diseases of the liver and biliary passages (124-127)	147	133	14	16.9	19.1	8.1	130	118	12	15.0	17.0	6.9
Other diseases of the digestive system (115-118, 122, 123, 128, 129)	252	197	55	29.0	28.3	31.7	197	148	49	22.7	21.3	28.2
Nephritis (130-132)	1,060	810	250	122.0	116.5	144.1	1,021	793	228	117.5	114.0	131.4
Diseases of the genito-urinary system (133-139)	154	126	28	17.7	18.1	16.1	111	87	24	12.8	12.5	13.8
Puerperal septicemia (140, 145)	25	15	10	1.7	1.3	2.8	18	10	8	1.4	1.1	2.4
Other puerperal causes (141-144, 146-150)	34	23	11	2.3	2.0	3.1	27	18	9	2.2	2.0	2.7
Diseases of the skin, bones, etc. (151-156)	19	17	2	2.2	2.4	1.2	10	9	1	1.2	1.3	0.6
Congenital debility, malformations, premature birth, etc. (157-161)	401	287	114	46.1	41.3	65.7	319	216	103	36.7	31.0	59.4
Suicides (163-171)	140	136	4	16.1	19.6	2.3	135	131	4	15.5	18.8	2.3
Homicides (172-175)	87	22	65	10.0	3.2	37.5	86	21	65	9.9	3.0	37.5
Other violent and accidental deaths (176-198)	568	447	121	65.4	64.3	69.7	546	428	118	62.8	61.5	68.0
Senility (162)	8	8	..	0.9	1.2	..	8	8	..	0.9	1.2	..
Cause not specified or ill-defined (199, 200)	4	3	1	0.5	0.4	0.6	6	4	2	0.7	0.6	1.2

* Except that death rates for all causes are per 1,000 population and for puerperal causes are per 1000 live births.

TABLE NO. 10

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE, BALTIMORE—1939

International List No.	Cause	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*	8,374	2,505	7,301	2,316	791	155	282	34	499	152	107	11	7,907	2,479
	I—Infectious and Parasitic Diseases														
1	Typhoid fever	2	3	1	..	1	2	..	1	..	..	..	..	1	..
3	Typhus fever	2	..	2	..	..	..	..	..	..	..	..	..	2	..
5	Undulant fever	1	..	1	..	..	..	..	..	..	..	..	..	1	..
7	Measles	8	2	7	2	..	..	1	..	..	..	..	..	7	2
8	Scarlet fever	1	..	1	..	..	..	..	..	..	..	..	..	1	..
9	Whooping cough	5	6	4	5	1	1	..	..	..	..	..	..	4	5
10	Diphtheria	9	..	3	..	6	..	..	..	..	..	..	..	3	..
11	Influenza	40	29	37	26	2	3	1	..	..	..	..	..	37	26
	Dysentery,														
13a	Amebic	1	..	1	..	..	..	..	..	..	..	..	..	1	..
13b	Bacillary	10	10	6	6	4	4	..	..	..	..	..	..	6	6
13c	Unspecified	..	2	..	..	..	2	..	..	..	..	..	..	..	..
15	Erysipelas	3	1	3	1	..	..	..	..	..	..	..	..	3	1
16	Acute poliomyelitis	2	..	..	..	1	..	1	..	..	..	..	..	..	..
17	Lethargic encephalitis	1	..	1	..	..	..	..	..	..	..	..	..	1	..
18	Epidemic cerebrospinal meningitis	4	2	4	2	..	..	..	..	..	..	..	..	4	2
22	Tetanus	5	3	1	2	4	1	..	..	..	..	..	..	1	2
	Tuberculosis of the														
23	Respiratory system	244	268	205	255	24	9	15	4	107	58	4	2	316	315
24	Meninges and central nervous system	7	17	5	13	1	4	1	..	1	..	..	..	6	13
25	Intestines and peritoneum	2	2	2	2	..	..	..	..	..	2	..	..	2	4
26	Vertebral column	2	3	2	2	..	1	..	..	..	..	..	..	2	2
27	Bones and joints	2	3	2	2	..	1	..	..	..	..	..	..	2	2
29	Lymphatic system	1	..	1	..	..	..	..	..	..	..	..	..	1	..
30	Genito-urinary system	8	..	7	..	1	..	..	..	..	..	..	..	7	..
31	Other organs	1	..	..	..	..	..	1	..	..	..	..	..	..	..
32	Disseminated	..	1	..	1	..	..	..	..	..	..	..	..	..	1
34	Syphilis	62	208	53	193	5	15	4	..	9	3	..	..	62	196
35	Gonococcus infection	4	18	3	18	..	..	1	..	..	..	..	..	3	18
36	Purulent infection	11	2	5	1	4	1	2	..	..	1	..	..	5	2
43	Mycoses	1	1	..	..	..	1	1	..	..	..	..	..	..	..
44	Chickenpox	1	..	1	..	..	..	..	..	..	..	..	..	1	..
	Rocky Mountain spotted fever	5	..	..	..	5	..	..	..	..	..	..	..	..	..
	Tularemia	6	2	6	2	..	..	..	..	..	..	..	..	6	2
	Mumps	1	..	1	..	..	..	..	..	..	..	..	..	1	..

* 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—1939

International List No.	Cause	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 and other malignant tumors of														
45	Buccal cavity and pharynx	38	5	31	5	6	..	1	..	..	..	1	..	32	5
46	Digestive tract and peritoneum	530	90	450	81	57	7	23	2	14	1	5	..	469	82
47	Respiratory system	104	8	82	8	13	..	9	..	..	1	..	..	82	9
48	Uterus	118	27	112	26	3	1	3	..	2	1	..	..	114	27
49	Female genital organs	32	8	27	6	2	2	3	..	1	..	..	..	28	6
50	Breast	136	20	122	20	9	..	5	..	3	..	1	..	126	20
51	Male genito-urinary organs	106	18	84	14	17	3	5	1	1	..	2	..	87	14
52	Skin	16	2	15	2	..	..	1	..	..	..	..	..	15	2
53	Other or unspecified organs	127	15	104	12	15	1	8	2	2	..	1	..	107	12
	Nonmalignant tumors of														
54b	Uterus	17	13	11	12	4	1	2	..	1	..	..	..	12	12
54d	Brain	10	2	4	2	2	..	4	..	1	..	..	..	5	2
54e	Other organs	13	1	9	..	1	1	3	..	..	..	..	..	9	..
	Unspecified tumors of														
55d	Brain	1	..	..	..	1	..	..	..	..	..	..	..	..	..
	III—Rheumatic Diseases, Nutritional Diseases, Diseases of the Endocrine Glands and Other General Diseases														
56	Acute rheumatic fever	11	6	8	5	2	1	1	..	1	..	1	..	10	5
57	Chronic rheumatism, osteoarthritis	14	..	14	..	..	..	..	..	1	..	..	..	15	..
59	Diabetes mellitus	277	40	242	37	31	2	4	1	7	1	1	..	250	38
62	Pellagra	2	2	2	2	..	..	..	..	1	..	1	..	4	2
63	Rickets	1	1	1	1	..	..	..	..	..	..	..	..	1	1
66a	Simple goiter	4	..	2	..	2	..	..	..	..	..	..	..	2	..
66b	Exophthalmic goiter	13	2	10	1	2	1	1	..	..	1	..	..	10	2
66e	Other diseases of the thyroid and parathyroid glands	..	1	..	1	..	..	..	..	..	..	..	..	..	1
67	Diseases of the thymus glands	3	1	1	1	1	..	1	..	..	..	1	..	2	1
68	Diseases of the adrenals	1	1	1	..	..	1	..	..	..	..	..	..	1	..
69	Other general diseases	2	..	2	..	..	..	..	..	..	..	..	..	2	..
	IV—Diseases of the Blood and Blood-Making Organs														
70a	Primary purpuras	2	..	2	..	..	..	..	..	..	..	..	..	2	..
71a	Pernicious anemia	13	1	10	1	2	..	1	..	1	..	..	..	11	1
72a	Leukemias	41	8	30	4	8	3	3	1	..	1	..	..	30	5
72b	Hodgkin's disease	17	1	12	1	2	..	3	..	..	..	..	..	12	1
73	Diseases of the spleen	4	1	3	1	1	..	..	..	..	..	..	..	3	1
74	Other diseases of the blood and blood-making organs	4	2	2	2	2	..	..	..	..	..	..	..	2	2

	V—Chronic Poisonings and Intoxications														
75	Alcoholism	12	4	11	4	1	..	..	..	1	..	..	..	12	4
76b	Other chronic poisoning by organic substances	1	..	1	..	..	..	..	..	1	..	..	..	2	..
77a	Chronic poisoning by lead	3	2	3	2	..	..	..	..	..	..	..	..	3	2
	VI—Diseases of the Nervous System and of the Organs of Special Sense														
78	Encephalitis	9	1	4	1	2	..	3	..	..	..	..	..	4	1
79a	Simple meningitis	12	7	7	5	5	2	..	..	..	..	1	..	8	5
80	Progressive locomotor ataxia	4	1	4	..	..	1	..	..	..	..	..	..	4	..
81	Other diseases of the spinal cord	12	4	9	3	2	1	1	..	..	..	..	..	9	3
82a	Cerebral hemorrhage	527	188	498	185	18	3	11	..	28	3	4	2	530	190
82b	Cerebral embolism and thrombosis	57	8	51	8	4	..	2	..	3	..	..	..	54	8
82c	Softening of the brain	6	1	6	1	..	..	..	..	..	..	..	..	6	1
82d	Hemiplegia and other paralysis	5	..	5	..	..	..	..	..	..	..	..	..	5	..
83	General paralysis of the insane	1	..	1	..	..	..	..	..	14	36	..	..	15	36
84	Dementia praecox and other psychoses	9	..	6	..	1	..	2	..	28	9	..	..	34	9
85	Epilepsy	7	3	7	3	..	..	..	..	3	..	..	..	10	3
87a	Neuralgia and neuritis	2	..	1	..	..	..	1	..	..	..	..	..	1	..
87b	Other diseases of the nervous system	24	2	21	2	3	..	..	..	6	..	..	..	27	2
89a	Diseases of the ear	8	5	7	5	1	..	..	..	..	..	..	..	7	5
89b	Diseases of the mastoid process	2	..	2	..	..	..	..	..	..	..	..	..	2	..
	VII—Diseases of the Circulatory System														
90	Pericarditis	5	1	4	1	1	..	..	..	..	..	..	..	4	1
91a	Acute endocarditis	23	7	21	7	..	..	2	..	..	1	..	..	21	8
92a	Chronic endocarditis	300	87	281	84	13	2	6	1	8	1	2	1	291	86
93a	Acute myocarditis	15	14	15	14	..	..	..	..	1	..	..	..	16	14
93c	Chronic myocarditis	735	82	700	79	28	2	7	1	54	6	8	1	762	86
93d	Diseases of the myocardium, unspecified	28	3	27	3	..	..	1	..	2	1	3	..	32	4
94a	Angina pectoris	61	4	60	4	..	..	1	..	4	..	2	..	66	4
94b	Diseases of the coronary arteries	611	72	583	70	15	..	13	2	15	1	18	1	616	72
95a	Functional diseases of the heart	10	1	9	1	..	..	1	..	1	..	..	..	10	1
95b	Other and unspecified diseases of the heart	762	157	695	152	61	4	6	1	15	6	8	..	718	158
96	Aneurysm (except of the heart)	19	5	12	3	5	1	2	1	..	..	1	..	13	3
97	Arteriosclerosis	80	4	77	4	2	..	1	..	14	5	1	..	92	9
98	Gangrene	13	2	12	2	1	..	..	..	..	..	..	..	12	2
99	Other diseases of the arteries	7	..	5	..	2	..	..	..	1	..	..	..	6	..
100	Diseases of the veins (varices, hemorrhoids, phlebitis, etc.)	11	2	6	2	4	..	1	..	..	..	..	..	6	2
102	Idiopathic anomalies of the blood-pressure	1	..	..	..	1	..	..	..	..	..	..	..	..	..
	VIII—Diseases of the Respiratory System														
104b	Diseases of the nasal fossae and annexa	2	2	2	1	..	1	..	..	..	..	..	..	2	1
105	Diseases of the larynx	2	..	1	..	..	..	1	..	..	..	..	..	1	..
	Bronchitis														
106a	Acute	13	..	12	..	1	..	..	..	..	..	..	..	12	..
106b	Chronic	26	2	21	2	..	..	5	..	..	..	..	..	21	2
107a	Bronchopneumonia	259	116	230	111	25	4	4	1	18	2	1	..	249	113
107b	Capillary bronchitis	..	1	..	1	..	..	..	..	..	..	..	..	..	1
108	Lobar pneumonia	202	131	168	122	28	6	6	3	14	1	..	..	182	123
110	Pleurisy	4	..	1	..	2	..	1	..	..	..	..	..	1	..
111b	Pulmonary congestion	2	1	2	1	..	..	..	..	..	..	..	..	2	1
112	Asthma	15	4	15	3	..	..	..	1	..	..	1	..	16	3
114a	Chronic interstitial pneumonia (including occupational diseases of the respiratory system)	1	..	1	..	..	..	..	..	..	..	..	..	1	..
114b	Other diseases of the respiratory system	12	1	8	..	2	..	2	1	..	..	..	..	8	..

TABLE NO. 10—Continued

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE, BALTIMORE—1939

International List No.	Cause	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														
115a	Diseases of the pharynx and tonsils	14	3	10	2	2	1	2	..	1	..	1	..	12	2
115b	Other diseases of the buccal cavity and annexa	1	3	1	3	..	..	..	..	..	..	..	..	1	3
117a	Ulcer of the stomach	41	4	29	4	6	..	6	..	..	1	..	..	29	5
117b	Ulcer of the duodenum	15	1	12	1	2	..	1	..	..	..	..	..	12	1
118	Other diseases of the stomach	5	4	4	4	..	..	1	..	..	..	..	..	4	4
	Diarrhea and enteritis														
119	Under two years of age	32	24	24	21	8	3	..	..	..	..	..	..	24	21
120	Two years and over	17	1	15	1	2	..	..	..	1	..	..	..	16	1
121	Appendicitis	72	21	52	20	18	1	2	..	2	1	..	..	54	21
122a	Hernia	50	11	39	9	10	2	1	..	2	..	..	..	41	9
122b	Intestinal obstruction	47	24	30	20	15	2	2	2	..	..	1	..	31	20
123	Other diseases of the intestines	15	2	12	2	2	..	1	..	..	..	..	..	12	2
124a	Cirrhosis of the liver, alcoholic	27	..	26	..	..	..	1	..	..	..	..	..	26	..
124b	Cirrhosis of the liver, non-alcoholic	34	4	30	4	2	..	2	..	..	..	2	..	32	4
125a	Yellow atrophy of the liver	6	1	4	..	2	1	..	..	..	..	..	..	4	..
125b	Other diseases of the liver	6	5	5	4	..	1	1	..	..	..	..	..	5	4
126	Biliary calculi	34	2	29	2	4	..	1	..	1	..	..	..	30	2
127	Other diseases of the gall-bladder and biliary passages	26	2	21	2	5	..	..	..	..	..	..	..	21	2
128	Diseases of the pancreas	6	2	4	2	1	..	1	..	1	..	..	..	5	2
129	Peritonitis, cause not specified	3	1	1	1	2	..	..	..	..	..	..	..	1	1
	X—Diseases of the Genito-Urinary System														
130	Acute nephritis (including unspecified under 10 years of age)	5	3	3	1	1	1	1	1	..	..	..	..	3	1
131	Chronic nephritis	805	247	743	226	49	20	13	1	42	..	5	1	790	227
133	Other diseases of the kidneys and ureters (puerperal diseases excepted)	23	10	17	7	5	3	1	..	..	..	..	..	17	7
134	Calculi of the urinary passages	21	..	15	..	4	..	2	..	..	..	..	..	15	..
135	Diseases of the bladder (tumors excepted)	4	..	2	..	2	..	..	..	..	..	..	..	2	..
136a	Stricture of the urethra	2	3	1	3	1	..	..	..	..	..	..	..	1	3
136b	Other diseases of the urethra	2	2	..	2	..	..	2	..	..	..	..	..	..	2
137	Diseases of the prostate	63	11	45	10	13	..	5	1	1	..	..	..	46	10
138	Diseases of the male genital organs not specified as venereal	1	1	..	1	1	..	..	..	..	..	..	..	..	1
139a	Cysts of the ovary	1	..	..	..	1	..	..	..	..	..	..	..	..	..
139b	Other diseases of the ovaries and diseases of the tubes and parametrium	7	..	6	..	..	..	1	..	..	..	..	..	6	..
139c	Diseases of the uterus	2	1	..	1	1	..	1	..	..	..	..	..	..	1

	XI—DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUERPERAL STATE														
140	Abortion with septic conditions	8	8	6	7	2	1	..	..	..	..	..	..	6	7
141	Abortion without mention of septic conditions (to include hemorrhages)	2	1	2	1	..	..	..	..	..	..	..	..	2	1
142a	Ectopic gestation with septic conditions specified	..	1	..	1	..	..	..	..	..	..	..	..	..	1
142b	Ectopic gestation without mention of septic conditions	..	2	..	1	..	1	..	..	..	..	..	..	..	1
144a	Placenta praevia	1	1	1	1	..	..	..	..	..	..	..	..	1	1
144b	Other puerperal hemorrhages	1	..	1	..	..	..	..	..	..	..	..	..	1	..
145a	Puerperal septicemia and pyemia	7	2	4	1	3	1	..	..	..	..	..	..	4	1
146	Puerperal albuminuria and eclampsia	8	1	6	1	2	..	..	..	..	..	..	..	6	1
147	Other toxemias of pregnancy	..	2	..	2	..	..	..	..	..	..	..	..	..	2
148	Puerperal phlegmasia alba dolens, embolus, sudden death (not specified as septic)	2	..	1	..	1	..	..	..	..	..	..	..	1	..
149a	Cesarean operation	2	..	2	..	..	..	..	..	..	..	..	..	2	..
149b	Other accidents of childbirth	7	3	5	2	2	1	..	..	..	..	..	..	5	2
	XII—DISEASES OF THE SKIN AND CELLULAR TISSUE														
151	Furuncle, carbuncle	3	..	3	..	..	..	..	..	..	..	..	..	3	..
152	Phlegmon, acute abscess	3	1	2	1	1	..	..	..	..	..	..	..	2	1
153	Other diseases of the skin	2	..	1	..	1	..	..	..	..	..	..	..	1	..
	XIII—DISEASES OF THE BONES AND ORGANS OF LOCOMOTION														
154	Osteomyelitis	6	1	1	..	2	1	3	..	..	..	..	..	1	..
155	Other diseases of the bones	2	..	2	..	..	..	..	..	..	..	..	..	2	..
156b	Diseases of other organs of locomotion	1	..	..	..	..	..	1	..	..	..	..	..	..	..
	XIV—CONGENITAL MALFORMATIONS														
157a	Congenital hydrocephalus	18	2	10	1	2	1	6	..	..	..	..	..	10	1
157b	Spina bifida and meningocele	7	..	5	..	2	..	..	..	..	..	..	..	5	..
157c	Congenital malformations of the heart	36	13	27	13	8	..	1	..	..	..	..	..	27	13
157d	Other congenital malformations	22	2	14	2	8	..	..	..	..	..	..	..	14	2
	XV—DISEASES OF EARLY INFANCY														
158	Congenital debility	4	2	4	2	..	..	..	..	..	..	..	..	4	2
159	Premature birth	131	65	103	58	28	7	..	..	..	..	2	..	105	58
160a	Injury at birth, Cesarean operation	2	..	2	..	..	..	..	..	..	..	..	..	2	..
160b	Injury at birth, without Cesarean operation	44	17	32	17	11	..	1	..	..	..	1	..	33	17
161a	Atelectasis	12	8	11	8	1	..	..	..	..	..	..	..	11	8
161b	Icterus of the new-born	2	1	1	..	1	1	..	..	..	..	..	..	1	..
161c	Sclerema	..	1	..	..	..	1	..	..	..	..	..	..	..	..
161d	Other diseases peculiar to early infancy	9	3	4	2	5	1	..	..	..	..	..	..	4	2
	XVI—SENILITY														
162	Senility	8	..	8	..	..	..	..	..	..	..	..	..	8	..

TABLE NO. 10—Continued

ALLOCATION OF DEATHS BY COLOR AND CAUSE OF DEATH ACCORDING TO PLACE OF DEATH AND PLACE OF RESIDENCE, BALTIMORE—1939

International List No.	Cause	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
	XVII—Violent and Accidental Deaths														
	Suicide by														
163	Solid or liquid poisons or by absorption of corrosive substances	19	..	16	..	3	..	..	..	..	..	..	..	16	..
164	Poisonous gas	42	..	41	..	..	..	1	..	2	..	..	..	43	..
165	Hanging or strangulation	15	1	13	1	1	..	1	..	3	..	2	..	18	1
166	Drowning	5	1	5	1	..	..	..	..	..	..	1	..	6	1
167	Firearms	36	..	28	..	4	..	4	..	1	..	3	..	32	..
168	Cutting or piercing instruments	7	..	4	..	2	..	1	..	..	..	1	..	5	..
169	Jumping from high places	11	1	8	1	3	..	..	..	1	..	..	..	9	1
170	Crushing	1	..	1	..	..	..	..	..	..	..	..	..	1	..
171	Other means	..	1	..	1	..	..	..	..	1	..	..	..	1	1
	Homicide by														
173	Firearms	5	34	4	33	..	1	1	..	..	..	..	1	4	34
174	Cutting or piercing instruments	2	25	2	25	..	..	..	..	..	..	..	..	2	25
175	Other means	15	6	14	5	1	1	..	..	1	..	..	1	15	6
	Accidents														
177	Poisoning by food	1	1	1	1	..	..	..	..	..	..	..	..	1	1
178	Absorption of poisonous gas	16	3	15	3	1	..	..	..	..	..	..	..	15	3
179	Other acute accidental poisonings (gas excepted)	6	2	6	2	..	..	..	..	..	..	..	..	6	2
180	Conflagration	10	12	10	12	..	..	..	..	..	..	..	..	10	12
181	Burns (conflagration excepted)	20	11	15	10	5	1	..	..	1	..	1	..	17	10
182	Mechanical suffocation	1	1	1	1	..	..	..	..	..	..	1	..	2	1
183	Drowning	21	18	14	17	3	..	4	1	23	1	1	..	38	18
	Traumatism by														
184	Firearms	7	2	3	2	4	..	..	..	1	1	..	..	4	3
185	Cutting or piercing instruments	1	..	1	..	..	..	..	..	..	..	..	..	1	..
186a	Fall	177	20	161	19	15	1	1	..	10	1	3	..	174	20
186b	Crushing, landslide	20	4	19	4	1	..	..	..	4	2	2	..	25	6
188	Injuries by animals	1	..	..	..	1	..	..	..	..	..	..	..	..	..
190	Excessive cold	1	..	1	..	..	..	..	..	..	..	..	..	1	..
191	Excessive heat	1	..	1	..	..	..	..	..	..	..	..	..	1	..
192	Lightning	..	..	..	..	..	..	..	..	1	..	..	..	1	..
193	Due to electric currents	3	3	3	2	..	..	..	1	..	..	..	..	3	2
194a	Other foreign bodies	6	1	5	1	1	..	..	..	..	..	..	..	5	1
194b	Others under this title	151	41	97	34	36	4	18	3	13	3	11	..	121	37
195	Violent deaths of which the nature (accident, suicide, homicide) is unknown	3	2	1	2	..	..	2	..	2	..	..	..	3	2
198	Legal executions	1	..	..	..	1	..	..	..	..	..	..	..	..	..
200	Cause of death not specified or ill defined	3	1	3	1	..	..	..	..	..	..	1	1	4	2

**SUPPLEMENT FOR GROUP XVII—VIOLENT AND ACCIDENTAL DEATHS. CROSS CLASSIFICATION OF DEATHS FROM ACCIDENTS

201	Accidental traumatism in mines and quarries	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1
203	Elevator accidents	1	1	1	1	..	..	..	..	..	..	..	..	1	1	
205	Other machinery accidents	2	3	1	2	..	..	1	1	..	..	..	..	1	2	
206	Railroad and automobile collisions	3	1	2	..	1	1	..	..	..	..	..	..	2	..	
207	Other railroad accidents	9	..	7	..	2	..	..	..	3	..	..	..	10	..	
208	Street car and automobile collisions	1	..	1	..	..	..	..	..	..	1	..	..	1	1	
209	Other street car accidents	6	2	6	1	..	1	..	..	..	..	..	..	6	1	
210	Automobile accidents	143	33	95	28	33	3	15	2	14	3	14	..	123	31	
211	Motorcycle accidents	1	..	1	..	..	..	..	..	..	..	..	..	1	..	
212	Other land transportation accidents	2	1	1	1	1	..	..	..	..	..	..	..	1	1	
213	Water transportation accidents	7	1	6	1	..	..	1	..	7	..	..	..	13	1	
214	Air transportation accidents	1	..	..	..	..	..	1	..	..	..	..	..	..	..	

** The supplement for group XVII is an independent tabulation of deaths from certain accidents in Baltimore City during 1939. These were included under numbers 176 through 195.

TABLE NO. 11

RESIDENT AND RECORDED DEATHS AND DEATH RATES PER 100,000 POPULATION FROM CERTAIN IMPORTANT CAUSES FOR TOTAL, WHITE AND COLORED POPULATIONS—1930-1939

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																		
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	..	0.3	0.4	..
1937	7	4	3	0.8	0.6	1.8	25	16	9	2.9	2.3	5.4	4	3	1	0.5	0.4	0.6
1936	8	2	6	0.9	0.3	3.7	7	6	1	0.8	0.9	0.6	5	5	..	0.6	0.7	..
1935	9	8	1	1.1	1.2	0.6	2	2	..	0.2	0.3	..	13	10	3	1.5	1.5	1.9
1934	10	4	6	1.2	0.6	3.8	91	70	21	10.9	10.3	13.4	10	10	..	1.2	1.5	..
1933	2	2	..	0.2	0.3	..	..	..	..	..	..	..	22	19	3	2.7	2.8	2.0
1932	1	..	1	0.1	..	0.7	1	1	..	0.1	0.1	..	17	16	1	2.1	2.4	0.7
Recorded																		
1939	5	2	3	0.6	0.3	1.7	10	8	2	1.2	1.2	1.2	1	1	..	0.1	0.1	..
1938	13	8	5	1.5	1.2	2.9	..	..	..	..	..	..	3	3	..	0.3	0.4	..
1937	10	7	3	1.2	1.0	1.8	28	18	10	3.3	2.6	6.0	4	3	1	0.5	0.4	0.6
1936	8	2	6	0.9	0.3	3.7	8	7	1	0.9	1.0	0.6	8	8	..	0.9	1.2	..
1935	12	11	1	1.4	1.6	0.6	4	4	..	0.5	0.6	..	16	13	3	1.9	1.9	1.9
1934	11	5	6	1.3	0.7	3.8	97	75	22	11.6	11.1	14.0	12	12	..	1.4	1.8	..
1933	3	3	..	0.4	0.5	..	..	..	..	..	..	..	28	25	3	3.4	3.7	2.0
1932	6	4	2	0.7	0.6	1.3	1	1	..	0.1	0.2	..	19	18	1	2.3	2.7	0.7
1931	25	15	10	3.1	2.3	6.8	62	49	13	7.6	7.4	8.8	16	15	1	2.0	2.3	0.7
1930	27	16	11	3.3	2.4	7.7	2	2	..	0.2	0.3	..	14	12	2	1.7	1.8	1.4

Year	Whooping Cough						Diphtheria						Influenza					
Resident																		
1939	9	4	5	1.0	0.6	2.9	3	3	..	0.3	0.4	..	63	37	26	7.2	5.3	15.0
1938	19	7	12	2.2	1.0	7.0	3	3	..	0.3	0.4	..	53	37	16	6.1	5.3	9.4
1937	35	17	18	4.1	2.5	10.8	7	5	2	0.8	0.7	1.2	104	68	36	12.2	9.9	21.6
1936	36	13	23	4.2	1.9	14.1	8	3	5	0.9	0.4	3.1	76	57	19	9.0	8.3	11.6
1935	8	3	5	1.0	0.4	3.1	2	2	..	0.2	0.3	..	103	65	38	12.2	9.5	23.7
1934	56	32	24	6.7	4.7	15.3	6	5	1	0.7	0.7	0.6	63	42	21	7.6	6.2	13.4
1933	39	15	24	4.7	2.2	15.6	6	4	2	0.7	0.6	1.3	112	90	22	13.5	13.4	14.3
1932	36	23	13	4.4	3.4	8.7	10	3	7	1.2	0.4	4.7	127	92	35	15.5	13.7	23.3
Recorded																		
1939	11	5	6	1.3	0.7	3.4	9	9	..	1.0	1.3	..	69	40	29	7.9	5.8	16.7
1938	21	9	12	2.4	1.3	7.0	6	5	1	0.7	0.7	0.6	57	39	18	6.6	5.6	10.6
1937	42	24	18	4.9	3.5	10.8	11	9	2	1.3	1.3	1.2	112	78	34	13.1	11.3	20.4
1936	39	15	24	4.6	2.2	14.7	10	5	5	1.2	0.7	3.1	83	64	19	9.8	9.3	11.6
1935	9	4	5	1.1	0.6	3.1	6	6	..	0.7	0.9	..	103	66	37	12.2	9.7	23.1
1934	57	33	24	6.8	4.9	15.3	7	6	1	0.8	0.9	0.6	63	42	21	7.6	6.2	13.4
1933	41	16	25	5.0	2.4	16.3	6	4	2	0.7	0.6	1.3	118	95	23	14.3	14.1	15.0
1932	45	30	15	5.5	4.5	10.0	15	8	7	1.8	1.2	4.7	136	100	36	16.6	14.9	24.0
1931	70	34	36	8.6	5.1	24.5	23	13	10	2.8	2.0	6.8	143	104	39	17.6	15.6	26.5
1930	16	11	5	2.0	1.7	3.5	20	17	3	2.5	2.6	2.1	73	54	19	9.1	8.1	13.2

NOTE.—Recorded deaths and death rates from these causes for years prior to 1930 will be found in the ANNUAL REPORT for 1930.

	Pulmonary Tuberculosis						Other Forms of Tuberculosis						Cancer					
Resident																		
1939	631	316	315	72.6	45.4	181.6	42	20	22	4.8	2.9	12.7	1,237	1,060	177	142.3	152.4	102.0
1938	668	359	309	77.5	51.9	181.6	43	20	23	5.0	2.9	13.5	1,217	1,054	163	141.2	152.3	95.8
1937	810	427	383	94.7	62.0	229.6	51	25	26	6.0	3.6	15.6	1,205	1,034	171	140.9	150.2	102.5
1936	790	417	373	93.1	60.9	228.1	46	16	30	5.4	2.3	18.3	1,114	948	166	131.3	138.5	101.5
1935	757	400	357	90.0	58.7	222.9	51	16	35	6.1	2.3	21.8	1,146	984	162	136.2	144.5	101.1
1934	751	393	358	90.0	58.0	228.2	62	18	44	7.4	2.7	28.0	1,125	973	152	134.8	143.6	96.9
1933	755	431	324	91.2	64.0	211.0	61	22	39	7.4	3.3	25.4	1,084	940	144	131.0	139.5	93.8
1932	803	412	391	97.9	61.5	260.3	67	35	32	8.2	5.2	21.3	1,006	863	143	122.6	128.8	95.2
Recorded																		
1939	512	244	268	58.9	35.1	154.5	49	23	26	5.6	3.3	15.0	1,400	1,207	193	161.1	173.5	111.2
1938	505	256	249	58.6	37.0	146.3	48	22	26	5.6	3.2	15.3	1,352	1,184	168	156.8	171.1	98.7
1937	620	304	316	72.5	44.2	189.4	58	31	27	6.8	4.5	16.2	1,376	1,182	194	160.9	171.7	116.3
1936	627	316	311	73.9	46.2	190.2	53	22	31	6.2	3.2	19.0	1,269	1,095	174	149.6	159.9	106.4
1935	617	305	312	73.3	44.8	194.8	59	21	38	7.0	3.1	23.7	1,284	1,114	170	152.6	163.6	106.1
1934	579	276	303	69.4	40.7	193.2	71	24	47	8.5	3.5	30.0	1,277	1,115	162	153.1	164.6	103.3
1933	581	315	266	70.2	46.8	173.2	66	27	39	8.0	4.0	25.4	1,185	1,035	150	143.2	153.6	97.7
1932	628	299	329	76.5	44.6	219.0	79	43	36	9.6	6.4	24.0	1,140	983	157	138.9	146.7	104.5
1931	686	344	342	84.3	51.6	232.8	103	49	54	12.7	7.4	36.8	1,088	953	135	133.7	143.0	91.9
1930	697	386	311	86.4	58.2	216.6	115	47	68	14.3	7.1	47.4	1,072	932	140	132.9	140.6	97.5

	Heart Disease						Bronchopneumonia						Lobar Pneumonia					
Resident																		
1939	2,970	2,536	434	341.8	364.6	250.2	363	249	114	41.8	35.8	65.7	305	182	123	35.1	26.2	70.9
1938	2,916	2,461	455	338.2	355.7	267.4	405	278	127	47.0	40.2	74.6	359	217	142	41.6	31.4	83.4
1937	2,758	2,369	389	322.5	344.2	233.2	481	350	131	56.2	50.8	78.5	557	333	224	65.1	48.4	134.3
1936	2,602	2,145	457	306.8	313.3	279.5	474	316	158	55.9	46.2	96.6	549	289	260	64.7	42.2	159.0
1935	2,344	1,956	378	277.4	287.2	236.0	485	345	140	57.7	50.7	87.4	499	280	219	59.3	41.1	136.7
1934	2,297	1,933	364	275.3	285.3	232.0	456	306	150	54.7	45.2	95.6	524	325	199	62.6	48.0	126.9
1933	2,256	1,887	369	272.7	280.0	240.3	477	346	131	57.7	51.3	85.3	483	277	206	58.4	41.1	134.2
1932	2,139	1,765	374	260.7	263.3	249.0	482	344	138	58.7	51.3	91.9	503	284	219	61.3	42.4	145.8
Recorded																		
1939	2,978	2,550	428	342.7	366.6	246.7	376	259	117	43.3	37.2	67.4	333	202	131	38.3	29.0	75.5
1938	2,910	2,463	447	337.6	356.0	262.7	424	297	127	49.2	42.9	74.6	391	246	145	45.4	35.6	85.2
1937	2,757	2,376	381	322.4	345.2	228.4	504	365	139	58.9	53.0	83.3	609	375	234	71.2	54.5	140.2
1936	2,608	2,154	454	307.5	314.6	277.7	498	340	158	58.7	49.7	96.6	592	324	268	69.8	47.3	163.9
1935	2,314	1,937	377	275.1	284.4	235.3	499	357	142	59.3	52.4	88.6	548	319	229	65.1	46.8	143.0
1934	2,297	1,925	372	275.3	284.1	237.1	485	328	157	58.1	48.4	100.1	544	340	204	65.2	50.2	130.0
1933	2,255	1,887	368	272.5	280.0	239.7	503	372	131	60.8	55.2	85.3	508	298	210	61.4	44.2	136.8
1932	2,170	1,789	381	264.5	266.9	253.6	508	362	146	61.9	54.0	97.2	540	312	228	65.8	46.6	151.8
1931	2,221	1,779	442	273.0	266.9	300.9	628	453	175	77.2	68.0	119.1	726	412	314	89.2	61.8	213.7
1930	2,112	1,625	487	261.8	245.1	339.2	592	432	160	73.4	65.2	111.5	645	359	286	80.0	54.1	199.2

TABLE NO. 11—Continued

RESIDENT AND RECORDED DEATHS AND DEATH RATES PER 100,000 POPULATION FROM CERTAIN IMPORTANT CAUSES FOR TOTAL, WHITE AND COLORED POPULATIONS—1930-1939

Year	Diarrhea and Enteritis Under Two Years						Chronic Nephritis						Premature Birth					
	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	Tota	White	Col'd	Total	White	Col'd	Total	White	Col'd	Tota	White	Co'd
Resident																		
1939	45	24	21	5.2	3.4	12.1	1,017	790	227	117.0	113.6	130.8	163	105	58	18.8	15.1	33.4
1938	80	51	29	9.3	7.4	17.0	1,033	770	263	119.8	111.3	154.6	183	118	65	21.2	17.0	38.2
1937	69	51	18	8.1	7.4	10.8	1,087	828	259	127.1	120.3	155.2	198	128	70	23.2	18.6	42.0
1936	90	60	30	10.6	8.8	18.3	1,046	800	246	123.3	116.8	150.4	196	131	65	23.1	19.1	39.8
1935	65	41	24	7.7	6.0	15.0	1,042	793	249	123.9	116.4	155.4	223	150	73	26.5	22.0	45.6
1934	108	67	41	12.9	9.9	26.1	1,090	819	271	130.6	120.9	172.8	251	179	72	30.1	26.4	45.9
1933	60	38	22	7.3	5.6	14.3	1,187	911	276	143.5	135.2	179.7	252	157	95	30.5	23.3	61.9
1932	84	54	30	10.2	8.1	20.0	1,083	827	256	132.0	123.4	170.4	262	168	94	31.9	25.1	62.6
Recorded																		
1939	56	32	24	6.4	4.6	13.8	1,052	805	247	121.1	115.7	142.4	196	131	65	22.6	18.8	37.5
1938	94	60	34	10.9	8.7	20.0	1,090	820	270	126.4	118.5	158.7	221	151	70	25.6	21.8	41.1
1937	91	67	24	10.6	9.7	14.4	1,121	853	268	131.1	123.9	160.6	238	163	75	27.8	23.7	45.0
1936	103	67	36	12.1	9.8	22.0	1,066	813	253	125.7	118.7	154.7	222	155	67	26.2	22.6	41.0
1935	70	45	25	8.3	6.6	15.6	1,042	791	251	123.9	116.1	156.7	242	167	75	28.8	24.5	46.8
1934	129	84	45	15.5	12.4	28.7	1,098	820	278	131.6	121.0	177.2	254	181	73	30.4	26.7	46.5
1933	75	50	25	9.1	7.4	16.3	1,210	920	290	146.2	136.5	188.9	254	158	96	30.7	23.5	62.5
1932	99	64	35	12.1	9.6	23.3	1,092	836	256	133.1	124.7	170.4	265	170	95	32.3	25.4	63.2
1931	141	95	46	17.3	14.3	31.3	1,113	836	277	136.8	125.4	188.6	254	182	72	31.2	27.3	49.0
1930	142	107	35	17.6	16.1	24.4	1,184	933	251	146.8	140.7	174.8	274	194	80	34.0	29.3	55.7

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—1932-1939

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																		
1939	300	194	106	24.0	21.1	32.0	511	302	209	40.8	32.8	63.1	45	28	17	3.6	3.0	5.1
1938	364	239	125	27.6	24.2	37.7	683	429	254	51.7	43.4	76.6	44	29	15	3.3	2.9	4.5
1937	348	223	125	27.8	23.8	39.7	664	393	271	53.1	41.9	86.1	42	28	14	3.4	3.0	4.4
1936	381	250	131	32.3	27.9	46.0	763	461	302	64.7	51.5	106.2	49	35	14	4.2	3.9	4.9
1935	392	273	119	31.8	29.2	40.1	673	432	241	54.6	46.1	81.2	67	40	27	5.4	4.3	9.1
1934	419	307	112	34.3	33.4	37.3	803	536	267	65.8	58.3	88.9	71	52	19	5.8	5.7	6.3
1933	429	286	143	35.2	31.3	46.7	749	484	265	61.4	53.0	86.6	59	39	20	4.8	4.3	6.5
1932	464	320	144	36.3	32.9	47.2	805	528	277	63.0	54.2	90.9	62	46	16	4.8	4.7	5.2
Recorded																		
1939	367	251	116	24.7	22.1	32.8	640	401	239	43.0	35.3	67.6	59	38	21	4.0	3.3	5.9
1938	431	296	135	28.2	25.2	38.4	815	535	280	53.4	45.5	79.7	56	36	20	3.6	3.1	5.7
1937	427	289	138	29.9	26.5	41.2	817	512	305	57.2	46.9	91.0	64	43	21	4.5	3.9	6.3
1936	437	299	138	32.9	29.1	45.9	894	568	326	67.3	55.3	108.5	62	44	18	4.7	4.3	6.0
1935	440	315	125	32.3	29.9	40.1	775	519	256	56.8	49.3	82.1	82	47	35	6.0	4.5	11.2
1934	434	320	114	32.3	31.0	36.2	877	601	276	65.2	58.3	87.8	83	60	23	6.2	5.8	7.3
1933	441	295	146	32.9	28.9	45.7	824	544	280	61.5	53.3	87.6	75	54	21	5.6	5.3	6.6
1932	477	329	148	34.1	30.4	46.6	869	571	298	62.0	52.7	93.9	79	59	20	5.6	5.4	6.3

TABLE NO. 13

CASES OF REPORTABLE DISEASES CLASSIFIED ACCORDING TO SEX, COLOR AND AGE PERIODS—1939

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 Years and Over	Age Not Specified
1	Typhoid fever	24	W	14	M	7	....	....	1	....	....	1	2	1	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....
					F	7	....	....	....	....	....	1	....	....	....	2	....	1	2	1	....	....	....	....	....	....	....	....	....
			C	10	M	6	....	....	....	....	....	2	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	4	....	....	....	1	....	1	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
2	Paratyphoid fever	2	W	1	F	2	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
			C	1	M	2	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
3	Typhus fever	6	W	4	M	3	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....
					F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....
			C	2	M	2	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....
5	Undulant fever	9	W	9	M	6	....	....	....	....	....	....	....	....	1	1	1	....	1	....	1	1	....	....	....	....	....	....	....
					F	3	....	....	....	....	....	....	....	....	1	1	....	....	....	1	....	....	....	....	....	....	....	....	....
7	Measles	11,833	W	10,663	M	5,359	228	454	486	518	596	2,843	186	13	10	7	4	4	1	....	1	....	....	1	....	....	....	....	7
					F	5,304	188	427	470	516	557	2,839	244	25	14	9	5	3	3	....	....	....	1	....	....	....	....	....	3
			C	1,170	M	572	35	80	74	55	68	230	17	4	6	1	2	....	....	....	....	....	....	....	....	....	....	....	....
					F	598	43	94	72	63	71	210	16	6	9	4	7	1	....	1	....	....	....	....	....	....	....	....	1
8	Scarlet fever	598	W	477	M	221	2	9	13	14	18	120	25	13	2	1	1	2	1	....	....	....	....	....	....	....	....	....	....
					F	256	1	2	6	21	30	130	35	8	4	6	6	3	2	1	1	....	....	....	....	....	....	....	....
			C	121	M	48	1	1	5	7	1	26	4	2	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....
					F	73	1	....	5	7	5	34	11	4	1	4	....	1	....	....	....	....	....	....	....	....	....	....	....
9	Whooping cough	1,575	W	1,136	M	507	51	56	65	58	58	199	17	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1
					F	629	60	80	66	71	89	243	11	3	3	1	1	....	....	....	....	....	....	....	....	....	....	....	1
			C	439	M	207	44	35	29	29	22	46	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	232	45	39	37	21	32	55	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1

10	Diphtheria	67	W	61	M	32	1	3		3	4	7	9	2	1	1	1													
					F	29		1	1	3	4	6	7	2	1	1	2			1										
			C	6	M	4			1			2			1															
					F	2						1		1																
11	Influenza	562	W	500	M	252	7	4	2	4	5	20	16	16	30	34	14	19	21	20	14	11	4	4	1	2	1	2	1	
					F	248	5		3	3	2	14	13	13	20	19	21	17	9	23	20	12	15	9	11	5	5	2	7
			C	62	M	23	4	1	1				1	1	1	1	1	1	2	4			2		1	1	1			
					F	39	2	5	1	2				2	3	5	2	2	3	2	1	2	4	1		1	1			
13a	Dysentery, amebic	13	W	11	M	4									1				1				2							
					F	7										2	1	1		1	1		1							
			C	2	M	1													1											
					F	1										1														
13b	Dysentery, bacillary	134	W	78	M	44	9	8	4		2	8	2		2				1	3				3						2
					F	34	6	4	3	5	1	2	1		2	1		1	1			1	1			3				2
			C	56	M	32	8	6	8	2	1	3			1		2													1
					F	24	10	5	2	3		1						2			1									
13c	Dysentery, unspecified	43	W	24	M	16	3	1	3	2		4		1					2											
					F	8	4	3		1																				
			C	19	M	12	6	3	2	1																				
					F	7	5		1		1																			
15	Erysipelas	89	W	83	M	38	3	3	1		1	2	2		1	2	1	1	5	2	5	3	1	1	3			1		
					F	45	1	1				3				5	1	6	5	6	5	2	3	2	1	4				
			C	6	M	3	1												1					1						
					F	3	1				1					1														
16	Poliomyelitis (paralytic cases)	20	W	10	M	6		2		2	1	1																		
					F	4	1	1	1			1																		
			C	10	M	4		2				2																		
					F	6	1	1	1			2		1																
17	Lethargic encephalitis	1	W	1	M	1															1									
18	Epidemic cerebrospinal meningitis	18	W	10	M	9	1	1	1		1	1	1		1		1						1							
					F	1	1																							
			C	8	M	6	1			1	1		2					1												
					F	2			2																					
22	Tetanus	8	W	5	M	5				1		1	1	1	1															
			C	3	M	1						1																		
					F	2												2												

TABLE NO. 13—Continued

CASES OF REPORTABLE DISEASES CLASSIFIED ACCORDING TO SEX, COLOR AND AGE PERIODS—1939

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 Years and Over	Age Not Specified
23	Tuberculosis, pulmonary	1,430	W	678	M	421	3	....	2	1	2	16	10	13	33	29	34	46	48	37	49	30	32	14	13	7	1	....	1
					F	257	2	2	3	4	5	13	17	23	47	42	27	14	20	7	7	3	6	8	2	2	2	....	1
			C	752	M	390	11	9	4	8	5	26	21	39	37	35	41	27	39	35	26	13	5	6	1	1	....	....	1
					F	362	4	12	8	12	8	33	34	59	56	42	29	26	12	4	7	9	2	4	....	....	....	....	1
24-32	Tuberculosis, other forms	85	W	25	M	16	....	1	....	....	....	1	1	1	3	5	....	....	....	1	1	....	....	....	....	2	....	....	....
					F	9	....	....	1	....	1	1	....	....	....	....	1	....	....	1	1	2	....	....	....	....	1	....	....
			C	60	M	26	....	4	....	....	1	2	2	2	1	1	4	5	1	....	1	1	....	....	....	....	1	....	....
					F	34	2	4	....	1	....	3	5	5	3	6	3	1	1	....	....	....	....	....	....	....	....	....	....
34	Syphilis	7,507	W	1,413	M	900	2	1	1	1	....	2	8	20	76	102	126	136	98	79	93	65	43	22	13	5	2	....	5
					F	513	....	....	....	....	2	....	6	27	80	92	72	66	53	32	22	20	15	16	5	2	....	....	3
			C	6,094	M	3,069	11	4	4	3	7	13	34	179	476	550	464	427	310	218	152	81	59	34	15	6	2	3	17
					F	3,025	19	3	2	4	7	28	69	378	608	591	438	369	211	109	72	46	24	14	6	2	....	....	25
35	Gonococcus infection	2,252	W	667	M	526	....	1	....	....	....	....	....	33	175	134	74	43	31	16	5	4	6	....	....	1	....	....	3
					F	141	2	....	1	5	1	18	5	14	40	20	18	9	5	1	....	....	1	....	....	....	....	....	1
			C	1,585	M	1,232	1	....	....	....	1	3	13	312	388	224	119	77	48	19	11	3	4	....	....	....	....	....	9
					F	353	4	6	13	12	15	40	20	48	58	51	42	32	4	4	1	....	1	....	....	1	....	....	1
35c	Gonorrheal ophthalmia	27	W	4	M	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	2	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
			C	23	M	11	8	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
					F	12	10	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
35e	Chancroid	167	W	4	M	4	....	....	....	....	....	....	....	1	....	1	....	1	1	....	....	....	....	....	....	....	....	....	....
			C	163	M	158	....	....	....	....	....	....	....	19	56	36	17	17	6	4	1	1	....	....	....	....	....	....	1
					F	5	....	....	....	....	....	....	1	3	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....

35f	Other venereal diseases	30	W	1	M	1															1									
			C	29	M	21								2	4	6	2	4	2		1									
					F	8								1	4	3														
38	Malaria	3	W	2	M	2							1	1																
			C	1	M	1										1														
39	Weil's disease	1	W	1	M	1							1																	
42	Trichinosis	1	C	1	M	1									1															
44a	Chickenpox	2,231	W	1,952	M	987	29	38	45	55	74	659	62	8	1	3	5	1	1		2									4
					F	965	36	40	51	59	55	664	41	10		2	2		2											3
			C	279	M	139	10	13	7	12	10	73	7	1		2					1									3
					F	140	5	12	15	7	18	73	5	2	1				1											1
44b	German measles	48	W	47	M	31	3	2	4	3	5	12	1	1																
					F	16	2	2			1	10		1															
			C	1	M	1	1																							
44c	Rocky Mountain spotted fever	1	C	1	F	1															1									
44d	Tularemia	31	W	26	M	14								2	1	2	1		3	2	2				1					
					F	12			1								1	5		1	1		3							
			C	5	F	5													2	1		2								
44f	Mumps	1,054	W	1,022	M	556	4	7	13	16	29	340	91	27	5	5	8	2	1	2		1								5
					F	466		11	8	11	22	280	72	28	5	7	6	1	2	1		2		1			1			8
			C	32	M	19		1	2		1	1	3	2		1	3	1	2	1										1
					F	13		1	1	2		4	1	2		1				1										
44g	Salmonella infection	8	W	5	M	3		1	1												1									
					F	2							1						1											
			C	3	M	1									1															
					F	2	2																							
62	Pellagra	19	W	10	M	7										1			1	2	2				1					
					F	3									1				2											
			C	9	M	6							1			1			1	1	2									
					F	3										1	2													
88	Trachoma	3	W	3	M	1						1																		
					F	2									1								1							

TABLE NO. 13—Continued

CASES OF REPORTABLE DISEASES CLASSIFIED ACCORDING TO SEX, COLOR AND AGE PERIODS—1939

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 Years and Over	Age Not Specified
107a	Bronchopneumonia	740	W	506	M	279	45	12	8	4	5	11	....	9	11	6	5	8	8	12	16	12	15	22	29	16	16	9	....
					F	227	27	14	9	7	2	7	2	6	2	2	4	3	3	6	8	8	16	18	17	23	19	24	....
			C	234	M	118	22	12	5	3	....	4	....	3	2	5	2	6	5	3	11	5	4	11	6	3	4	1	1
					F	116	26	11	5	3	4	2	3	3	1	6	6	4	3	6	8	6	4	3	7	4	1	....	....
108	Lobar pneumonia	1,141	W	580	M	340	19	21	11	4	7	21	16	15	15	24	10	16	14	18	20	22	21	23	16	15	3	5	4
					F	240	13	14	13	4	5	24	10	3	13	13	16	7	11	12	14	10	12	10	18	8	3	2	5
			C	561	M	325	49	35	21	14	11	23	5	8	9	23	23	25	18	22	13	6	6	4	7	2	....	....	1
					F	236	34	23	20	4	7	23	8	8	6	10	13	12	19	14	8	5	8	5	4	3	....	1	1
115a	Septic sore throat	97	W	69	M	27	....	1	7	2	2	4	....	2	5	2	....	1	....	....	....	1	....	....	....	....	....	....	....	....
					F	42	1	2	1	1	1	6	4	4	11	2	1	2	2	1	2	1	....	....	....	....	....	....	....
			C	28	M	18	....	2	2	3	2	3	2	....	3	1	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	10	....	2	....	1	....	2	2	1	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....
115d	Vincent's angina	24	W	14	M	5	....	....	....	1	....	....	1	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	1
					F	9	....	1	1	....	1	1	....	2	....	....	....	1	....	....	....	....	....	....	....	....	....	....	2
			C	10	M	5	....	3	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	5	....	....	1	1	....	2	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
119–120	Diarrhea and enteritis	186	W	94	M	59	38	7	1	1	....	4	....	1	1	....	....	1	....	....	1	....	....	3	1	....	....	....	....
					F	35	27	....	1	....	....	1	....	1	1	....	....	....	....	....	....	1	....	1	....	1	1	....	....
			C	92	M	43	34	5	2	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	49	38	7	1	1	....	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....
153a	Impetigo contagiosa	59	W	55	M	25	3	3	1	1	3	4	7	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	30	2	3	6	2	3	8	3	....	1	1	....	....	....	....	1	....	....	....	....	....	....	....	....
			C	4	M	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
					F	3	....	....	....	....	....	2	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

TABLE NO. 14

REPORTED CASES AND CASE RATES PER 100,000 POPULATION FROM CERTAIN COMMUNICABLE DISEASES FOR TOTAL, WHITE AND COLORED POPULATION—1920-1939

Disease	Year	Total Reported Cases	Rate Per 100,000 Population	White		Colored	
				Reported Cases	Rate Per 100,000 Population	Reported Cases	Rate Per 100,000 Population
Typhoid Fever (not including paratyphoid fever)	1939	24	2.8	14	2.0	10	5.8
	1938	51	5.9	35	5.1	16	9.4
	1937	68	8.0	40	5.8	28	16.8
	1936	49	5.8	32	4.7	17	10.4
	1935	69	8.2	58	8.5	11	6.9
	1934	81	9.7	58	8.6	23	14.7
	1933	53	6.4	46	6.8	7	4.6
	1932	85	10.4	64	9.5	21	14.0
	1931	107	13.2	75	11.3	32	21.8
	1930	132	16.4	96	14.5	36	25.1
	1929	77	9.6	57	8.6	20	14.3
	1928	114	14.4	85	13.0	29	21.2
	1927	123	15.7	99	15.2	24	18.0
	1926	156	20.0	124	19.1	32	24.6
	1925	169	21.9	145	22.5	24	18.9
	1924	122	15.9	108	16.8	14	11.3
	1923	208	27.4	168	26.3	40	33.2
	1922	198	26.4	171	27.0	27	23.1
	1921	265	35.6	222	35.2	43	37.8
	1920	267	36.2	233	37.2	34	30.8
Measles	1939	11,833	1,361.7	10,663	1,533.1	1,170	674.4
	1938	1,119	129.8	861	124.4	258	151.6
	1937	9,227	1,079.0	8,140	1,182.6	1,087	651.5
	1936	4,361	514.1	4,050	591.5	311	190.2
	1935	533	63.4	453	66.5	80	49.9
	1934	18,612	2,230.8	16,307	2,407.1	2,305	1,469.4
	1933	128	15.5	100	14.8	28	18.2
	1932	165	20.1	150	22.4	15	10.0
	1931	15,019	1,846.1	13,654	2,048.2	1,365	929.2
	1930	451	55.9	400	60.3	51	35.5
	1929	145	18.1	133	20.2	12	8.6
	1928	12,229	1,542.6	10,986	1,675.1	1,243	907.8
	1927	661	84.1	610	93.5	51	38.2
	1926	12,628	1,621.3	11,614	1,790.6	1,014	778.3
	1925	2,135	276.6	2,033	315.2	102	80.3
	1924	4,223	552.0	3,732	581.9	491	397.1
	1923	8,289	1,093.4	7,739	1,213.4	550	457.1
	1922	5,042	671.2	4,658	734.5	384	328.2
	1921	2,236	300.4	2,181	345.9	55	48.4
	1920	5,039	683.4	4,530	722.6	509	461.2
Scarlet Fever	1939	598	68.8	477	68.6	121	69.7
	1938	1,092	126.7	954	137.9	138	81.1
	1937	810	94.7	737	107.1	73	43.8
	1936	1,046	123.3	979	143.0	67	41.0
	1935	1,699	202.0	1,595	234.2	104	64.9
	1934	1,358	162.8	1,258	185.7	100	63.7
	1933	2,075	250.8	1,948	289.1	127	82.7
	1932	2,094	255.2	2,011	300.0	83	55.3
	1931	1,245	153.0	1,171	175.7	74	50.4
	1930	1,777	220.3	1,700	256.4	77	53.6
	1929	1,532	191.6	1,475	223.7	57	40.6
	1928	1,037	130.8	993	151.4	44	32.1
	1927	1,014	129.0	983	150.7	31	23.2
	1926	1,087	139.6	1,043	160.8	44	33.8
	1925	1,122	145.3	1,093	169.5	29	22.8
	1924	1,989	260.0	1,890	294.7	99	80.1
	1923	2,238	295.2	2,182	342.1	56	46.5
	1922	1,194	159.0	1,155	182.1	39	33.3
	1921	1,065	143.1	1,023	162.2	42	36.9
	1920	1,248	169.3	1,207	192.5	41	37.2

TABLE NO. 14—Continued

REPORTED CASES AND CASE RATES PER 100,000 POPULATION FROM CERTAIN COMMUNICABLE DISEASES FOR TOTAL, WHITE AND COLORED POPULATION—1920-1939

Disease	Year	Total Reported Cases	Rate Per 100,000 Population	White		Colored	
				Reported Cases	Rate Per 100,000 Population	Reported Cases	Rate Per 100,000 Population
Whooping Cough	1939	1,575	181.2	1,136	163.3	439	253.1
	1938	1,548	179.6	897	129.6	651	382.6
	1937	3,661	428.1	3,184	462.6	477	285.9
	1936	3,570	420.9	2,443	356.8	1,127	689.2
	1935	1,100	130.8	998	146.5	102	63.7
	1934	4,566	547.3	4,035	595.6	531	338.5
	1933	2,059	248.9	1,398	207.5	661	430.5
	1932	3,759	458.2	3,384	504.9	375	249.6
	1931	3,294	404.9	2,661	399.2	633	430.9
	1930	1,028	127.4	961	144.9	67	46.7
	1929	3,558	444.9	3,228	489.5	330	235.3
	1928	3,238	408.5	2,656	405.0	582	425.1
	1927	2,394	304.7	2,195	336.5	199	149.0
	1926	2,636	338.4	2,360	363.9	276	211.9
	1925	3,541	458.7	3,043	471.8	498	392.3
	1924	1,881	245.9	1,702	265.4	179	144.8
	1923	3,090	407.6	2,798	438.7	292	242.7
	1922	1,453	193.4	1,181	186.2	272	232.5
	1921	3,271	439.5	3,085	489.3	186	163.6
	1920	1,085	147.2	960	153.1	125	113.3
Diphtheria	1939	67	7.7	61	8.8	6	3.5
	1938	125	14.5	103	14.9	22	12.9
	1937	257	30.1	198	28.8	59	35.4
	1936	146	17.2	118	17.2	28	17.1
	1935	119	14.1	100	14.7	19	11.9
	1934	108	12.9	91	13.4	17	10.8
	1933	137	16.6	122	18.1	15	9.8
	1932	254	31.0	196	29.2	58	38.6
	1931	416	51.1	318	47.7	98	66.7
	1930	522	64.7	437	65.9	85	59.2
	1929	547	68.4	476	72.2	71	50.6
	1928	829	104.6	730	111.3	99	72.3
	1927	1,619	206.0	1,413	216.6	206	154.2
	1926	837	107.5	764	117.8	73	56.0
	1925	897	116.2	823	127.6	74	58.3
	1924	1,110	145.1	1,047	163.2	63	51.0
	1923	1,318	173.9	1,224	191.9	94	78.1
	1922	1,533	204.1	1,448	228.3	85	72.7
	1921	1,423	191.2	1,365	216.5	58	51.0
	1920	1,549	210.1	1,514	241.5	35	31.7
Pulmonary Tuberculosis	1939	1,430	164.6	678	97.5	752	433.5
	1938	1,613	187.1	875	126.5	738	433.7
	1937	1,755	205.2	1,012	147.0	743	445.3
	1936	1,497	176.5	862	125.9	635	388.3
	1935	1,708	203.0	982	144.2	726	453.2
	1934	1,372	164.4	811	119.7	561	357.6
	1933	1,375	166.2	880	130.6	495	322.4
	1932	1,187	144.7	720	107.4	467	310.9
	1931	1,391	171.0	903	135.5	488	332.2
	1930	1,254	155.5	803	121.1	451	314.2
	1929	1,275	159.4	861	130.6	414	295.2
	1928	1,235	155.8	837	127.6	398	290.7
	1927	1,369	174.2	902	138.3	467	349.6
	1926	1,389	178.3	954	147.1	435	333.9
	1925	1,470	190.4	994	154.1	476	374.9
	1924	1,445	188.9	994	155.0	451	364.8
	1923	1,482	195.5	1,050	164.6	432	359.1
	1922	1,433	190.8	1,047	165.1	386	329.9
	1921	1,390	186.8	1,005	159.4	385	338.7
	1920	1,407	190.8	1,055	168.3	352	319.0

Cases prior to 1920, see page 198 of 1923 annual report (not classified by color).

APPENDIX

STATE POST MORTEM EXAMINERS LAW OF 1939

CHAPTER 369

A BILL ENTITLED

AN ACT to repeal Article 22 of the Annotated Code of Maryland (1924 Edition), title "Coroners"; to repeal Sections 385, 386, 387, 388 and 389, inclusive, of the Charter and Public Local Laws of Baltimore City (1938 Edition), sub-title "Coroners, Inquests and Dead Bodies"; to repeal Sections 81, 82, 83, 84, 85, 86, 87, 88, 89, 90 and 91 of Article 1, title "Allegany County," sub-title "Coroners," Section 206 of Article 2, title "Anne Arundel County," sub-title "Coroners," Sections 171, 172, 173 and 174 of Article 3, title "Baltimore County," sub-title "Coroners," Sections 93 and 94 of Article 11, title "Frederick County," sub-title "Coroners," and Sections 188, 189, 190, 191 and 192 of Article 16, title "Montgomery County," sub-title "Coroners," of the Code of Public Local Laws (1930 Edition), and all other Public Local Laws relating to Coroners; to add a new sub-title and a new section to Article 41 of the Annotated Code of Maryland (1924 Edition), title "Governor—Executive and Administrative Departments," said new sub-title to be "Department of Post Mortem Examiners" and to follow immediately after Section 127 of said Article 41, and the new section to be known as Section 127A and to follow immediately after said new sub-title, said section creating the Department of Post Mortem Examiners; and to enact a new Article of the Annotated Code of Maryland (1924 Edition) to be known as Article 22, title "Post Mortem Examiners," said new Article to consist of eight sections to be known as Sections 1, 2, 3, 4, 5, 6, 7 and 8, creating the Department of Post Mortem Examiners, prescribing the powers and duties thereof, and providing for the appointment of a Chief Medical Examiner and two Assistant Medical Examiners and for the appointment of a Deputy Medical Examiner for each of the counties of the State.

SECTION 1. *Be it enacted by the General Assembly of Maryland,* that Article 22 of the Annotated Code of Maryland (1924 Edition), title "Coroners," be and the same is hereby repealed.

SEC. 2. *And be it further enacted,* That Sections 385, 386, 387, 388 and 389 of the Charter and Public Local Laws of Baltimore City (1938 Edition), title "Coroners, Inquests and Dead Bodies," be and the same are hereby repealed.

SEC. 3. *And be it further enacted,* That a new sub-title and a new section be and they are hereby added to Article 41 of the Annotated Code of Maryland (1924 Edition), title "Governor—Executive and Administrative Departments," said new sub-title and new section to follow immediately after Section 127 of said Article 41 and to read as follows:

DEPARTMENT OF POST MORTEM EXAMINERS

127A. The head of the Department of Post Mortem Examiners shall be a Commission constituted and organized as provided by law and having and exercising all the rights, powers, duties, obligations and functions now or hereafter conferred by law.

SEC. 4. *And be it further enacted,* That Sections 81, 82, 83, 84, 85, 86, 87, 88, 89, 90 and 91 of Article 1, title "Allegany County," sub-title "Coroners," Section 206 of Article 2, title "Anne Arundel County," sub-title "Coroners," Sections 171, 172, 173 and 174 of Article 3, title "Baltimore County," sub-title "Coroners,"

Sections 93 and 94 of Article 11, title "Frederick County," sub-title "Coroners," and Sections 188, 189, 190, 191 and 192 of Article 16, title "Montgomery County," sub-title "Coroners," of the Code of Public Local Laws, be and the same are hereby repealed.

SEC. 5. *And be it further enacted,* That a new Article be and the same is hereby added to the Annotated Code of Maryland (1924 Edition), said new Article to be known as Article 22, title "Post Mortem Examiners," and to follow immediately after Article 21 of said Code, and to consist of eight sections to read as follows:

1. The Department of Post Mortem Examiners is hereby created and established. The head of said Department shall be a Commission, consisting of the Professor of Pathology of the University of Maryland, the Professor of Pathology of the Johns Hopkins University, the Director of Health of the State of Maryland, the Commissioner of Health of Baltimore City and the Attorney General of Maryland. The members of said Commission shall serve without compensation and shall select one of its members as Chairman, and one as Vice-Chairman, who shall act as Chairman in the absence or inability of the Chairman.

2. The said Commission is hereby authorized and directed to appoint three medical examiners, one to be known as Chief Medical Examiner, at an annual salary of $6,500, and the other two as Assistant Medical Examiners, at an annual salary of $5,000 each. The Chief Medical Examiner and the Assistant Medical Examiners shall be licensed Doctors of Medicine, and shall have had at least two years postgraduate training in pathology. The said Commission shall also appoint such clerks and other employees as may be necessary for the proper administration of the Department and at such compensation as may be provided in the Ordinance of Estimates of Baltimore City and the salaries of said Examiners shall be included in the Ordinance of Estimates each year. The Clerks and employees shall be appointed in accordance with the provisions of Sections 268 to 284, inclusive, of the Baltimore City Charter (1938 Edition), known as the Merit System.

3. The said Commission is hereby authorized to appoint a Deputy Medical Examiner, who shall be a licensed Doctor of Medicine, for each county in the State; provided, however, that an additional Deputy Medical Examiner or Examiners may be appointed for any county whenever, in its discretion, the said Commission shall deem it necessary or desirable to do so. The Deputy Medical Examiners shall be appointed from a list containing the names of not less than two qualified persons submitted by the Medical Societies of the respective counties; provided, however, that if there be no Medical Society in any county, or if the Medical Society of any county fails or refuses to submit such list of names, the said Commission shall proceed to appoint a Deputy Medical Examiner, or Examiners, for said county. Each Deputy Medical Examiner shall receive as compensation $15.00 for each death he investigates, in accordance with the provisions of this Article; such Deputy Medical Examiner when it becomes necessary, shall have the power to deputize any other physician in the County to act as Deputy Medical Examiner in his place and stead.

4. It shall be the duty of the Chief Medical Examiner, the Assistant Medical Examiners and the Deputy Medical Examiners to attend to all the medical functions now devolving upon the coroners and post mortem physicians in Baltimore City, or upon coroners or justices of the Peace, acting as Coroners, in the several counties of the State, and to perform all the duties imposed upon them by the provisions of this Article.

The office of said Chief Medical Examiner, and the Assistant Medical Examiners, shall be maintained in such building in Baltimore City as may be provided by the City of Baltimore, and the said Commission shall see that proper equipment is provided for the use of said Chief Medical Examiner and Assistant Medical Examiners, or arrange for the use of the Laboratory and other equipment of the State Department of Health, the Health Department of Baltimore City, the State Police Department and the Police Department of Baltimore City. It shall be the duty of the Chief Medical Examiner, or an Assistant Medical Examiner, to be on call at all times for the performance of the duties set forth in this Article.

5. When any person shall die in Baltimore City, or in any County of the State, as a result of violence, or by suicide, or by casualty, or suddenly when in apparent health or when unattended by a physician, or in any suspicious or unusual manner, it shall be the duty of the police or sheriff immediately to notify the Chief Medical Examiner and Assistant Medical Examiner, or a Deputy Medical Examiner, as the case may be, and the State's Attorney of Baltimore City, or of the County, as the case may be, of the known facts concerning the time, place, manner and circumstances of such death. Immediately upon receipt of such notification, the said Medical Examiner shall go to the dead body and take charge of the same. Such Medical Examiner shall fully investigate the essential facts concerning the medical causes of death and may take the names and addresses of as many witnesses thereto as may be practicable to obtain, and, before leaving the premises shall reduce such facts, as he may deem necessary to writing and file the same in his office. The Police Officer or Sheriff present at such investigation, or if no officer be present, then the Medical Examiner shall, in the absence of the next kin of the deceased person, take possession of all property of value found on such person, make an exact inventory thereof on his report and deliver such property to the Police Department in Baltimore City or Sheriff of the County, as the case may be, which shall surrender the same to the person entitled to its custody or possession; such Medical Examiner shall take possession of any object or articles which, in his opinion, may be useful in establishing the cause of death, and deliver them to the State's Attorney.

6. If the cause of such death shall be established beyond a reasonable doubt, such Medical Examiner shall so report and file in his office within thirty days after his notification of such death. If, however, in the opinion of such Medical Examiner, an autopsy is necessary, the same shall be performed by the Chief Medical Examiner, an Assistant Medical Examiner, or by such competent pathologists as may be authorized by the Chief Medical Examiner. A detailed description of the findings written during the progress of such autopsy, and the conclusions drawn therefrom, shall thereupon be filed in the office of the Chief Medical Examiner, or in the office of the Deputy Medical Examiner in the county where the death occurred. A copy of the findings and conclusions as to the autopsies performed in the several counties shall also be filed in the office of the Chief Medical Examiner. Provided, however, it shall be the duty of any Deputy Medical Examiner to call upon the Chief Medical Examiner or an Assistant Medical Examiner, or other persons authorized and designated by the Chief Medical Examiner, to make an examination or perform an autopsy, whenever he deems it necessary or desirable, and it shall be the duty of said Chief Medical Examiner or Assistant Medical Examiner to go to the County for that purpose, except in such cases as a competent pathologist is so authorized by the Chief Medical Examiner to perform such autopsy. In every case where an autopsy is performed in any County by the Chief Medical Examiner or Assistant Medical Examiner, the County Commissioners of such County shall pay to the Mayor and

City Council of Baltimore City Twenty-five Dollars ($25.00), and shall pay to said Chief Medical Examiner or Assistant Medical Examiner, as the case may be, his necessary traveling expenses.

7. It shall be the duty of the Chief Medical Examiner, and the Deputy Medical Examiners, to keep full and complete records in their respective offices, properly indexed, giving the name, if known, of every such person, the place where the body was found, date and cause of death, and all other available information relating thereto. The original report of the Chief Medical Examiner, Assistant Medical Examiners, or Deputy Medical Examiners, and the detailed findings of the autopsy, if any, shall be attached to the record of each case. The Chief Medical Examiner, or in case of his absence or inability, an Assistant Medical Examiner, and the Deputy Medical Examiners, shall promptly deliver to the State's Attorney of Baltimore City, or the State's Attorney of the County, as the case may be, copies of all records relating to every death in which, in the judgment of such Medical Examiner, further investigation may be deemed advisable. The State's Attorney of Baltimore City, or the State's Attorney of any county, may obtain from the office of the Chief Medical Examiner, or of the Deputy Medical Examiners, as the case may be, copies of such records or other information which he may deem necessary. The records of the office of the Chief Medical Examiner, and of the several Deputy Medical Examiners, made by themselves or by one under their direction or supervision, or transcripts thereof certified by such Medical Examiner, shall be received as competent evidence in any Court in this State of the matters and facts therein contained. A reasonable fee shall be charged for filing insurance blanks, etc., and all such fees collected by the Chief Medical Examiner and Assistant Medical Examiners shall be paid into the City Treasury of Baltimore City on or before the tenth day of each month, but the Deputy Medical Examiners of the respective Counties shall be permitted to retain the fees collected by them. The records which shall be admissible as evidence under this section shall be records of the results of views and examinations of or autopsies upon the bodies of deceased persons by such Medical Examiner, or by any one under his direct supervision or control, and shall not include statements made by witnesses or other persons.

8. The Chief Medical Examiner, the Assistant Medical Examiners and the Deputy Medical Examiners, shall have the power to administer oaths and affirmations, and take affidavits and make examinations as to any matter within the jurisdiction of their respective offices, but said Chief Medical Examiner, Assistant Medical Examiners and Deputy Medical Examiners shall not have the power or be required to summon a Jury of Inquisition. Provided, however, that nothing in this Article shall apply to Cecil County nor shall any of its provisions be enforced in said County.

SEC. 6. *And be it further enacted,* That if any section or paragraph of this Act shall be declared invalid, such invalidity shall not affect the remaining sections or paragraphs of said Act.

SEC. 6A. *And be it further enacted,* That the Board of Estimates of Baltimore City may transfer the balance of any appropriations made to the Coroners in the Ordinance of Estimates for the year 1939 to the credit of the said Board of Medical Examiners on June 1, 1939.

SEC. 7. *And be it further enacted,* That all laws or parts of laws, whether Public General Laws or Public Local Laws, inconsistent herewith, be and they are hereby repealed to the extent of such inconsistency.

SEC. 8. *And be it further enacted,* That this Act shall take effect on June 1, 1939.

Approved May 3, 1939.

STATE OCCUPATIONAL DISEASE LAW OF 1939

SECTION 1. *Be it enacted by the General Assembly of Maryland,* That ten new sections be and they are hereby added to Article 101 of the Annotated Code of Maryland (1924 Edition and 1935 Supplement), title "Workmen's Compensation", to be under sub-title "Occupational Diseases", said new sections to be known as Sections 32A to 32J inclusive, to follow immediately after Section 32 of said Article, and that Section 54 of said Article, sub-title "Claims and Compensation; Benefits", Section 56 of said Article, sub-title "Appeals", and Section 65 of said Article "Miscellaneous", be and they are hereby repealed and reenacted with amendments, all to read as follows:

Occupational Diseases

32A. Every employee who, in the regular course of his employment, is injuriously subjected to an exposure to any of the occupational diseases hereinafter named, in an occupation or process hereinafter set down opposite the name of such disease, shall be deemed to be engaged in an extra-hazardous employment within the provisions of Section 32 of this Article. Compensation as provided in this Article shall be payable for disability or death of an employee resulting from the following occupational diseases:

Column One *Description of Diseases*	Column Two *Description of Process or Occupation*
1. Anthrax.	1. Handling of wool, hair, bristles, hides or skins.
2. Lead poisoning or its sequelae.	2. Any process or occupation involving the use of or direct contact with lead or its preparations or compounds.
3. Zinc poisoning or its sequelae.	3. Any process or occupation involving the use of or direct contact with zinc or its preparations or compounds or alloys.
4. Mercury poisoning or its sequelae.	4. Any process or occupation involving the use of or direct contact with mercury or its preparations or compounds.
5. Phosphorus poisoning or its sequelae.	5. Any process or occupation involving the use of or direct contact with phosphorus or its preparations or compounds.
6. Arsenic poisoning or its sequelae.	6. Any process or occupation involving the use of or direct contact with arsenic or its preparations or compounds.
7. Poisoning by wood alcohol.	7. Any process or occupation involving the use of or direct contact with wood alcohol or any preparation containing wood alcohol.

8. Poisoning by benzol or nitro-, hydro-, hydroxy- and amido-derivatives of benzene (denitro-benzol, anilin, and others) or its sequelae.	8. Any process or occupation involving the use of or direct contact with benzol or nitro-, hydro-, hydroxy-, or amido-derivatives of benzene or its preparations or compounds.
9. Poisoning by carbon bisulphide or its sequelae, or any sulphide.	9. Any process or occupation involving the use of or direct contact with carbon bisulphide or its preparation or compounds or any sulphide.
10. Poisoning by nitrous fumes or its sequelae.	10. Any process or occupation in which nitrous fumes are evolved.
11. Poisoning by nickel carbonyl or its sequelae.	11. Any process or occupation in which nickel carbonyl is evolved.
12. Dope poisoning (poisoning by tetrachlor-methane or any substances used as or in conjunction with a solvent for acetate of cellulose or nitro cellulose, or its sequelae.	12. Any process or occupation involving the use of or direct contact with any substances used as or in conjunction with a solvent for acetate of cellulose or nitro cellulose.
13. Poisoning by formaldehyde and its preparations.	13. Any process or occupation involving the use of or direct contact with formaldehyde and its preparations.
14. Hydrocyanic acid poisoning.	14. Any process or occupation involving the use of or direct contact with the cyanides.
15. Chlorine poisoning.	15. Any process or occupation involving the use of or direct contact with chlorine or its compounds.
16. Ammonia poisoning.	16. Any process or occupation involving the use of or direct contact with ammonia or its compounds.
17. Cadmium poisoning.	17. Any process or occupation involving the use of or direct contact with cadmium or its compounds.
18. Manganese poisoning.	18. Any process or occupation involving the use of or direct contact with manganese or its compounds.
19. Chrome ulceration or dermatitis or their sequelae.	19. Any process or occupation involving the use of or direct contact with chromic acid or bichromate of ammonium, potassium or sodium, or their preparations.
20. Epitheliomatous cancer or ulceration of the skin or the corneal surface of the eye, due to pitch, tar, bitumen, mineral oil, or paraffin, or any compound, product or residue of any of these substances.	20. Any process or occupation involving the use of or direct contact with tar, pitch, bitumen, mineral oil, or paraffin or any compound, product or residue of any of these substances.
21. Glanders.	21. Care or handling of any equine animal or the carcass of any such animal.

22. Compressed air illness or its sequelae.	22. Any process or occupation carried on in compressed air.
23. Miners' diseases, including only cellulitis, bursitis, ankylotomiasis, tenosynovitis and nystagmus.	23. Any process or occupation in connection with mining or underground work.
24. Cataract in glassworkers.	24. Process in the manufacture of glass involving exposure to the glare of molten glass.
25. Radium poisoning or disability due to radioactive properties of substances or to roentgen rays (X-rays).	25. Any process or occupation involving the use of or direct contact with radium or radioactive substances or the use of or direct exposure to roentgen rays (X-rays).
26. Poisoning from methyl chloride or other halogenated hydrocarbons.	26. Any process or occupation involving the use of or direct contact with methyl chloride or other halogenated hydrocarbons.
27. Carbon monoxide poisoning.	27. Any process or occupation involving direct exposure to carbon monoxide in buildings, sheds, or enclosed places.
28. Poisoning by sulphuric, hydrochloric or hydrofluoric acid.	28. Any process or occupation involving the use of or direct contact with sulphuric, hydro-chloric or hydrofluoric acids or their fumes.
29. Respiratory, gastro-intestinal or physiological nerve and eye disorders due to contact with petroleum products and their fumes.	29. Any process or occupation involving the use of or direct contact with petroleum or petroleum products and their fumes.
30. Disability arising from blisters or abrasions.	30. Any process or occupation involving continuous friction, rubbing or vibrations causing blisters or abrasions.
31. Disability arising from bursitis or synovitis.	31. Any process or occupation involving continuous rubbing, pressure, or vibration of the parts affected.
32. Dermatitis (venenata).	32. Any process or occupation involving the use of or direct contact with acids, alkalies, oils, brick, cement, lime, concrete, mortar or other substances capable of causing dermatitis.
33. Silicosis.	33. Any process or occupation involving an exposure to or direct contact with silicon dioxide (SiO_2) dust.
34. Asbestosis.	34. Any process or occupation involving an exposure to or direct contact with asbestos dust.

32B. Where an employee of an employer subject to this Article suffers from an occupational disease, as hereinbefore listed and is thereby disabled from performing his work in the last occupation in which he was injuriously exposed to the hazards of such disease, or dies as a result of such disease, and the disease was due to the nature of an occupation or process described in Section 32A hereof, in which he was employed within the period previous to his disablement as limited in Sections 32C and 32D hereof, the employee, or, in case of his death, his dependents shall be entitled to compensation in the amount and payable in the manner provided elsewhere in this Article, as if such disablement or death were an injury by accident, except as otherwise provided in Sections 32A to 32J hereof; and the practice and procedure prescribed elsewhere in this Article shall apply to proceedings for compensation for such diseases, except as in said Sections 32A to 32J, and Sections 54, 56 and 65, as hereby amended, otherwise provided.

No compensation shall be payable for an occupational disease if the employee, at the time of entering into the employment of the employer by whom the compensation would otherwise be payable, falsely represented himself in writing as not having previously been disabled, laid off, or compensated in damages or otherwise, because of such disease.

Where an occupational disease is aggravated by any other disease or infirmity, not itself compensable, or where disability or death from any other cause, not itself compensable, is aggravated, prolonged, accelerated or in anywise contributed to by an occupational disease, the percentage of such contribution to be determined by the Medical Board, as hereinafter created, the compensation payable shall be reduced and limited to such proportion only of the compensation that would be payable if the occupational disease were the sole cause of the disability or death as such occupational disease, as a causative factor, bears to all the causes of such disability or death, such reduction in compensation to be effected by reducing the number of weekly or monthly payments or the amount of such payments, as under the circumstances of the particular case may be for the best interest of the claimant or claimants.

32C. No compensation for death from an occupational disease shall be payable to any person whose relationship to the deceased, which, under the provisions of this Article would give right to compensation, arose subsequent to the beginning of the first compensable disability save only to after-born children of a marriage existing at the beginning of such disability.

Where compensation is payable for an occupational disease, the employer in whose employment the employee was last injuriously exposed to the hazards of such disease, and the insurance carrier, if any, on the risk when such employee was last so exposed under such employer, shall be liable therefor; the amount of the compensation shall be based upon the average wages of the employee when last so exposed under such employer; and the notice of injury and claim for compensation, as hereinafter required, shall be given and made to such employer; provided, however, that in case of silicosis or asbestosis the only employer or insurance carrier liable shall be the last employer in whose employment the employee was last injuriously exposed to the hazards of the disease during a period of sixty (60) days or more after the effective date of this sub-title, and the insurance carrier, if any, on the risk when the employee was last so exposed under such employer.

An employer shall not be liable for any compensation for an occupational disease unless such disease shall be due to the nature of an employment in which the hazards of such disease actually exist, are characteristic of and peculiar to the trade, occupa-

tion, process, or employment, and is actually incurred in his employment and unless disablement or death results within three (3) years in case of silicosis or asbestosis, or one (1) year in case of any other occupational disease, after the last injurious exposure to such disease in such employment, or, in case of death, unless death follows continuous disability from such disease, commencing within the period above limited, for which compensation has been paid or awarded or claim made as provided in this Article, and results within seven (7) years after such last exposure.

32D. In the absence of conclusive evidence in favor of the claim, disability or death from silicosis or asbestosis shall be presumed in fact not to be due to the nature of any occupation within the provisions of Section 32A of this Article, unless during the ten (10) years immediately preceding the date of disablement the employee has been exposed to the inhalation of silica dust or asbestos dust over a period of not less than five (5) years, two (2) years of which shall have been in this State, under a contract of employment existing in this State, provided, however, that if the employee shall have been employed by the same employer during the whole of such five-year period, his right to compensation against such employer shall not be affected by the fact that he had been employed during any part of such period outside of this State.

Compensation shall not be payable for partial disability due to silicosis or asbestosis. In the event of total disability or death from uncomplicated silicosis or asbestosis, compensation shall be payable to employees and their dependents as follows: If disablement occurs, or, in the case of no claim for prior disablement, if death occurs in the calendar month in which this sub-title becomes effective, the total compensation and death benefits payable shall not exceed the sum of Five Hundred Dollars ($500.00). If disablement occurs, or, in the case of no claim for prior disablement, if death occurs during the next calendar month, the total compensation and death benefits payable shall not exceed Five Hundred and Fifty Dollars ($550.00). Thereafter the total amount of compensation for death and benefits payable for total disability and death shall increase at the rate of Fifty Dollars ($50.00) per month; the aggregate payable in each case to be limited according to the foregoing formula for the month in which total disability occurs, or, in case of no claim for prior disability, in which death occurs. Such progressive increase in the limitation of the total amount in any event payable for total permanent disability and death due to silicosis or asbestosis shall continue only until such total amount equals but does not exceed the sums which would be payable to the particular employee or his dependents; had such total permanent disability and death been due to an accidental injury.

In case of death from uncomplicated silicosis or asbestosis, compensation shall be payable in accordance with the foregoing provisions of this section, provided, however, that the compensation payable in any such case shall be limited to a period not to exceed the average life expectancy of a person of the age and sex of the deceased.

32E. Where an employee, though not actually disabled, is found to be affected by silicosis or asbestosis, he may, subject to the approval of the Medical Board, hereinafter created, be permitted to waive in writing full compensation for any aggravation of his condition that may result from his continuing in his hazardous occupation. In the event of total disablement or death as a result of the disease with which the employee was so affected, after such a waiver, compensation shall nevertheless be payable as herein elsewhere provided, but in no case, whether for disability or death or both, for longer than one hundred (100) weeks, but in no case

to exceed two thousand dollars ($2,000) in the aggregate. A waiver so permitted shall remain effective, for the trade, occupations, process or employment for which executed, notwithstanding a change or changes of employer. The State Industrial Accident Commission shall make reasonable rules and regulations relative to the form, execution, filing or registration and public inspection of waivers or records thereof.

32F. Written notice shall be given to the employer of an occupational disease by the employee or someone in his behalf within ten (10) days after the first distinct manifestation thereof, and in the case of death from such an occupational disease, written notice of such death shall also be given to the employer within thirty (30) days thereafter. Failure to give either of such notices shall be deemed waived unless objection is made at a hearing on the claim prior to any award or decision thereon. Actual knowledge of an occupational disease and of exposure to the conditions causing it, by the employer in whose employment the employee was last injuriously exposed, or by the responsible superintendent in charge of the work, shall be deemed notice of its contraction. If no claim for disability or death from an occupational disease be filed with the State Industrial Accident Commission within one (1) year from the date of disablement or death, as the case may be, the right to compensation for such disease shall be forever barred; provided, however, that the failure to file a claim within the time limited herein shall be deemed waived unless objection to such failure be made at a hearing on such claim before any award or decision thereon. Notice or claim shall be deemed waived in case of disability or death where the employer or insurance carrier makes compensation payments therefor, or within the time above limited, the employer or his insurance carrier by his or its conduct leads the employee or claimant reasonably to believe that notice or claim has been waived by his or its affirmative conduct.

Whenever a disability from an occupational disease occurs to any employee it shall be the duty of the employer promptly upon obtaining knowledge or notice thereof, to at once report such disability to the Commission, and also to any local representative of the Commission. Such report shall state (a) the time, cause and nature of the disability, and the probable duration; (b) whether the disability from an occupational disease arose out of and in the course of the injured person's employment; (c) any other matters the rules and regulations of the Commission may prescribe.

This Article shall not apply to cases of occupational disease in which the last injurious exposure to the hazards of such diseases occurred before June 1, 1939.

32G. There shall be a Medical Board consisting of three members who shall be licensed physicians in good professional standing, two of whom shall have had at least five (5) years' practice in the diagnosis, treatment and care of industrial diseases, and one of whom shall be especially trained in roentgenology, and who shall have had at least five (5) years' practice and experience. They shall be appointed by the Governor, by and with the advice and consent of the Senate from a list of nominees to be submitted by the Deans of the medical departments of the University of Maryland and of the Johns Hopkins University, and by the council of the Medical and Chirurgical Faculty of Maryland, each of these three agencies to submit a list of at least three persons, two of whom shall be especially experienced in occupational diseases, and one of whom shall be an experienced roentgenologist. One of said members shall be designated as Chairman of the Medical Board by the Governor. The term of office of a member of such Board shall be six (6) years, except that the first appointments hereunder shall be made as follows: one for two (2) years, one for

four (4) years, and one for six (6) years. Vacancies shall be filled for the balance of the unexpired terms in the same manner as the original appointments as hereinabove provided. A majority of the Medical Board shall constitute a quorum. The Medical Board shall have the power and authority to make rules regulating its procedure, to contract for laboratory work, to make necessary investigations of working conditions; to provide for ordering and the conducting of autopsies, to conduct hearings on medical questions, to determine medical issues, and to perform such other reasonable duties as the work of the Board may require. The functions of the Board shall be as set forth elsewhere in this Article.

The members of the Medical Board shall devote as much of their time as may be required to perform the duties and carry out the functions of the Board as set forth in this Article. The Chairman of the Medical Board shall receive an annual salary of Two Thousand Five Hundred Dollars ($2500.00) and the two associate members of the Board shall receive an annual salary of Two Thousand Dollars ($2000.00) each, and each member of the Board shall be entitled to the reasonable and necessary traveling and other necessary expenses incurred while actually engaged in the performance of their duties.

32H. Upon the filing of a claim for compensation for death from an occupational disease where an autopsy is necessary to accurately and scientifically ascertain and determine the cause of death, such autopsy shall be ordered by the Medical Board and shall be made under the supervision of the coroner, medical examiner or public official equivalent thereto. The Medical Board may designate a duly licensed physician, who is a specialist in such examinations, to perform or attend such autopsy, and to certify his findings thereon. Such findings shall be filed with the Medical Board and shall be a public record. The State Industrial Accident Commission also may exercise such authority on its own motion or on application made to it at any time by any party in interest, upon the presentation of facts showing that a controversy may exist in regard to the cause of death or the existence of any occupational disease. All proceedings for compensation shall be suspended upon refusal of a claimant or claimants to permit such autopsy when so ordered, and no compensation shall be payable for any period during which autopsy is refused.

The State Industrial Accident Commission shall refer every claim for compensation for an occupational disease to the Medical Board for investigation, hearing and report, excepting, however, such cases wherein there are no controverted medical issues. No award shall be made in any such case until the Medical Board shall have duly investigated and heard the case and made its report and its decisions with respect to all medical questions at issue. The date of disablement, if in dispute, shall be deemed a medical question.

The Medical Board, upon reference to it of a claim for occupational disease, shall notify the claimant or claimants and the employer to appear before it at a time and place stated in said notice. At such hearing either party may offer testimony of such witnesses as they may desire, which shall become a part of the record of the proceedings before the Medical Board. If the employee be living, he shall appear before the Medical Board at the time and place specified and shall then or thereafter submit to such examinations, including clinical and X-ray examinations, as the Medical Board may require. The claimant and the employer or his insurance carrier shall each be entitled, at his own expense, to have present at all examinations conducted by the Medical Board, a physician admitted to practice medicine in the State who shall be given every reasonable facility for participating in every such examination. If a physician admitted to practice medicine in the State shall certify

that the employee is physically unable to appear at the time and place designated by the Medical Board, the Board shall, on notice to the parties, change the place and time of examination to such other place and time as may reasonably facilitate the examination of the employee. Proceedings shall be suspended and no compensation shall be payable for any period during which the employee may refuse to submit to such examination.

The Medical Board shall, as soon as practicable after it has completed its consideration of the case, report in writing its findings and conclusions on every medical question in controversy. If the date of disablement is controverted and cannot be exactly fixed scientifically, the Medical Board shall fix the most probable date, having regard to all the circumstances of the case. The Medical Board shall also include in its report a statement indicating the physician or physicians, if any, who appeared before it, and what, if any, medical reports and X-rays were considered by it.

32-I. The Medical Board shall file with the State Industrial Accident Commission the records of all proceedings had before the Medical Board, including transcript of the testimony of all witnesses appearing on behalf of the claimant and the employer, together with its own report and findings upon all medical questions involved in the claim. Included in such record shall be the findings of the Medical Board, determining the nature of the disease, the extent of injury and the degree of disability sustained by the claimant.

Upon the filing of the record of the proceedings by the Medical Board, the State Industrial Accident Commission shall send a certified copy of such findings to the claimant or claimants and to the employer and his insurance carrier, if any. In the event that either the claimant or claimants or the employer or the insurance carrier shall feel aggrieved by any decision of the Medical Board, either party may, within thirty (30) days after the filing with the State Industrial Accident Commission of the record of the proceedings before the Medical Board as herein provided, file a petition with the State Industrial Accident Commission, requesting the State Industrial Accident Commission to review the record and the proceedings before the Medical Board. If no petition for review has been filed with the State Industrial Accident Commission within said thirty day period from the filing of the Medical Board's findings and report, the State Industrial Accident Commission shall render its decision or award, which shall conform to the findings in such report and the decision of the Medical Board as to medical questions. In the event that a petition for review by the State Industrial Accident Commission of the findings and report of the Medical Board has been filed, as herein provided, the State Industrial Accident Commission shall review the proceedings, findings and report of the Medical Board, and upon the record thus made shall render its decision or award upon all issues referred to the Medical Board. In any hearing, as provided for in Sections 32A to 32J of this Article, held by the State Industrial Accident Commission in any case to determine any controversial questions, no finding of fact by the State Industrial Accident Commission shall be subject to be reviewed or be set aside, reversed or modified.

32J. It shall be the duty of the State Department of Health, and of the Commissioner of Health of Baltimore City, concurrently:

1. To receive reports of occupational diseases from physicians who have knowledge of such cases.

2. To study occupational diseases and ways and means for their control and prevention, and make the necessary rules and regulations for such control and prevention. Such rules and regulations for the control and prevention of occupational

diseases shall have the force and effect of law. No such rule or regulation or any modification, amendment, or repeal thereof, shall become effective until public notice of such proposed rule or regulation, modification, amendment, or repeal thereof shall have been given, and a public hearing thereon held before the State Board of Health.

3. To investigate industrial conditions causing occupational diseases, or which may be suspected of causing occupational diseases, and make recommendations for the control of such condition.

4. To enforce regulations regarding occupational diseases.

5. To recommend to the Legislature for enactment such measures, including additions to the list of occupational diseases contained in Section 32A of this Act, as their studies and experience may demonstrate to be advisable.

But nothing in this Section shall be construed to limit any powers given to the Mayor and City Council of Baltimore, by charter or amendment thereto.

54. The powers and jurisdiction of the Commission over each case shall be continuing, and it may, from time to time, make such modifications or changes with respect to former findings or orders with respect thereto as in its opinion may be justified, provided, however, that no modification or change of any final award of compensation shall be made by the Commission unless application therefor shall be made to the Commission within three years next following the last final award of compensation, but no award shall be considered a final award under this Section unless it shall have been so designated on the award by the Commission. In cases where no final award shall have been made by the Commission, but an award not designated as a final award shall have been made by the Commission, no additional award or awards of compensation shall be made by the Commission unless application therefor be made to the Commission within three years next following the last payment of compensation under such award or awards not designated by the Commission as final. However, in all occupational disease cases application to the Commission for a modification or change in any final award must be made within one year thereafter.

The State Industrial Accident Commission shall not pass any order or make any award designated as a final order or award, except after a hearing, or unless the parties shall have been afforded an opportunity to ask for a hearing or unless the parties shall consent to the passage of such final order or award.

56. Any employer, employee, beneficiary or person feeling aggrieved by any decision of the Commission affecting his interests under this Article, may have the same reviewed by a proceeding in the nature of an appeal and initiated in the Circuit Court of the county or in the Common Law Courts of Baltimore City having jurisdiction over the place where the accident occurred or over the person appealing from such decision, and the Court shall determine whether the Commission has justly considered all the facts concerning the injury, whether it has exceeded the powers granted it by the Article, and whether it has misconstrued the law and facts applicable in the case decided. If the Court shall determine that the Commission has acted within its powers and has correctly construed the law and facts, the decision of the Commission shall be confirmed; otherwise it shall be reversed or modified. Upon the hearing of such an appeal the Court shall, upon motion of either party filed with the Clerk of the Court according to the practice in civil cases, submit to a jury any question of fact involved in such case. Provided, however, that in all appeals in which occupational diseases are involved, the findings of fact by the State Industrial Accident Commission shall be final and not subject to review or modification by the

Court or be submitted to a jury. The proceedings in every such an appeal shall be informal and summary, but full opportunity to be heard shall be had before judgment is pronounced. No such appeal shall be entertained unless notice of appeal shall have been served personally upon some member of the Commission within thirty days following the rendition of the decision appealed from. An appeal shall not be a stay. If the decision of the Commission shall be changed or modified, the practice prevailing in civil cases as to the payment of costs and the fees of medical and other witnesses shall apply. In all such appeals upon suggestion in writing, under oath, of either of the parties to said proceedings that such party cannot have a fair and impartial trial in the Court in which the same may be pending, the said Court shall order and direct the record of proceedings in such appeal to be transmitted to some other of the Circuit Courts of the Counties, or Common Law Courts of Baltimore City for trial. Appeal shall lie from the judgment of the Circuit Court of the County or the Common Law Courts of Baltimore City to the Court of Appeals as in other civil cases, and such appeals shall have precedence over all cases except criminal cases.

In all cases where compensation is awarded on appeal, whether by an affirmance, reversal, or modification of an order of the State Industrial Accident Commission, the claimant shall be entitled to receive, in addition to the compensation awarded, interest at the rate of six per cent per annum or any installments of compensation not paid as they matured under the award of the Commission or would have matured had the same compensation been awarded by the Commission at the time of passing its order from which the appeal is taken.

The Attorney General shall be the legal adviser of the Commission, and shall represent it in all proceedings whenever so requested by any of the Commissioners. In all Court proceedings under or pursuant to this Article, the decision of the Commission shall be prima facie correct and the burden of proof shall be upon the party attacking the same.

65. Definitions as used in this Article:

(1) "Extra-hazardous employment" means a work or occupation described in Section 32 of this Article.

(2) "Employer", except when otherwise expressly stated, means a person, partnership, association, corporation, and the legal representatives of a deceased employer, or the receiver or trustee of a person, partnership, association or corporation employing workmen in extra-hazardous employments.

(3) "Employee" means a person who is engaged in an extra-hazardous employment in the service of an employer, carrying on or conducting the same upon the premises or at a plant, or in the course of his employment away from the plant of his employer, and shall not include farm laborers. "Farm laborers" as used in this Article, shall mean any employees who, at the time of the accident, are engaged in rendering any agricultural service, including the threshing or harvesting of crops, or who, at the time of the accident, are engaged in service incidental to and in connection with agricultural pursuits or developments, whether the employer be the farmer or other person undertaking or contracting with the farmer to perform any such agricultural service, pursuit or development. This Article shall not apply to cutters of cord wood or fire wood, farm laborers, domestic servants, nor to country blacksmiths, wheelwrights or similar rural employments, unless these employments elect to come under this Article as provided in Section 33, nor in any case where the accident occurred before this Act takes effect, nor to casual employees or any employees who are employed wholly without the State. But for all purposes of this

Article, casual, occasional or incidental employments outside of this State by the Maryland employer of an employee or employees regularly employed by said employer within this State shall be construed to be employment within this State; provided, however, if an employee or the dependents of an employee shall receive compensation or damages under the laws of any other State, nothing herein contained shall be construed so as to permit a total compensation for the same injury greater than is provided for in this Article.

(4) "Employment" includes employment only in a trade, business or occupation carried on by the employer for pecuniary gain.

(5) "Compensation" means the money allowance payable to an employee or to his dependents as provided for in this Article, and includes funeral benefits provided therein.

(6) "Injury", "Personal Injury" and "Accidental Personal Injury" means only accidental injuries arising out of and in the course of employment and such disease or infection as may naturally result therefrom, and the occupational diseases specified and enumerated in Section 32A of this Article.

(7) "Death" when mentioned as a basis for the right to compensation means only death resulting from such injury.

(8) "Average weekly wages" for the purposes of this Article shall be taken to mean the average weekly wages earned by an employee when working on full time.

(9) "State Accident Fund" means the State Insurance Fund provided for in Section 16 of this Article.

(10) The term "child" and "children" shall include posthumous children and adopted children, whether members of the deceased employee's household at the time of his accident or death or not, and shall also include step-children, illegitimate children and other children, if such step-children, illegitimate children and other children were members of the household of the decedent at the time of the accident or death and had received contributions toward their support from such deceased employee during any part of the six months immediately preceding the accident or death.

(11) "Beneficiary" means a husband, wife, child, children or dependents of an employee in whom shall vest a right to receive payments under this Article.

(12) "Mining" means all underground workings by shaft, drift, slope or otherwise, for the securing, removing, and taking out from under the ground, coal, iron ore, clays and all other minerals and mineral substances, found in and under the earth, and shall mean all work done by any miner or employee working in and about said mines in said shafts, slopes, headings, tunnels, rooms and other subterranean places therein, for the purpose of obtaining and removing therefrom all such minerals and mineral substances, and the benefits of this Article shall be extended to any employee, or in case of his death, to his dependent relatives, otherwise entitled, who shall be killed or injured while so working or employed therein, and such mineworker shall be deemed to be wholly employed in the State of Maryland, and entitled to the benefits of this Article, if the tipple, mouth or principal mine entrance in and about which he works, is situated in this State, notwithstanding such shaft, heading, slope or other subterranean tunnel may extend underground into an adjoining State, and notwithstanding such mine worker so employed in this State may be killed or injured while working in said mine beyond the lines of this State, and within the lines of an adjoining State.

(13) "Occupational Disease" as used in this Article shall mean only the diseases enumerated and specified in Section 32A of this Article.

(14) Whenever used in this Article "Silicosis" shall mean the characteristic fibrotic condition of the lungs caused by the inhalation of silicon dioxide (SiO_2) dust; and "Asbestosis" shall mean the characteristic fibrotic condition of the lungs caused by the inhalation of asbestos dust.

(15) "Disablement", as used in Sections 32A, B, G, H, and I of this Article, means the event of an employee's becoming actually incapacitated, either partially or totally, because of an occupational disease, from performing his work in the last occupation in which exposed to the hazards of such disease; and "disability" means the state of being so incapacitated. Disablement and disability shall be determined by the Medical Board as herein provided.

SEC. 2. *And be it further enacted,* That this Act shall take effect June 1, 1939.

Approved, May 24, 1939.

DAIRY FARM REGULATIONS

DEFINITIONS

REGULATION 1. Definitions. When used in these regulations, the term "person" means a corporation, association, firm or individual; the term "producer" means a person who maintains cows for the purpose of obtaining milk for sale as such; the term "milk plant" means any place where milk or milk products are received, processed, stored, pasteurized, bottled or otherwise handled.

PERMITS

REGULATION 2. Permit. No person shall bring or send into the City of Baltimore or to milk plants holding Baltimore permits any milk which has not been produced on a dairy farm holding a Dairy Farm Permit issued by the Commissioner of Health of Baltimore.

Application for said permit shall be made in writing upon a form prescribed by the Commissioner of Health, and each application for a permit for a dairy farm located beyond the Limits of Inspection for Dairy Farms as hereinafter set forth in Regulation No. 4 shall be accompanied by a preliminary inspection fee of $5.00.

The Commissioner of Health shall in each case cause an investigation to be made of the premises, dairy herd and equipment of the applicant, and if these are found upon such investigation to be satisfactory he shall issue a Dairy Farm Permit. If disapproved, the applicant shall be notified in writing as to the reasons for such disapproval.

The Dairy Farm Permit shall be conspicuously displayed in the dairy house and shall expire on December 31 of year issued. If application for renewal of permit is not made on or before this date such permit shall be cancelled.

On and after the effective date of these regulations no Dairy Farm Permit shall be issued to any producer who has not been an active permittee in good standing within thirty days prior to the date that his application for such permit is filed with the Commissioner of Health, unless the dairy farm, buildings, premises and equipment of said producer conform to and are conducted in accordance with the provisions of these regulations.

On and after January 1, 1940 no Dairy Farm Permit shall be issued, except as an annual renewal of a permit issued prior to January 1, 1940 and for identical premises, unless the buildings, premises and equipment of the applicant shall conform to these regulations.

REGULATION 3. Revocation of permit. The Dairy Farm Permit may be revoked at any time by the Commissioner of Health in accordance with the provisions of Section 71 of Article 16 of the Baltimore City Code of 1927 for failure to comply with the requirements of the city milk ordinance or with any rules or regulations that may be issued by the Commissioner of Health in accordance with the power conferred upon him by law or ordinance.

REGULATION 4. Limits of inspection for dairy farms. The Limits of Inspection for Dairy Farms serving the City of Baltimore shall extend along the southwest shore line of the Patapsco River from the City of Baltimore to the Chesapeake Bay and thence follow the west shore line of the Chesapeake Bay to Windmill Point immediately north of Gibson Island; from Windmill Point the boundary shall follow the Mountain Road to Lipins Corner and thence along the Annapolis Boulevard to

Glen Burnie; from Glen Burnie it shall extend along the Generals Highway for approximately one-half mile to the Dorsey Road and thence shall follow the Dorsey Road through Dorsey to the Baltimore-Washington Boulevard. On the Baltimore-Washington Boulevard it shall extend to Laurel; from Laurel it shall follow the road to Burtonsville, through Burtonsville and Spencerville to Ashton. From Ashton it shall extend along the road to Olney and Laytonsville. From Laytonsville it shall extend along the road through Washington Grove to Gaithersburg and thence along the Metropolitan Branch of the Baltimore and Ohio Railroad to Knoxville. From Knoxville the boundary shall run northward along the county line between Frederick and Washington Counties in Maryland to Blue Ridge Summit, Pennsylvania, at the point where the county line meets the tracks of the Western Maryland Railroad. The boundary shall then follow the Western Maryland Railroad from that point to Gettysburg, Pennsylvania, and thence along the Lincoln Highway to York, Pennsylvania; from York it shall follow the Dallastown Pike to Red Lion, Pennsylvania, and thence it shall follow the road from Red Lion through Windsor, Bittersville, Martinsville and Craley to the Susquehanna River at Long Level, Pennsylvania. The boundary shall then proceed along the west shore of the Susquehanna River to the Chesapeake Bay and thence along the west shore of the Chesapeake Bay to the Patapsco River and thence shall follow the north shore of the Patapsco River to Baltimore City.

COMMUNICABLE DISEASES

REGULATION 5. Communicable diseases. It shall be the duty of any person having charge or control of any dairy farm for which a Dairy Farm Permit has been issued by the Commissioner of Health, to notify the Commissioner of Health immediately upon the discovery upon such premises of any case of diphtheria, scarlet fever, septic sore throat, typhoid fever or any other communicable disease which may be transmitted by milk.

All persons employed in the production and handling of milk on the farm shall be examined for communicable diseases at such time and in such manner as the Commissioner of Health may deem necessary.

COWS

REGULATION 6. Cows. Cattle shall be healthy. Any cow which is in an unhealthy condition shall be removed from the milking herd and kept isolated as long as the condition prevails.

The hair on udders, tails and flanks shall be kept short at all times.

Before each milking all cows shall be cleaned and handled in a manner prescribed by the Commissioner of Health. (*Essential Requirements for Sanitary Milk Production*, Rule 2, pages 12-14.)

REGULATION 7. Tuberculin test. All milk produced on a farm holding a permit shall be from a herd which has been tuberculin tested under Federal and State supervision. The tuberculin test shall be made at such times as the Federal, State or city authorities may designate.

All tuberculin test receipts or official notices that the herds have been tested shall be filed with the Commissioner of Health of Baltimore.

STANDARDS

REGULATION 8. Chemical. Only pure, clean, fresh, unadulterated, unsophisticated and wholesome cow's milk shall be delivered or offered for delivery to

plants in Baltimore or to milk plants holding Baltimore permits and such milk shall be understood to be the natural product of healthy cows, which has not been deprived of any part of its cream, and to which no additional liquid or solid or preservative or other matter whatsoever has been added; and which at a temperature of 60 degrees Fahrenheit shall have a specific gravity of not less than 1.029, and shall contain not less than 3.50 per cent butterfat, and not less than 8.50 per cent milk solids other than butterfat.

REGULATION 9. Bacteriological. No milk produced on a dairy farm holding a permit shall contain more than 200,000 bacteria per cubic centimeter upon delivery at the milk plant.

BUILDINGS AND PREMISES

REGULATION 10. Buildings and premises. All stables, buildings and premises where milk is produced and handled shall be maintained at all times in a clean and orderly condition.

All possible fly breeding places, such as accumulations of manure, wet and decaying feeds and straw and other refuse shall be eliminated from the vicinity of the milking stable and dairy house.

REGULATION 11. Stables. All cows shall be milked in an approved stable, which shall be well lighted, ventilated and drained. Stalls, stanchions and divisions of an approved type shall be provided for the maximum number of cattle in the milking stable at any one time and shall be so arranged as to allow adequate space for each animal, and that the droppings will fall for the most part into the gutter.

The floors, platforms, gutters and feed troughs shall be constructed of impervious material. The construction shall be such as to facilitate prompt and satisfactory cleaning and shall conform to approved dimensions. The inside surface of the walls and ceilings shall be of smooth tight construction and shall be kept clean at all times. Stables shall be whitewashed or painted as often as may be deemed necessary. All fowl or animals other than cattle shall be excluded from the milking stables. The milking stables shall be separated from other parts of the stables by a partition of smooth tight construction. Milking stables shall be promptly and properly cleaned each morning and more often if necessary and the manure and other waste products shall be stored in such manner as to be inaccessible to the milking herd.

REGULATION 12. Stable yard. The stable yard shall be properly graded and drained and shall be maintained at all times in a sanitary condition.

REGULATION 13. Dairy house. All dairy farms shall be provided with a conveniently located dairy house, which shall be so located as to be free from any sources of contamination such as a hog pen, manure pile or privy; and which shall be effectively screened, and shall be provided with adequate light and ventilation, smooth walls and ceiling light in color and a smooth properly drained floor of impervious material. The dairy house shall not be directly connected by entrance with any other building.

The dairy house shall be kept clean and shall not be used for any purpose other than the handling and storing of milk and milk utensils.

REGULATION 14. Water supply. An adequate water supply shall be provided at all times in the dairy house for the proper cooling and storing of the milk and cleaning of utensils and equipment. This water supply shall be protected from contamination.

REGULATION 15. Privies and toilets. All dairy farms shall be provided with one or more conveniently located privies or toilets for the use of all persons engaged in the production and handling of milk, which shall be so constructed, operated and

maintained that the waste is inaccessible to flies, and does not pollute the surface soil or contaminate any water supply. All privies and toilets shall be constructed in accordance with standards approved by the Commissioner of Health.

EQUIPMENT

REGULATION 16. Necessary equipment. All dairy farms shall be provided with the approved equipment necessary for the production and handling of milk in a manner prescribed by the Commissioner of Health. Such equipment shall be maintained in satisfactory condition at all times and shall include an approved chlorine sterilizer; wash buckets and cloths; Maryland type milk cans; small top or covered milk pails; dairy thermometers; drain rack; brushes; hot water and approved milk cooling and storage equipment and facilities. (*Essential Requirements for Sanitary Milk Production*, pages 4–8.)

REGULATION 17. Milk can labeling. All milk produced under a Dairy Farm Permit shall be properly labeled at all times prior to delivery to the milk plant with the name and address of the producer and the permit number of the farm upon which it was produced.

All milk cans shall have the permit number in figures not less than 1 inch high and the name and address of the producer in letters not less than ½ inch high permanently affixed to the shoulder of each can.

REGULATION 18. Strainer. If a milk strainer is used it must be of an approved type and in good physical condition. The straining pad or disc shall be of a single service type and shall be stored in a sanitary dust-proof container in the dairy house.

In all cases where milk is strained on the farm the straining shall be done in the dairy house or other satisfactory room unless a metal cover of approved type is provided for the strainer while in use.

REGULATION 19. Equipment for cleaning utensils. Approved equipment and facilities shall be provided and installed in the dairy house for the proper cleaning, rinsing and scalding of all milk utensils.

Such equipment and facilities shall include a wash vat of ample capacity and a water heating device of such type and construction as will not create any objectionable conditions in the dairy house.

REGULATION 20. Milk stools. Milk stools shall be constructed of metal or other impervious material and shall be kept in a sanitary condition at all times.

REGULATION 21. Clothing. Milkers and milk handlers shall wear clean outer garments while milking or handling milk utensils or equipment.

MILK HANDLING

REGULATION 22. Utensil cleaning. All utensils used in the production and handling of milk shall be properly cleaned immediately after each usage and shall be stored on an approved drain rack until again used. (*Essential Requirements for Sanitary Milk Production*, Rule 5, pages 24–26.)

REGULATION 23. Utensils—bactericidal treatment. All utensils used in the production and handling of milk shall immediately before each usage be subjected to a chlorine or other approved bactericidal process. After bactericidal treatment the milk utensils shall be handled in a manner that will prevent contamination. (*Essential Requirements for Sanitary Milk Production*, Rule 1, pages 9–11.)

REGULATION 24. Milkers' hands. Milkers' hands shall be clean while milking and shall be rinsed with a bactericidal solution immediately before milking and following any interruption in the milking operation.

REGULATION 25. Milking. Before milking all cows shall be properly cleaned and the udders, teats and flanks washed and wiped with a cloth using a bactericidal solution approved by the Commissioner of Health. The first few streams from each teat shall be discarded. Milk which is bloody, stringy or otherwise abnormal shall not be shipped. (*Essential Requirements for Sanitary Milk Production*, Rule 2, pages 12–14.)

REGULATION 26. Milk handling. Each pail of milk shall be immediately removed to the dairy house. No milk shall be strained or poured in the milking stable except in a manner approved by the Commissioner of Health.

REGULATION 27. Milk cooling and storage. Milk shall be promptly cooled to 60 degrees Fahrenheit or lower and shall be stored in the dairy house at 60 degrees Fahrenheit or lower at all times until it is shipped. (*Essential Requirements for Sanitary Milk Production*, Rules 3 and 4, pages 14–24.)

If morning's milk is delivered to a country milk plant within two hours of the time of milking it need not be cooled to 60 degrees Fahrenheit or lower, provided, however, that in no case shall warm morning's milk be delivered to a country milk plant after 9:00 A. M. between November 1 and March 31 or after 8:00 A. M. between April 1 and October 31.

Milk shall not be stored on the dairy farm for more than fifteen hours from the time of milking.

TRANSPORTATION

REGULATION 28. Transportation. All containers of milk shall be properly protected at all times from point of origin to destination, in the manner set forth in this regulation.

All milk containers whether full or empty, shall be placed on a platform, so constructed and located as to prevent the exposure of the containers to the direct rays of the sun. Such platforms shall be provided at all points where milk is regularly assembled.

Cans containing milk shall not be superimposed directly upon each other.

In no case shall contaminating commodities, livestock or poultry, be transported in the same conveyance with the milk.

Milk and milk products from unapproved sources shall not be transported in any vehicle which is being used for the transporting of milk or milk products from approved sources.

All transportation agents shall effectively refrigerate or otherwise protect the milk while in transit to prevent the rise in temperature of such milk.

GENERAL

REGULATION 29. Administration. Dairy farms may be inspected at any time by approved field representatives and as often as may be deemed necessary by the Commissioner of Health.

All expenses incurred by the Commissioner of Health in making inspections of, and in supervising, any dairy farm located beyond the Limits of Inspection for Dairy Farms, as hereinbefore set forth in Regulation No. 4, shall be paid by the dairy farm permittee at the office of the City Collector, Bureau of Receipts, Municipal Office Building, Baltimore. If more than one farm beyond said limits of inspection is inspected on a single inspection trip, said expenses will be prorated equally among the farms inspected on each trip. The decision of the Commissioner of Health as to the amount of said expenses shall be final and in reaching his decision the Com-

missioner shall take into consideration the compensation, subsistence and traveling expenses of the Health Department field representative making said inspections.

If said expenses are not paid within thirty (30) days after the date of billing, the permit of the dairy farm or farms in default shall be suspended.

The Health Department field representatives are placed in administrative charge of all milk inspection work to the end that they may institute necessary inspection and supervision and the possible suspension and reinstatement of producers; provided, however, that aggravated offenses which warrant revocation of permit shall be submitted to the Commissioner of Health for decision.

All approvals hereinbefore mentioned required to be had for the production and handling of milk on dairy farms shall be effective and binding only when in writing and signed by the Commissioner of Health.

The above dairy farm regulations shall supersede all previous regulations appertaining to the respective subjects herein included and all prior regulations inconsistent with the above are hereby rescinded.

Date Adopted: March 10, 1923.
Dates Amended: April 15, 1926; January 30, 1928; June 6, 1930 and February 16, 1939.
Date Effective: February 16, 1939.

Huntington Williams, M.D.

Commissioner of Health.

REGULATIONS GOVERNING THE HANDLING AND SALE OF MILK AND MILK PRODUCTS

REGULATION 1. Definitions. When used in these regulations, the term "person" means a corporation, association, firm or individual; the term "producer" means a person who maintains cows for the purpose of obtaining milk for sale as such; the term "milk plant" means any place where milk or cream is received, processed, stored, pasteurized, bottled or otherwise handled; the words "milk or cream" mean milk, cream, sour cream, skimmed milk, chocolate milk, buttermilk or other fermented milk; the term "bulk milk" means milk sold or delivered in containers exceeding one quart in capacity.

REGULATION 57. Bulk milk. No person dealing in milk shall offer for sale, sell, dispose of or deliver any milk or cream unless the same be kept, offered for sale, exposed for sale, sold, disposed of or delivered in individual sanitary glass bottles or such other similar individual receptacles or containers as may be approved by the Commissioner of Health. Nothing herein contained shall be construed to prohibit the sale of bulk milk to restaurants, public eating places, hotels, institutions, bakeries or other similar establishments for cooking or manufacturing purposes only, or to holders of milk plant permits. "Manufacturing" or "manufacturing purposes" as used in this regulation shall not be construed to include the mixing of non-alcoholic drinks such as milk shakes, sodas or similar beverages.

Date Adopted: November 23, 1928.
Dates Amended: August 15, 1936; and March 13, 1939.
Date Effective: March 13, 1939.

Huntington Williams, M.D.

Commissioner of Health.

REGULATIONS GOVERNING THE HANDLING AND SALE OF MILK AND MILK PRODUCTS

REGULATION 35. Caps. All caps shall be approved for lettering and design by the Commissioner of Health and in addition shall conform to the following requirements:

(a) The name of the distributor and the address of the milk plant where the milk or cream is pasteurized or bottled shall appear on the cap.

(b) The caps shall bear as the most prominent legend one, and only one, of the following designations:

Selected Milk Pasteurized
Selected Cream Pasteurized
Chocolate Milk Pasteurized
Goat Milk Pasteurized
Selected Raw Milk
Selected Raw Cream
Certified Milk
Certified Cream

(c) The day of the week the product was pasteurized shall be stated.

Date Adopted: November 23, 1928.
Dates Amended: August 15, 1936; November 25, 1936 and December 21, 1939.
Date Effective: December 21, 1939.

Huntington Williams, M.D.

Commissioner of Health.

REGULATION 62B. Goat milk. Goat milk is the unadulterated, fresh, clean lacteal secretion, free from colestrum, obtained by the complete milking of one or more healthy goats. Goat milk shall be produced, handled, pasteurized, processed, distributed and sold in accordance with the provisions of the city milk ordinance and Health Department regulations adopted thereunder governing the production, handling, pasteurization, processing, distribution and sale of cows' milk.

Date Adopted: December 21, 1939.
Date Effective: December 21, 1939.

Huntington Williams, M.D.

Commissioner of Health.

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