

[Report of the Medical Officer of Health for Holborn Borough].

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The Metropolitan Borough of Holborn.

ANNUAL REPORT

OF THE

Medical Officer of Health,

C. W. HUTT, M.A., M.D., M.R.C.P., D.P.H.

For the Year 1929.



London :

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Sheffield Street, Kingsway, W.C.2.

1930

197, HIGH HOLBORN, W.C. 1.

TO THE MAYOR, ALDERMEN AND COUNCILLORS OF THE
METROPOLITAN BOROUGH OF HOLBORN.

Herewith I beg to present a Report upon the Health and Sanitary Conditions of the Borough for the year 1929.

Believe me, Ladies and Gentlemen,

Yours obediently,

C. W. HUTT,

Medical Officer of Health

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PUBLIC HEALTH COMMITTEE.**1929-30.***Chairman—*

Councillor The Rev. Wilfred H. Davies, M.A.

Vice-Chairman—

Councillor Harold J. Jewell.

*Ex-Officio—*His Worship The Mayor,
Councillor Percy Hill, J.P.

Alderman Albert J. Clark.
 „ Charles Shortland.
 Councillor Edmund Balding.
 „ John H. Boraston, C.B.
 „ Henry W. Ellis.
 „ Herbert H. V. Harrison.
 „ Robert Portwine.
 „ Sir William R. Smith, D.L., J.P., M.D.
 „ George Witherby.
 „ Arthur Youngman.

1928-29.*Chairman—*

Councillor John H. Boraston, C.B.

Vice-Chairman—

Councillor The Rev. Wilfred H. Davies, M.A.

*Ex-Officio—*His Worship The Mayor,
Alderman Albert J. Clark, J.P.,

Alderman Charles Shortland.
 Councillor Edmund Balding.
 „ Robert P. Bristow.
 „ Henry W. Ellis.
 „ Percy Hill.
 „ Harold Jewell.
 „ Robert Portwine.
 „ Sir William R. Smith, D.L., J.P., M.D.
 „ George Witherby.
 „ Arthur Youngman.

HOUSING OF THE WORKING CLASSES COMMITTEE.**1929-30.***Chairman—*

Councillor Roland H. Haxell.

Vice-Chairman—

Councillor Horace W. Langdon, F.S.I.

*Ex-Officio—*His Worship The Mayor,
Councillor Percy Hill, J.P.

Alderman James W. Coade.
 „ H. Warren Coleman.
 Councillor Robert P. Bristow.
 „ Rev. Wilfred H. Davies, M.A.
 „ Miss Frances M. Graves.
 „ Albert E. Hunter.
 „ Raymond A. Miles.
 „ George D. Pooley.
 „ Asher Rosenberg.
 „ J. St. Laurence Stallwood.

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Alderman Harold Warren Coleman.
 Councillor Rev. Wilfred H. Davies, M.A.
 „ Miss Frances M. Graves.
 „ Ernest Hamlin.
 „ Albert E. Hunter.
 „ Horace W. Langdon, F.S.I.
 „ Raymond A. Miles.
 „ George D. Pooley.
 „ Asher Rosenberg.
 „ J. St. Laurence Stallwood.

MATERNITY AND CHILD WELFARE COMMITTEE.**1929-30.***Chairman—*

Councillor George D. Pooley.

Vice-Chairman—

Councillor Robert P. Bristow.

Ex-Officio—

His Worship The Mayor,

Councillor Percy Hill, J.P.

Councillor Claude Bouillon.

„ Miss Frances M. Graves.

„ Ernest Hamlin.

„ Albert E. Hunter.

„ William M. Morgan.

„ Albert A. Mussett.

„ Robert Portwine.

Mrs. Cecil J. Coade.

Mrs. H. Warren Coleman.

Miss Emily Dibdin.

Mrs. Percy Hill.

Miss M. Wilmshurst.

1928-29.*Chairman—*

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Councillor Edmund Balding.

„ Claude Bouillon.

„ Miss Frances M. Graves.

„ Albert E. Hunter.

„ James S. Motion.

„ Albert A. Mussett.

„ William H. Rose.

„ Frederick E. Toye.

Mrs. Cecil J. Coade.

Mrs. H. Warren Coleman.

Mrs. Wilfred H. Davies.

Miss Emily Dibdin.

„ M. Wilmshurst.

TUBERCULOSIS CARE COMMITTEE.

Holborn Borough Council	...	...	...	Councillor Miss F. M. Graves (to November, 1929).
				Councillor H. V. Harrison (from November, 1929).
				Medical Officer of Health (Dr. C. W. Hutt).
Tuberculosis Dispensary	...	...	...	Councillor Sir William Smith, D.L., J.P.
				Tuberculosis Officer (Dr. J. A. Struthers).
London County Council	...	...	...	Dr. F. C. Lewis.
				Miss H. Bell.
Guardians of the Holborn Union	...	...	...	Councillor Alfred Humphreys.
Charity Organisation Society	...	...	...	Miss E. F. Bolton.
Local Association of Children's School Care Committees.				Miss A. E. Dove.
Invalid Children's Aid Association	...	...	...	Miss Butler.
Metropolitan District Nursing Association				Miss M. Wilmshurst.
Almoners of hospitals	...	...	...	Miss J. G. Salmon.
				Miss A. M. Smith.
				Miss S. Double.
Insurance Committee for the County of London.				
Northern London War Pensions Committee				Councillor R. H. Haxell.
British Red Cross Emergency Help Fund				Mr. G. H. Neal (from Jan., 1929).
Other social workers (co-opted)	...	...	...	Mrs. E. C. Bedford.
				Mrs. C. J. Coade.
				Mrs. Percy Hill.
				Miss O. Lazarus.
				Miss H. M. Mathieson.
				Cav. R. Terroni.

STAFF.

The following was the Staff during 1929.

Medical Officer of Health—C. W. Hutt, M.A., M.D., M.R.C.P., D.P.H.

Medical Officers of Maternity Centres—

10, John Street—Richenda Gillett, M.D.Brux., L.S.A.

Winefride M. Gibson, M.B., B.S., M.R.C.S., L.R.C.P. (temporary).

Short's Gardens—James Arthur Struthers, M.D., B.Ch., M.R.C.P., D.P.H.

Consultant Medical Officer—Puerperal Pyrexia and Puerperal Fever Regulations (1926-1928)—

J. D. Barris, M.B., F.R.C.P., F.R.C.S., 50, Welbeck Street, W. 1.

Medical Officer of Tuberculosis Dispensary—

James Arthur Struthers, M.D., B.Ch., M.R.C.P., D.P.H.

Medical Officer—Diphtheria Immunisation—E. Goodwin Rawlinson, M.D., L.R.C.P., D.P.H.

Public Analyst—James Kear Colwell, F.I.C.

Sanitary Inspectors—Albert Bennett.

George F. Clark.

Samuel Larard, M.R.San.I.

Sanitary Inspector and Health Visitor—Ethel Jane Charlesworth, C.M.B.

Health Visitor—Muriel G. Stockwell, C.M.B.

Tuberculosis Health Visitor—M. Watson.

Chief Clerk and Committee Clerk—Edwin Kent.

Assistant Clerks—Frank Fitch.

Arthur Long.

Phyllis Bull.

Mary E. Shelton.

Dentist—Sidney Adams, L.D.S. (British Dental Hospital).

Anæsthetist—P. Lloyd-Williams, M.R.C.S., L.R.C.P.

Nurses—The Metropolitan Nursing Association.

Mortuary Keeper and Superintendent of Cleansing Station—Arthur C. Britton.

Superintendent of Women's Cleansing Station—Bertha R. Britton.

Caretaker of Maternity Centre—Elizabeth Alderton.

Home Help—Margaret Smith (to 30th June, 1929).

Ellen Bohling (from 30th June, 1929),

(Address 1F, Peabody Buildings, Herbrand Street, W.C. 1.)

And Panel of Emergency Home Helps.

Disinfector—Henry Emms.

Assistant Disinfector—E. E. Denny.

Deputy Disinfector—J. Jefferson.

Addresses of other Public Officials more or less connected with Public Health Work.

PUBLIC VACCINATORS.

Holborn District, Eastern part of Borough (East of Southampton Row)—

Dr. P. J. Connolly, 43, Rosebery Avenue, E.C. 1. Telephone No. Terminus 4624.

Hours 11 a.m. to 12 noon, and 6.30 to 8 p.m. (except Thursday evenings).

Also at No. 10, John Street (Maternity and Child Welfare Centre), Wednesdays and Fridays 3 p.m.

St. Giles and Bloomsbury District, Western part of Borough (West of Southampton Row)—

Dr. Ernest G. Wheat, 104, Charing Cross Road, W.C. 2. Telephone No. Temple Bar 6466.

Hours 12.30 to 1.30 p.m., and 3 to 5 p.m. daily.

24, Meredith Street, Rosebery Avenue, E.C. 1.

Telephone No. Clerkenwell 8065.

Hours 6 to 8.30 p.m. (except Thursday evenings).

Also at St. Giles Buildings, Short's Gardens, (Maternity and Child Welfare Centre), Mondays 2 to 3 p.m.

Vaccination Officer—Mr. Percy E. Capps, Town Hall, 197, High Holborn, W.C. 1.

Registrars of Births and Deaths—Mr. E. J. Comfort, 20A, Harpur Street.

Mr. Percy H. Durrant, 14, 16 and 18, Bloomsbury Street.

Certifying Surgeon (Factory & Workshop Acts)—Dr. W. D. Brunton, 72, Euston Square, N.W. 1.

H.M. Inspector of Factories—Mr. H. Clarke, 99, Queen's Gate, S.W. 7.

District Surveyor—Mr. William G. Perkins, 11, Gray's Inn Square, W.C. 1.

H.M. Coroner—Sir Walter Schröder, 2, Branch Hill Side, Hampstead, N.W. 3.

Coroner's Officer—Mr. James Stabb, 46, Baker Street, Lloyd Square, W.C. 1.

STATISTICS AND SOCIAL CONDITIONS.

Statistical Summary, 1929.

Area of Borough in acres	...	...	...	...	...	405.1
Population—estimated to middle of year (as supplied by the Registrar-General) for birth and death rates	...	...	...	...	...	38,380
Population—Census, 1921	...	...	...	...	...	43,192
Number of inhabited houses (1921)	...	...	...	...	...	6,494
Number of families or separate occupiers (1921)	...	...	...	...	...	9,682
Rateable value 1st November, 1929	...	..	...	...	...	£1,601,578
Rate of 1d. in the £ estimated to yield	...	...	...	...	...	£6,603
Births	{	Total	M.	F.	}	392		
Legitimate		...	350	160			190	...
Illegitimate		..	42	17			25	...
Annual rate of births per 1,000 population	...	...	...	...	...	10.2
Deaths	...	..	...	...	...	598
Annual rate of deaths per 1,000 population	...	...	...	...	...	15.6
Number of women dying in, or in consequence of, childbirth	...	...	...	{ from sepsis	...	—
	...	...	...	{ „ other causes	...	—
Deaths of infants under one year of age per 1,000 births	...	...	...	...	...	74
Deaths from measles (all ages)	...	...	...	...	...	—
„ „ whooping cough (all ages)	...	...	...	...	...	7
„ „ diarrhoea (under two years of age)	...	...	...	...	...	3
Zymotic death rate*	...	...	...	...	...	0.25
Tuberculosis death-rate per 100,000	...	...	...	...	...	110
Excess of registered births over deaths	...	...	...	...	...	—
Excess of registered deaths over births	...	...	...	...	...	206

* Excluding deaths from Epidemic diarrhoea.

Vital Statistics, 1929.

England and Wales, London and Holborn.

	Annual Rates per 1,000 living.		Deaths under 1 year to 1,000 Births.
	Births.	Deaths.	
England and Wales	16.3	13.4	74
London	15.7	13.8	70
Holborn	10.2	15.6	74

General Provision of Health Services for the Borough.

Hospitals provided or subsidised by the Local Authority or by the London County Council.

Fever and Smallpox.—Hospitals for patients suffering from these diseases are provided by the Metropolitan Asylums Board—one of the hospitals of the Board (St. Margaret's) is also available for cases of Marasmus.

Tuberculosis.—Residential institutional treatment for tuberculosis is provided by the London County Council. The Borough Council's Tuberculosis Dispensary is situated at, and linked up with, the University College Hospital.

Maternity.—The Borough Council has arranged for the reservation of beds for maternity cases at the University College Hospital.

Contributions towards cost of maternity service are paid by the Council to:—

University College Hospital.

City of London Maternity Hospital.

Royal Free Hospital.

Other Hospitals—not subsidised by the Borough Council.

The following hospitals are situated in the Borough:—

French Hospital, Shaftesbury Avenue.

Hospital for Sick Children, Great Ormond Street.

Italian Hospital, Queen Square.

National Hospital, Queen Square.

Royal Westminster Ophthalmic Hospital, Broad Street.

London Homœopathic Hospital, Great Ormond Street.

St. Paul's Hospital (Genito-urinary and Skin), Endell Street.

Institutional Provision for Unmarried Mothers, Illegitimate Infants and Homeless Children.

There are no institutions for unmarried mothers, illegitimate children or homeless children in the Borough, but St. Faith's Home, Myddelton Square, receives such mothers from the Holborn area.

Ambulance Facilities.

For Infectious Cases—Provided by the Metropolitan Asylums Board (now L.C.C.) ('Phone: City 7200).

For Non-Infectious Cases—The Ambulances of the Metropolitan Asylums Board (now L.C.C.). Minimum fee 10/-.)

For Accidents—The London County Council and the St. John Ambulance Association.

For Maternity—The London County Council Ambulances ('Phone Hop 5000).

Clinics and Treatment Centres.

Ante-natal and Post-natal Clinic. (Municipal.)

10, John Street Tuesday at 2 p.m.

Maternity and Child Welfare.

10, John Street (Municipal)	{ Tuesday Wednesday Thursday Friday }	at 2 p.m.
------------------------------------	--	-----------

St Giles' Buildings (Municipal)	{ Monday Thursday }	at 2 p.m.
--	------------------------	-----------

(Short's Gardens)	{ Thursday Friday }	2-4 p.m. 6-7.30 p.m.
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Minor Ailments Clinic. (Municipal.)

10, John Street	{ Tuesday Friday }	at 2 p.m.
------------------------	-----------------------	-----------

Diphtheria Schick Test and Immunisation. (Municipal.)

10, John Street	Wednesday	at 2.30 p.m.
------------------------	-----------	--------------

General.

Bloomsbury Dispensary, 12, Bloomsbury Street ... Daily.

Acute Rheumatism (Children), up to age of 12 years.

Hospital for Sick Children, Great Ormond Street Daily.

Dental.

10, John Street, for expectant and nursing mothers
and children up to 5 years ... Thursday at 2 p.m.

10, John Street, General and for Tuberculous Patients Tuesday at 6.30 p.m.

School Clinics—Provided by the London County Council (see page 115).

Day Nurseries.—Established and controlled privately:—

Kingsway Crèche, Kingsway Hall, Kingsway.

Field Lane Institution Crèche, Vine Street, Clerkenwell Road.

St. Alban's Day Nursery, Greville Street.

Tuberculosis Dispensary.

At University College Hospital (entrance in Huntley Street).

Venereal Diseases.—Treatment clinics are arranged by the London County Council. Those in the Borough are:—

St. Paul's, Endell Street, daily 8 a.m. to 10 p.m.,

Hospital for Sick Children (for children only), Great Ormond Street, 9-10 a.m. daily
and 2-4 p.m., except Wednesday and Saturday.

Cleansing Station for Verminous Persons.

Goldsmith Street, Drury Lane.

Public Health Officers of the Local Authority.

See list on page 7.

Professional Nursing in the Home.

General.—The Metropolitan District Nursing Association of 31, Bedford Place, provides skilled nurses for the sick poor.

Infectious Diseases.—By arrangements made by the Borough Council with the Nursing Association, nurses are available for cases of:—

Summer Diarrhoea (in children under 2 years of age).

Measles with severe complications.

Whooping Cough with severe complications.

Lobar Pneumonia.

Influenzal Pneumonia.

Ophthalmia Neonatorum.

Pemphigus Neonatorum.

Puerperal Fever.

Puerperal Pyrexia.

Tuberculosis.

Maternity.—By arrangement with the Metropolitan District Nursing Association, skilled maternity nursing is available for necessitous maternity cases subject to the prior approval of the Maternity and Child Welfare Committee or the Medical Officer of Health, also for complications after confinement, including deficient lactation.

Contributions towards the service are required in connection with maternity nursing and the nursing of puerperal fever and puerperal pyrexia, the amount being assessed according to ability to pay.

Midwives.—The Borough Council does not employ or subsidise any midwives.

Home Helps.—Home Helps are available for service in homes during confinements—contributions towards the cost are required in accordance with ability to pay.

Chemical Work.—Particulars of the work carried out by the Public Analyst are included in pages 47-49.

Bacteriological Work.—Bacteriological work is carried out for the Borough Council by the Royal Institute of Public Health, 37, Russell Square.

Births and Deaths—Registration.

Holborn Sub-District (Eastern half of Borough).

20a, Harpur Street Theobalds Road.

Daily, 9.30 a.m. to 10.30 a.m. Wednesday evening, 6 to 8 p.m.

St. Giles and Bloomsbury Sub-District (Western half of Borough).

Oakley House, 14, Bloomsbury Street.

Daily, 11 a.m. to 12 noon. Monday and Friday, 2 to 3 p.m.

Population and Houses.

The following estimate of population as supplied by the Registrar-General has been adopted for the calculation of the death-rate and birth-rate of the Borough for the year 1929—38,380.

The density of the population in 1921, according to the Census of that year, was 107 persons per acre contrasted with 60 persons per acre for the County of London.

The character of population shows wide and striking contrasts, including as it does the occupants of expensive residential flats, the migratory population in the large hotels, the student class in the Bloomsbury boarding houses, residents in large commercial, social and philanthropic hostels, working class population in model dwellings and tenement lodging houses (many of whom are very poor), and a relatively large proportion of very poor people in common lodging houses.

Although the number of hotels and boarding houses keeps increasing, the Borough continues to become less residential and more important as a business centre. The number of factories, workshops, workplaces and offices keeps increasing so that we are adding to our large and crowded day population of London's workers.

The population in the 999 L.C.C. tenements in the Borough was estimated at 3,490. The number of deaths was 32, a death-rate of 9.1 per 1,000, considerably below the average death-rate for the whole of the Borough (15.6).

On the other hand the number of deaths of residents of Common Lodging Houses in the Borough, which contain 835 beds, was 66 which, calculated on the number of beds, was a rate of 79 per 1,000.

The birth-rates and death-rates given in this report are the crude rates, that is to say no correction has been made for sex and age distribution. The population of the borough, however, is such that probably a truer indication of the birth and death incidence would be indicated by rates corrected for such distribution. As, however, the Registrar-General in his summary tables and statistical review gives crude rates only, it is thought better for comparison purposes to adopt the same principle for this report.

The report of the Census, 1921, points out that the City of London and Holborn stand rather apart from the other Boroughs, owing to the general unsuitability of their dwellings for private family occupation. Here the relatively high population of males is similar to that found in the industrial areas; but there are fewer young children and the population is in consequence above the normal as regards age.

In rateable value Holborn ranks only lower than the Cities of London and Westminster and eight other London Boroughs, and is higher than such extended Boroughs as Battersea, Camberwell, Hackney, Lewisham and Southwark.

Registered Births.

The total number of births registered as occurring in the Borough was 256 (120 males and 136 females). Of these, 243 were legitimate and 13 illegitimate.

Corrected Births and Birth-Rate.

I received from the Registrar-General information of the births in outlying institutions in London of 114 legitimate infants and 34 illegitimate infants whose mothers were residents of the Borough. Twelve of the births occurring in the Borough, 7 legitimate and 5 illegitimate, were infants of mothers who were non-residents of the Borough.

The following table gives the corrected number of births and the corrected birth-rates for the twenty years 1909-1929:—

Year.	Total Births.		Legitimate Births.			Illegitimate Births.		
	No.	Rate per 1,000 of Population.	No.	Rate per 1,000 of population.	Proportion per 1,000 total Registered Births.	No.	Rate per 1,000 of population.	Proportion per 1,000 total Registered Births.
1909	986	19.26	935	18.27	948.2	51	0.99	51.8
1910	1,017	20.27	959	19.11	943.0	58	1.16	57.0
1911	920	18.73	865	17.61	940.2	55	1.12	59.8
1912	901	18.76	835	17.38	926.7	66	1.38	73.3
1913	798	16.99	743	15.82	931.1	55	1.17	68.9
1914	765	16.33	705	15.05	921.6	60	1.28	78.4
1915	670	14.44	616	13.28	919.4	54	1.16	80.6
1916	649	15.63	585	14.09	901.4	64	1.54	98.6
1917	571	14.50	496	12.60	868.7	75	1.90	131.3
1918	497	12.06	428	10.38	861.2	69	1.68	138.8
1919	539	13.56	477	12.00	885.0	62	1.56	115.0
1920	827	20.84	749	18.87	905.7	78	1.97	94.3
1921	648	14.88	593	13.62	915.1	55	1.26	84.9
1922	664	15.49	602	14.04	906.6	62	1.45	93.4
1923	595	13.71	547	12.61	919.3	48	1.10	80.7
1924	578	13.36	532	12.30	920.4	46	1.06	79.6
1925	527	12.16	490	11.31	929.8	37	0.85	70.2
1926	535	12.38	489	11.32	914.0	46	1.06	86.0
1927	505	11.96	452	10.71	895.0	53	1.25	105.0
1928	473	12.04	436	11.10	921.8	37	0.94	78.2
1929	392	10.21	350	9.12	892.9	42	1.09	107.1

In London the corrected birth-rate in 1929 was 15.7 per 1,000 in comparison with 15.9 for 1928.

In Holborn, as in most other districts, there has been a marked reduction in the birth-rate in the last 20 years, the rate for 1929, only 10.21 per thousand, being the lowest on record.

Mortality.

The total number of deaths registered as occurring in the Borough was 766, of which 415 were males and 351 females.

Of these deaths the following occurred in Public Institutions, etc., within the area of the Borough:—

Institution.	Residents.		Non-Residents.	
	St. Giles and Bloomsbury.	Holborn.	St. Giles and Bloomsbury.	Holborn.
French Hospital	—	—	39	—
Children's Hospital... ..	—	2	—	264
National Hospital	—	2	—	90
London Homœopathic Hospital ...	1	9	—	65
Italian Hospital	2	7	—	43
St. Paul's Hospital... ..	—	1	24	—
Private	—	—	16	3
Royal Westminster Ophthalmic Hospital	—	—	5	—
Total	3	21	84	465

There were 377 deaths of civil "residents" in various Workhouses, Infirmarys, Asylums, Hospitals, etc., outside the Borough, 66 of whom were removed from Common Lodging Houses in the Borough.

The deaths are further corrected by the Registrar-General by the inclusion of all deaths registered in the *calendar year* as distinct from the registration year of 52 weeks. This correction, together with deaths transferred from extra Metropolitan Institutions, accounts for the variation in the number of deaths given in the four quarterly reports of the Registrar-General and in his Annual Report. The final correction supplied by the Registrar-General for 1929 gives the total deaths for the Borough as 598.

Corrected Deaths and Death-Rates, 1929, compared with 1928.

Year.	Total Deaths at all ages registered in District.	Deaths in Public Institutions in District.	Deaths of non-residents of Borough registered in District.	Deaths of residents registered beyond the District.	Nett Deaths at all ages.	Death Rate for Borough.	Death Rate Registration London.
1928	739	574	546	338	531	13·5	11·6
1929	766	554	545	377	598	15·6	13·8

For details of causes of and ages at death, see Table II., page 130.

The principal cause of increase in the death-rate, as compared with 1928, was the deaths from influenza, 44 as compared with only 3 in the preceding year.

Seasonal Mortality.

The mortality in the four quarters of the year as given in the Quarterly Reports of the Registrar-General is shown below :—

	Deaths.	Death-rate per 1,000.	London Rate.
First Quarter	269	27.6	24.1
Second „	118	11.2	11.4
Third „	83	8.5	8.9
Fourth „	115	11.7	11.1
	585*	14.7*	13.9

Infantile Mortality.

The number of deaths of children under one year of age, and the number of deaths of children under one year of age per 1,000 corrected births, were the following :—

Year.	Deaths under 1 year of age.	Deaths under 1 year per 1000 corrected legitimate Births.	Deaths under 1 year per 1000 corrected illegitimate Births.	Deaths under 1 year per 1000 corrected Births.	London.
					Deaths under 1 year per 1000 Births.
1928 ...	27	57	54	57	67
1929 ...	29	77	48	74	70

Death-rate per 1,000 corrected births in 1929 and in ten preceding years.

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	Ave, 1919-28	1929
Holborn Borough	96	66	79	72	79	81	63	90	38	57	72.1	74
London ...	85	75	80	74	60	69	67	64	59	67	70.0	70

See also Table, page 112.

The figures on which the rates given in the Registrar-General's Quarterly Reports are based are necessarily only partly corrected; the final correction including the transference of births in institutions to the residential area of the parents is made before the publication of the Registrar-General's Annual Report.

*These figures, as published in the Registrar-General's Quarterly Returns for 1929, are for the 52 weeks ended 28th December; the complete corrections for the year 1929 increase the number of deaths to 598 and the rate to 15.6 per 1,000. The corresponding rate for London was 13.8.

Poor Law and Hospital Relief.

The Clerk to the Guardians of the Holborn Union has kindly supplied me with the following information relating to persons from the Holborn Division of the Union who received Poor Law Relief during the year 1929:—

Indoor Relief	...	...	...	...	1,108 persons
Outdoor Relief	...	...	...	...	308 cases
Outdoor Medical Relief	...	...	...	...	170 persons

Of the total number of 598 deaths, 401 died in hospitals and public institutions either within or without the Borough.

SANITARY CIRCUMSTANCES OF THE BOROUGH.

Scavenging.

The removal of house and trade refuse is carried out by contract. In the main thoroughfares, and in a number of other principal streets, there is a daily collection. In the remainder of the streets the collection is twice weekly.

The collection of house refuse from the main streets is completed by 9 a.m., the householders being required to put the bins on the kerb of the footway in front of their premises between the hours of 6 and 8 a.m. This earlier daily collection works well on the whole.

In a very large majority of the houses in the Borough, the old large fixed ashpits have been replaced by movable sanitary ashbins.

The number of notices served for the absence of, or defective, ashbins was 66.

Litter on the Public Way.

During the year considerable attention was paid to the question of litter on the public way alleged to arise from refuse blown or otherwise removed from dustbins placed on the footway in connection with the daily removal of house refuse. The London Traffic (Collection of Refuse) Regulations, 1927, prohibit in certain scheduled streets the use of vehicles for the collection of refuse between the hours of 9 a.m. and 7 p.m. The prohibition extends to 30 thoroughfares in Holborn—practically all the main roads. To enable the daily collection of house refuse to be completed in these streets by 9 a.m. occupiers are required to place the refuse on the kerb in front of their premises in small properly covered metal receptacles between the hours of 6 and 8 a.m. daily. In a number of premises there are no resident caretakers, the producers of the refuse being occupiers of lock-up shops, offices or larger premises. Many of these do not open until 9 or 10 o'clock in the morning and find it impracticable or inconvenient to comply with the requirement to place the refuse bins on the kerb between 6 and 8 o'clock in the morning; the practice has become common in the Borough as in other Central-London Areas for bins from such premises to be placed outside overnight. The number of bins put out in this way on various days in the week varies, but on an average some 200 bins are placed out each evening generally in entrance doorways or close against the building line, comparatively few being placed on the kerb. The contents of

these bins are from time to time disturbed and turned over by " totters " for pickings for which they presumably find a market, and by children in search of cigarette cards and other treasures of boys of to-day. Also, in the case of overfull uncovered bins paper and other light content is easily spilled around the bin and in windy weather is blown about up or down the street; but in the course of a number of inspections in the early morning and later afternoon it was found that much of the litter in the main thoroughfares did not originate from dustbins. It consisted of omnibus tickets particularly in the vicinity of omnibus stopping places, smokers' refuse—empty cigarette cartons, match boxes—evening newspaper bills thrown away by casual street news-sellers, paper bags and other refuse discarded by pedestrians, even waste vegetable matter and other trade refuse. To ascertain the extent to which an evening collection would improve the condition of the streets, the Public Health Committee decided to experiment with an evening collection in the daily streets on six consecutive evenings. It was anticipated that as the result of such collection an increased number of bins would be put out overnight. This anticipation was fulfilled. Inspections were made after each evening collection and although some improvement was noticed there remained a considerable amount of litter from other sources. The Committee were of opinion that the result achieved by the later collection was not commensurate with the extra cost involved and the experiment was discontinued. Steps have been taken to secure a stricter compliance with the by-laws governing the deposit of refuse on the kerb. Upwards of 500 letters and notices have been issued calling attention to improper receptacles or to metal receptacles overfull or not properly covered. This action has secured considerable improvement, but constant supervision in the early morning and late afternoon is essential. The Council has approved the appointment of a dust inspector who will devote his whole time to the supervision of the removal of house and trade refuse.

Improvement of Type of Dust Cart.

The Health Committee and the Council's officials have gone very thoroughly into the desirability of substituting dustless freighters for the motor wagons used for the removal of house refuse. Several meetings of a specially appointed Dust Sub-Committee were held, in which the Mayor took a special interest, the members of the Sub-Committee and the Public Health Staff inspected a large number of different types of dust collecting vehicles designed in this country and abroad, experiments extending over two weeks were made in the use of two different types of low loading freighters.

In view largely of the fact that the entirely satisfactory dust collecting vehicle has yet to be designed it was decided to defer the wholesale adoption of any one particular type of present dust cart. In the meantime the Contractors have provided two " Eagle Vulcan " freighters of a new design which included several improvements suggested by members of the Sub-Committee, the Town Clerk and the Public Health Staff.

The Borough Accountant was able to show that collection by these motor freighters was cheaper than by the horsed vehicles provided. To obtain the full advantage of such motor low loading vehicles they must work in pairs; a gang of dustmen is especially trained for the purpose.

The question as to the best type of dust collecting vehicle is being borne in mind; to secure first hand information for the Council the Mayor and Medical Officer have arranged to visit cities on the Continent.

Removal of Manure.

The removal of manure from the various mews in the Borough was satisfactorily carried out during the year. Again no complaint was received.

Sanitary Inspection of the District, including Premises and Occupations which can be controlled by By-Laws and Regulations.

In addition to my inspections, the Sanitary Inspectors made 20,652 various inspections and visits as set out in the following table. Each inspection frequently covers a number of different sanitary matters.

Sanitary Inspectors' and Health Visitors' Work Year, 1929.

	Mr. Bennett	Mr. Clark	Mr. Larard	Miss Charlesworth	Miss Stockwell	Mr. Wood	Total
Complaints received	42	26	46	...	...	8	122
Do. found to be justified ...	42	26	46	...	...	8	122
INSPECTION OF HOUSES—							
Dwelling-houses	56	193	77	...	...	22	348
Houses let in lodgings ...	323	416	236	21	...	8	1,037
Common lodging-houses ...	22	1	3	...	...	...	26
Schools ... ..	...	...	...	...	...	...	...
Drains tested by water ...	...	...	2	...	...	...	2
Drains tested by smoke ...	...	3	1	...	...	...	4
Re underground rooms ...	2	...	...	...	...	...	2
„ Rent (Restriction) Act ...	...	...	...	...	...	...	...
„ New Buildings	1	1	...	...	...	...	2
Factories—							
Bakehouses	15	8	...	...	...	...	23
Food preparation (other than above)	1	...	51	...	...	...	52
Other	48	50	212	...	...	...	310
WORKSHOPS AND WORKPLACES—							
Food premises:							
Dairies and Milkshops ...	8	18	1	...	...	...	27
Ice Cream, Manufacture ...	...	8	134	...	...	...	142
Do. Storage or Sale ...	...	11	4	...	...	...	15
Slaughter-houses ... ..	...	5	...	...	...	...	5
Hotels and Restaurants ...	48	27	126	...	...	...	201
Butchers	340	11	292	...	...	...	643
Bakehouses	7	4	5	...	...	...	16
Fish shops	52	4	12	...	...	...	68
Fried Fish shops	206	5	17	...	...	...	228
Market Streets	308	68	517	...	...	...	893
Licensed Premises ... ..	...	...	1	...	...	...	1
Other food shops	210	66	51	...	...	...	327
Other workshops	71	98	151	37	...	...	357
Other workplaces	85	88	76	...	...	...	249
Outworkers' Registers ..	19	42	54	...	...	...	115
Stable and Stable yards ...	40	40	...	...	...	...	80
Rag and Bone shops	64	5	...	...	...	...	69
Outworkers' rooms† ... ..	...	3	...	...	...	...	3
Offices	9	7	8	1	...	...	25
Inspections carried forward...	1,935	1,212	2,031	62	...	80	5,270

†All outworkers' rooms in houses let in lodgings (these comprise the larger majority), have been inspected but the visits have been counted under inspections of houses let in lodgings.

	Mr. Bennett	Mr. Clark	Mr. Larard	Miss Charles- worth	Miss Stockwell	Mr. Wood	Total
Brought forward	1,935	1,212	2,031	62	...	30	5,270
MISCELLANEOUS—							
Black smoke	61	22	177	...	...	...	260
Dust, Special Inspections ...	476	273	327	...	...	179	1,255
Rats and Mice (Destruction) Act	55	198	85	...	...	2	340
Sale of Food and Drugs Act, sampling	213	227	203	...	...	...	643
Demolition of Buildings ...	16	5	12	...	...	...	33
Other Inspections ... ..	...	2	1	1	10	...	14
Keeping of Animals	1	3	2	...	...	...	6
Periodical Inspections: Includes W.C. and yards, dust- bins, especially houses let in lodgings, and other suitable buildings	1,385	1,390	2,150	...	...	..	4,925
RE-INSPECTIONS—							
Houses	728	584	429	10	...	52	1,803
Factories	2	7	26	...	...	...	35
Workshops and Workplaces ...	75	58	77	1	...	...	211
Offices ... ..	...	...	1	1	...	...	3
Restaurants	3	2	5	...	...	...	10
Licensed premises ... ..	...	...	2	...	...	...	2
Miscellaneous ... ..	...	3	4	37	177	...	221
Visits <i>re</i> Infectious Diseases ...	101	130	131	97	144	9	612
Do. on School Reports ... ..	...	...	...	...	...	...	...
Scabies	1	...	...	...	...	...	1
Vermin ... ..	...	...	...	...	4	...	4
Lighting of Staircases	215	186	...	...	...	...	401
OTHER VISITS—							
Police Courts	5	1	2	...	...	...	8
Various	312	904	597	1	3	115	1,932
MATERNITY—							
Visits:							
††Children under 1 year ... ..	...	...	...	146	210	..	356
Do. 1 to 5 years... ..	...	...	...	6	9	...	15
Expectant Mothers ... ..	...	...	...	13	64	...	157
Re-visits:							
Children under 1 year ... ..	...	...	...	159	467	...	626
Do. 1 to 5 years... ..	...	...	...	153	369	...	524
Expectant Mothers ... ..	...	...	...	80	194	...	274
Other Maternity Visits ... ..	...	...	...	200	137	...	337
Attendances at Maternity Centres	...	...	...	190	185	...	375
Total	5,584	5,207	6,262	1,239	1,973	387	20,652

†† See page 103.

Notices Served.

The total number of notices served for nuisances found in dwelling houses and factories, workshops and workplaces, and premises subject to various By-laws, including notices requiring annual cleansing of houses let in lodgings, was 1,234, viz. :—

Public Health (London) Act, 1891—

Intimation Notices	463
Statutory Notices	58

By-laws—

Houses let in Lodgings	...	...	...	...	671
General	...	...	...	...	—
London County Council (General Powers) Acts—					
Verminous rooms	...	...	...	...	25
Ashpits	...	...	...	...	15
Rats and Mice (Destruction) Act, 1908	...	...	...	...	2
					1,234

The following table shows the work done to abate nuisances for which intimation notices were served:—

	Houses.	Factories, Workshops and Workplaces.
Water Supply—		
Provided	16	1
Cisterns cleansed, repaired etc.	35	3
Waterclosets—		
Cleansed	19	1
Water supplied, flushing cistern repaired, etc.	20	5
Repaired, new pans, etc.	124	11
Ventilation improved	1	7
„ to lobby provided or improved	—	6
Separate accommodation for sexes provided	—	7
Position or construction improved	3	3
Direct communication with workrooms remedied	—	9
Accommodation provided	6	1
Soil Pipes—		
Repaired, renewed and ventilated	4	2
Rainwater Pipes—		
Repaired or renewed	11	8
Drains—		
Repaired	11	7
Unstopped, cleansed, etc.	22	3
Sinks, etc.—		
Waste pipes repaired, renewed, etc.	24	3
Yards, Areas and Washhouses—		
Cleansed	23	1
Paved and paving repaired	15	1
Houses and Workshops, etc.—		
Cleansed	64	19
Dilapidations repaired and made good	45	5
Ventilation improved	2	—
Dampness—		
Roofs repaired	52	3
Gutters repaired	9	2
Other works to prevent dampness	12	—
Ashbins—		
Provided, repaired, etc.	44	22
Urinals—		
Repaired, cleansed, etc.	—	—
Various—		
Underground Rooms vacated	7	—
Smoke—Emission of black smoke abated	—	4
Accumulations of Refuse—Removed	16	2
Overcrowding abated	6	2
Other nuisances abated	17	18

Statutory Notices.

The following table shows the nuisances for which the 58 Statutory Notices were issued under the Public Health (London) Act, 1891.

			Houses	Factories, Workshops and Workplaces.
Section 2	(a) Dirty and dilapidated premises, etc.	...	23	1
"	(b) and Section 37, Ashbins	...	7	—
"	(c) Drains and W.C.'s	...	25	—
"	(d) Accumulation of rubbish	...	8	—
"	(e) Overcrowding	...	2	—
"	(f) and Section 48. Water supply	...	11	—
"	(g) Ventilation	...	—	1
" 38	W.C.'s communicating with workrooms	...	—	2
" "	W.C. dirty or defective	...	—	1
" "	W.C. Absence of separate accommodation for sexes	...	—	6
" "	Insufficient accommodation	...	—	3
" "	Ventilation of W.C. or lobby	...	—	3
" "	Black smoke	...	—	—
" 96	Underground rooms	...	3	—

By-Laws as to Houses let in Lodgings.

At the end of the year 502 houses were registered under these By-laws. Of these, 237 are in St. Giles and Bloomsbury and 265 in the Holborn District.

There were 1,037 inspections of these premises, excluding a very large number of periodical inspections and re-inspections. 169 notices were served for breaches of the By-laws, in addition to 502 notices that were served for annual cleansing as required by the By-laws.

Rag and Bone Dealers.

By-laws have been made by the London County Council under Section 9 of the London County Council (General Powers) Act, 1908, for regulating the conduct within the County of London (exclusive of the City of London) of the business of a rag and bone dealer and with respect to the premises in or upon which such business is carried on. These By-laws prohibit the sale or distribution by any person carrying on the business of a rag and bone dealer of any article of food or any balloon or toy, in or from any part of the premises used for or in connection with the business, or from any cart, barrow or other vehicle or receptacle used for the collection or disposal of rags, bones, fat, rabbit skins or other like article, or in any other way in connection with such business. The By-laws are supplemental to those made by the London County Council in 1923 respecting the same business. No breach of the By-law was discovered during the year.

Rats and Mice (Destruction) Act, 1919.

During the year 280 premises were inspected under the above Act, the total inspections being 340. Two notices for breaches of the Act were served. As a result, in all cases the rat runs were sealed up, in two cases old brick ashbins were abolished and sanitary bins substituted, and in two cases the cellars were paved.

RATS AND MICE (DESTRUCTION) ACT, 1919.

Summary of conditions found on inspections, action taken and results obtained.

WARD.	Number of premises inspected.	Number rat infested.	Action for Rat Repression.						RESULT.
			Traps.	Poisons.	Rat catchers.	Dogs.	Cats.	Proofing	
A.	10	1	—	—	—	—	—	1	Numbers reduced ... 1
B.	25	13	—	—	—	—	—	13	Free ... 2 Numbers reduced ... 11
C.	30	17	8	5	—	—	3	9	Free ... 16 Rats occasionally seen 1
D.	33	6	—	—	—	—	—	6	Free ... 6 Rats occasionally seen —
E.	24	14	1	3	2	—	—	13	Free ... 14
F.	56	24	2	15	5	—	—	17	Free ... 22 Numbers reduced ... 2
G.	32	6	1	3	—	—	—	4	Free ... 4 Numbers reduced ... 2
H.	45	16	8	11	7	—	2	3	Free ... 15 Rats occasionally seen 1
I.	25	9	3	4	2	—	1	—	Free .. 6 Rats occasionally seen 3
	280	106	23	41	16	—	6	66	Free ... 85 Numbers reduced ... 16 Rats only occasionally seen ... 5

The general arrangements made by the Council for rat repression included:—

(1) Systematic baiting in the Council's sewers, the bait used being small cubes of bread soaked in liquid extract of red squills and "Dalroc" which are found to be more effective than barium carbonate. The baits were laid in the sewers weekly during the year and four times during the first week in November. Thirteen gallons of the poison were used, making 12,000 baits. The men who work in the sewers report that the baits were taken and dead rats occasionally seen.

(2) The services of the Council's workmen were available for rat proofing subject to the cost of such service and the material used being defrayed by the owners or occupiers of the premises where the work was carried out.

(3) Arrangements were continued with firms of rat catchers for dealing with rat infested premises at the cost of the occupiers. This arrangement has proved useful and reports are from time to time received from the rat catchers employed respecting their inspections of the premises and the work ultimately carried out.

Where rat catchers are employed under the arrangements made by the Council, information is given to the Medical Officer of Health by the firms employed as to the work done and the results, but in many cases these or other firms are called in apart from the Council's arrangements and information in such cases may not be given to the local authority.

The question might be thought worthy of consideration whether it would be advisable and useful if statutory obligation were placed on all persons carrying out rat repression work to notify the presence of rats to the local authority. In the absence of a statutory obligation to do so, it would be unreasonable to expect the contracting firm to notify, as strong objection to such action might be taken by occupiers. On the other hand, knowledge of the presence of rats in a particular building might enable the local authority to initiate concerted action by owners of other property in an infested block and so enhance the prospect of dealing effectually with the pest. The firms who undertake rat repression work in the Borough under the arrangements made by the Council have agreed to furnish information of all their work in the Borough.

Rat Week.

In the observation of Rat Week in the Borough we endeavoured as in previous years to secure during the six days, 4th to 9th November, intensive action and co-operation by occupiers in rat infested blocks. As a corollary to this, the importance of systematic routine work for the extermination of rats and the prevention of rat infestation was emphasised.

Suitable poisons were sold in the Public Health Department and an increased quantity of rat baits laid in the sewers under the Council's control. It is customary to put down about 400 baits per week. During Rat Week the number was increased to about 1,300. The sewermen reported that dead rats are not often seen and they expressed the view that when dead the rats are washed away down the sewers, and further that there has been a decrease in the number of rats seen in the sewers during the past few years.

The results obtained from the special work in Rat Week are included in the summary table on page 22.

Rats from Disused Drains.

The London County Council (General Powers) Act, 1928, contains the following provisions with respect to disused drains:—

(1) The owner or (in default of the owner) the occupier of any premises in, under or attached to which there is to his knowledge a disused drain, shall give notice in writing of the existence of such disused drain to the council of the metropolitan borough in which the disused drain is situate.

(2) Any such notice as is required by sub-section (1) of this section shall be given by the person required by that sub-section to give the same—

(a) where any channel work or apparatus is a disused drain at the commencement of this Part of this Act forthwith after such commencement or soon after such commencement as the existence of such disused drain comes to the knowledge of such persons; or

(b) where a drain or any channel work or apparatus provided for use as a drain becomes a disused drain at any time after the commencement of this Part of this Act forthwith after it becomes to the knowledge of such person a disused drain.

(3) Any person who fails to comply with the foregoing provisions of this section shall be liable to a penalty not exceeding Five pounds. Provided that the occupier of any premises (not being also the owner thereof) shall not be liable to a penalty under this section for failing to give any such notice as aforesaid if he satisfies the court that he had reasonable cause to believe that the notice had been given by the owner of the premises.

(4) Proceedings for any offence under this section may be taken by the council of the metropolitan borough in which the disused drain in respect of which the offence is committed is situate.

Since the passing of this Act, opportunities have been taken to inspect vacant sites in the Borough to see whether the new powers should be used to enforce the sealing off of any disused drains that might have been left unsealed. In all, nine sites, equal to three acres, were inspected.

In the latter part of the year, there was evidence of the presence of rats on and in the vicinity of a site which had long been vacant and which was covered with an accumulation of builders' refuse. As a result of our action, the owners cleared the accumulation from the site, exposed the drains and completed their efficient sealing off.

On three of the nine sites inspected where it was found that the drains had already been properly sealed off, no nuisance from rats was reported.

On four sites, evidence of the sealing off of the disused drains was not obtained, but in three of these, there was no indication of any nuisance from rats. In connection with the fourth, it was reported that a few rats had been seen there at various times, but as a result of the use of dogs and ferrets, the nuisance had been abated.

On the remaining site, the demolition of the buildings is still in progress at the time of the preparation of this report; all the disused drains are being exposed and properly sealed off.

Careful watch is being maintained as to the presence of rats in dwellings surrounding all these sites.

Experience has shown us in Holborn that not only should disused drains be sealed off, but builders' refuse cleared; builders' refuse at times serves excellently as nesting places for colonies of rats.

Inspection of Workshops, etc.

The routine inspection of factories, workshops and workplaces has been carried out during the year. 385 factories were inspected, 515 workshops and 2,762 workplaces.

It is found that changes frequently occur in the occupation of workshops. To obtain information of such changes and further details of industrial conditions in the Borough a large number of visits and inspections were made in addition to the routine inspections mentioned above. As the result of these visits 31 premises no longer used for the purpose for which they had been registered were removed from the register of workshops. In some cases, owing to the introduction of machinery, former "workshops"

had become "factories" and the necessary transfer to the factory register was effected. Variations in the staff employed were also frequently reported. During the year 22 workshops were added to the register.

It was necessary to serve the following notices for the abatement of sanitary nuisances in factories, workshops and workplaces.

	Intimation Notices.	Statutory Notices.
Factories	26	5
Workshops	38	3
Workplaces	47	4
	<hr/> 111	<hr/> 12

Of the 613 workshops on the register at the end of the year

321 employed men only,
62 employed women only, and
230 employed both men and women.

The number of employees is often very small and many of the workshops are in tenement houses (houses let in lodgings).

No fewer than 151 different industries are carried on in these workshops, among the principal being the following :—

	No. of Workshops Employing			
	Men only.	Women only.	Both Sexes.	Total.
Boot makers and repairers	16	—	1	17
Builders	13	—	—	13
Cabinet makers	7	—	—	7
Carpenters	10	—	—	10
Clock and watch makers	12	—	1	13
Dressmakers and ladies' tailors	—	22	25	47
Diamond mounters	10	—	3	13
Engravers	14	—	2	16
Glass blowers	8	—	2	10
Jewellers	39	—	12	51
Lamp shade makers	—	3	3	6
Leather goods makers	5	—	4	9
Metal workers	6	—	1	7
Picture framers	9	—	1	10
Tailors	31	5	53	99

Factories.

These visits also afforded an opportunity for extending and revising information relating to "factories" in the Borough. Steps are being taken for the gradual compilation of a register of such places, and at the end of the year 446 factories had been entered on the register. Workshops are automatically converted, at a very small cost, into factories by the installation of a small electric motor; the health conditions then may no longer be inspected by the Borough Council's staff except as regards sanitary accommodation.

The 446 factories include 51 different industries. In 249 cases men only were employed, in 17 women only, and in 210 both sexes.

The more important industries carried on in these factories are :—

Bookbinding	-	-	-	20
Engineering	-	-	-	46
Jewellers' work	-	-	-	15
Metal work	-	-	-	12
Printing	-	-	-	94

The following is a summary in tabular form of the work done by the Inspectors in factories, workshops and workplaces in the year 1929 :—

	Mr. Bennett.	Mr. Clark.	Mr. Larard.	Miss Charles- worth.	Total.
Factories—					
Inspections ...	48	51	263	—	362
Re-inspections ...	4	5	26	—	35
Workshops—					
Inspections ...	87	80	151	37	355
Re-inspections ...	15	32	18	1	66
Workplaces—					
Inspections ...	88	85	86	—	259
Re-inspections ...	64	22	59	—	145
Offices—					
Inspections ...	9	7	8	1	25
Re-inspections ...	—	—	1	—	1
Bakehouses—					
Inspections ...	22	12	5	—	39
Re-inspections ...	—	—	—	—	—
Restaurants—					
Inspections ...	48	27	126	—	201
Re-inspections ...	1	3	4	—	8
Licensed Premises—					
Inspections ...	—	—	—	—	—
Re-inspections ...	—	—	2	—	2
Defects Found—					
Want of cleanliness ...	—	12	3	—	15
„ ventilation ...	—	1	4	—	5
Overcrowding ...	—	—	—	2	2
Want of drainage of floors ...	—	—	—	—	—
„ lavatory accommodation ...	—	—	—	—	—
Food improperly stored ...	—	—	—	—	—
Storage cistern defective ...	—	1	—	—	1
Accommodation for refuse ...	4	15	2	—	21
Accumulation of refuse ...	—	3	5	—	8
Insufficient ...	—	1	1	—	2
Unsuitable ...	1	4	14	—	19
Defective ...	2	5	5	1	13
Sanitary accommodation Not separate for sexes ...	—	2	4	—	6
Stopped ...	—	—	—	—	—
Foul ...	—	—	—	—	—
Direct communication with workroom ...	—	—	—	—	—
Other nuisances ...	2	15	16	—	33
Total defects ...	10	59	53	3	125

Action taken.

Matters referred to H.M. Inspector :—

Nuisances remediable by H.M. Inspector	...	...	—
Failure to affix abstract	...	...	7

Matters referred by H.M. Inspector :—

Notified by H.M. Inspector	25
----------------------------	-----	-----	----

Notices served.

	Mr. Bennett.	Mr. Clark.	Mr. Larard.	Miss Charles- worth.	Total.
Factories—					
Intimation	1	3	21	—	26
Statutory	—	1	4	—	5
Workshops—					
Intimation	7	18	11	8	38
Statutory	—	3	—	—	3
Workplaces—					
Intimation	—	19	12	—	31
Statutory	1	1	1	—	3
Offices—					
Intimation	—	2	1	—	3
Statutory	—	—	—	—	—
Restaurants—					
Intimation	—	3	5	—	8
Statutory	—	—	—	—	—
Licensed Premises—					
Intimation	—	—	1	—	1
Statutory	—	—	—	—	—
Legal Proceedings	—	—	—	—	—

Outworkers.

Lists received from Holborn Firms	163
Names and addresses received from other Authorities ...	402
Names and addresses sent to other Authorities ...	184
Notices served on Employers	39
Firms visited	113
Outworkers lists not kept	—
" " not sent	5
Infectious diseases in outworkers premises	1

Bacon Smoking Industry in Holborn.

There are two premises in the Borough which have been used for bacon smoking for a great number of years. These premises are old, but have been altered from time to time to meet modern requirements. The hygienic arrangements are generally satisfactory; they are well ventilated; there is ample accommodation for washing; dressing rooms are provided for the workers. The employers provide linen overalls and oilskin caps which are worn by the men when handling the bacon. Adequate and satisfactory facilities exist for the storage of cured sides and smoked bacon.

One firm has six smoke holes, the other four; 1,800 sides of bacon can be smoked at one time. The bacon is smoked for 36 to 48 hours, according to the season, longer in summer. The number of hours the bacon is smoked is important; it must be smoked long enough to be properly dried, but the longer the bacon is smoked the greater is the loss by evaporation (the loss in 48 hours is equal to 6 per cent. of the total weight) hence a tendency to under smoke the bacon has to be guarded against.

The bacon is imported already "cured" from Denmark, Sweden and Holland. the Continental method of "curing" bacon is, first to pump it, *i.e.*, brine is injected into it, and then the bacon is put into brine or pickle for about four days, after which it is drained for two or three days.

(The "dry-cure" method, practised chiefly in the West of England, is to "pump" the bacon in the thick parts, and then to place it in layers of dry salt. This process requires about 21 days to complete, and the bacon should then be left a little while to mature. The "dry-cure" method is obviously more expensive, but it is held to produce a higher quality article.)

Before export from the Continent, imported bacon is examined and certified as wholesome and free from disease by duly qualified men appointed by the various countries concerned, in accordance with the requirements of the British Government—in other words, the usual arrangement with regard to official certificates are carried out. The bacon is sent over in canvas wrappers, and is labelled and branded with the mark of the producer and the country of origin. Upon arrival at either of the Holborn depôts the wrappers are removed, the carcasses examined, wiped and dusted with pea meal before being placed in the smoke holes.

Some English bacon is also smoked here; one of the firms owns bacon curing factories in the West of England, from which they draw supplies as required. This arrives at Holborn "green," *i.e.*, "cured," and is then smoked in the same way as imported bacon.

Deal sawdust is laid upon the floors of the smoke holes; it is ignited and allowed to smoulder, and so produce the smoke in sufficient volume to ensure adequate smoking. Great care must be taken in order that sawdust from the correct source is obtained; sawdust from certain woods gives off pungent vapours which impregnate the bacon and gives it an undesirable flavour.

During the year, 3,067 lbs. of bacon have been condemned as unfit for food. Of this, 2,680½ lbs. were tainted and in varying stages of decomposition and the remaining 386½ lbs. were condemned on account of deep seated abscesses, the presence of which could not be determined until the sides were cut up.

The Making of Barometers and Thermometers.

Barometer and thermometer making appear to have been started in Holborn and Clerkenwell about the end of the 18th century by Italians who employed a number of young fellow countrymen as apprentices who lived on the premises in which they worked. The descendants of some of these Italians can still be found in Holborn, working as master men at the same trade.

Owing to the conditions under which the work was carried on, mercurial poisoning was at one time relatively common; usually the basement rooms of dwelling houses were used as workrooms in which the workers and apprentices not only ate their meals, but lived. The causes were not far to seek: the vitiation of the air by vapour from mercury, the gases given off by blow lamps, in the earlier days fed by colza oil and later by coal gas, combined with inadequate means of ventilation and inadequate arrangements for washing the hands before partaking of food.

As early as 1891, mercurial poisoning had become uncommon; although to-day stray cases are met with in this country; the hygienic improvements introduced have almost made the disease one of historic interest only. There are now no underground rooms in the Holborn area used for these purposes. The rooms which are used are adequately lighted and ventilated and periodically cleansed and lime-washed. Adequate washing accommodation is provided; the hours which young persons may work are limited; the trade, except for master men, is now followed almost entirely by English workers whose standard of education and living is considerably higher than that of those employed in the earlier days. Food is very rarely eaten in the workroom: as either a mess room is provided, or the workers go out to one of the many eating houses to be found in the vicinity. Competition has practically driven out the smaller employer, and has completely eliminated the domestic or semi-domestic workshops.

Thermometers and barometers are now more extensively used than at any previous period, although the mercurial barometer has largely given place to the aneroid.

I am informed by a large firm of Holborn manufacturers that the number of persons employed is much larger than it used to be, and for this reason: during the War, the scientific instrument trade was made a key industry, and since then has been benefited by a 33 $\frac{1}{3}$ per cent. import duty on all imported instruments.

This has gradually increased home trade, and although the small employer is now rare, the larger manufacturers employ more hands than they used to.

Type Founding.

Among the less common trades carried on in the Borough is that of a type founder. Although largely superseded for letterpress printing by the linotype and monotype machines there is still a demand for the ordinary type in certain classes of work, *e.g.*, book printing, the leading articles of newspapers, etc. The factory concerned in this work buys the various elemental metals and melts them in certain proportions at a small coke furnace to produce the necessary alloy which is run into the ingot moulds.

The type founding machines are each operated by a man, but are largely automatic. Over the machine is a gas heated metal pot in which the ingot is melted, and the metal kept in a molten state; the molten metal is automatically released in sufficient quantity to make one type, then is led to a mould which includes a copper matrix with the particular letter stamped in it. The type is then cast; it cools immediately, sufficiently to allow it to take its place on the closely packed travelling band which carries it to another part of the machine where it is cut to the correct height and the nicks cut in the side. After being examined as to height, etc., it is ready for use.

A large proportion of lead is used in the alloy for the type and careful cleanliness is necessary to avoid the risk of lead-poisoning. Ample lavatory basins with hot and cold water, soap and towels are provided at the factory entrances for the use of employees.

To prevent any danger to health arising from the heating of metal, an elaborate system of ventilation, including a small hood over each gas-heater, is provided; it terminates in a large exhaust fan in the roof which runs all the time machines are working.

Sanitary Condition of Offices.

The question of the sanitary supervision of offices is one of considerable importance in an area such as Holborn, containing as it does a very large number of professional and commercial offices. During the year 1929, 25 separate offices were inspected; in three cases it was found necessary to serve notices for the abatement of a nuisance.

The question has been raised as to the powers possessed by Metropolitan Local Authorities for the inspection and supervision of offices and the matter has, from time to time, been considered by the Metropolitan Boroughs Standing Joint Committee. A representation was made by that Committee to the Minister of Health asking for the introduction of legislation definitely granting to Local Authorities power for this inspection and supervision. In reply the Minister drew attention to the powers possessed by Local Authorities in London under the Public Health (London) Act, 1891, for dealing with insanitary premises, and the Minister considered that in view of the decision in the case of *Bennett v. Harding* (1900), the expression "workplace" which occurs in Sub-Section 2 of Section 38 of the Act, was wide enough to cover offices. Subsequently, however, a further letter was addressed by the Minister to the Standing Joint Committee expressing the hope that it would be found possible for some Metropolitan Borough Council to arrange for a test case. No such test case, however, has yet been taken.

There are, of course, in the Borough many blocks of offices which adequately conform to all reasonable hygienic requirements. Large corporations and industrial concerns recognise the value, in increased output, which comes from housing their clerical staff in good conditions. In small businesses the conditions are not always so satisfactory; lighting is poor and ventilation inadequate; this is particularly so where parts of large rooms are partitioned off for office purposes and where offices are situated in basements.

During the year a Bill was introduced in the House of Commons to regulate offices and the employment of young people therein. The Bill dealt with the sanitary condition of offices, overcrowding, underground offices, the provision of sanitary conveniences and rest rooms, means of escape in case of fire, restriction of period of employment and other cognate matters. The duty of enforcing the provisions of the proposed measure was placed on the local sanitary authority, except that in London the provision as to rest rooms and fire escape were to be enforced by the London County Council. The Bill was read a first time in November and although no further progress was made with the measure, it may be assumed that it indicated the trend of future legislation on this subject.

Glass Permeable to Ultra-Violet Radiation.

The use of such glass for windows in schools, work buildings and homes cannot but be regarded as highly desirable from a health point of view. This glass transmits the biological and therapeutic wave lengths of the ultra-violet rays and its general use, particularly in towns, would confer a benefit on school children at their lessons, workers in offices and shops, sick people confined to bed and residents generally in the crowded houses of our mean streets.

Smoke Abatement.

The smoke shafts in the Borough were frequently kept under observation and in 260 cases the inspections were recorded. A number of the observations were made in the early morning when smoke pollution is more prevalent. Frequently the observations extended for periods of not less than one hour. No complaints were received during the year of nuisances from the emission of smoke; as the result of the inspections made four notices were served.

During the year a Conference convened by the Greater London Smoke Abatement Committee was held at the Guildhall, and at the latter part of the year the recommendations made by the Conference were considered by the Public Health Committee. The recommendations covered the following points:—

Inspection of all chimneys other than those of private dwelling houses as a matter of routine.

Action under the Smoke Abatement Act with regard to smoke emitted in such quantity as to be a nuisance.

The emission of black smoke for two minutes in the aggregate within any continuous period of 30 minutes to be regarded as a nuisance.

Adequate instruction for officials dealing with smoke nuisances.

The establishment of classes at technical and other educational institutions for the training of stokers.

The Public Health Committee were able to report to the Council that for some years past in Holborn effect had been given to all the recommendations made by the Conference and attention was directed to the action taken by the Medical Officer of Health to encourage the establishment of classes for stokers (*see* A.R., 1929, p. 31).

It is gratifying to know that the domestic smoke problem is now receiving more attention and the control of domestic smoke appears to be reaching a more practical stage. Greater interest is being taken in the production and supply of smokeless fuel. In this connection it may be observed that gas coke is still largely neglected as a domestic fuel yet a good dry gas coke gives an ideal fire where the householder is sufficiently interested to learn how to use it. Unfortunately much coke is supplied to the public in a wet condition; all coke burnt should be quite dry. Vertical coke, *i.e.*, gas coke prepared in modern vertical retorts yields excellent fires in the all fire-brick grate; it only costs half as much as a coal fire. It would seem possible that we are nearing the time when the burning of raw coal in a domestic grate will be prohibited.

Personal observation by burning smokeless fuel in a slow combustion open grate shows that given ordinarily careful addition of fuel to the fire in time to prevent it going down a satisfactory fire is achieved with a warm dull red glow. Smokeless fuel should be invaluable in those instances, both domestic and office where for some reason down draught is difficult to prevent. We must all be cognisant of some chimneys where in spite of the careful attention of competent engineers their efforts do not result in removal of down draught, and in stormy weather the room, supposed to be ventilated by the chimney, becomes full of smoke with consequent defilement of valuable papers, some of which have to be handled frequently.

At a meeting of the Sunlight League in June, 1929, Sir Leonard Hill demonstrated an apparatus for measuring the ultra-violet rays which reach us from the sun. From the record published in the previous day's "Times," the strength of rays in Kingsway was $4\frac{1}{2}$ in comparison with 14 in Margate, the rays in London being cut out by smoke pollution.

HOUSING.

Common Lodging Houses.

The common lodging house accommodation in the Borough is equal to 22 beds per 1,000 of the population. The death-rate amongst common lodging house residents is very high; in this Borough it was 68.2 per 1,000 in 1929.

The following table gives details of the accommodation available in the common lodging houses in the Borough:—

Ward.			No. of Lodgers for which licensed.		Total.
			Males.	Females.	
Central St. Giles	7 & 11, Short's Gardens	William George Parker ...	234	—	234
Lincoln's Inn ...	Parker House, Parker Street	Frank Hunt (L.C.C.) ...	349	—	349
Lincoln's Inn ...	1-7, Macklin Street ..	Leslie Campbell Ruttledge	79	—	79
Lincoln's Inn ...	2-8, Kennedy Court ...	John Samuel Walters ...	—	78	78
St. George-the-Martyr	40, Eagle Street ...	Joseph Benton ...	50	—	50
St. George-the-Martyr	35, Devonshire Street...	Ada Elizabeth Chesterton	—	45	45

In London there is a shortage of common lodging houses for women. It will be observed that in this Borough is one of the common lodging houses for women started by Cecil Houses (Inc.) Women's Public Lodging House Fund, of which Mrs. Cecil Chesterton is the Honorary Organising Secretary. (There are three houses already open—one at 35, Devonshire Street, Theobalds Road, for 45 women and 2 babies; a second at 47/51, Wharfedale Road, King's Cross, for 58 women and 12 babies; a third at 194, Kensal Road, N. Kensington, for 60 women and 18 babies. A fourth house is now under reconstruction and will be open shortly).

Cecil Houses came into existence in 1926, to provide beds for homeless women. For one shilling a night they provide a bed, hot bath, hot tea and biscuits at night, tea and bread and butter in the morning, and facilities for washing clothes. A charge of 3d. is made for a cot. Cecil Houses resemble other common lodging houses, in that they are run on the lines of cheap hotels: no lodger is asked to help in the work of the house, etc., and no question is asked of anyone applying for a night's lodging.

All types of women use the houses; matchsellers, flowersellers, itinerant charwomen, domestics looking for situations, waitresses, women and children from the provinces and mothers with children who through the housing shortage are unable to find rooms. The Matrons are experienced, and more or less able to help in the different types of destitution. Since the houses started the Committee have been able to find jobs for over 400 women, and fit them out with clothes for the situations which, otherwise, they could not have taken.

Safeguards are adopted to prevent the spread of vermin; an inspection is made every morning of the beds. If any vermin be discovered (or a trace of disease found) the Public Health Authorities are communicated with and the bed and bedding sent to a disinfecting station. Such occurrences are infrequent, but if the woman again applies for a night's lodging she is asked, privately, if she would like to go to a cleansing station. If infectious disease is suspected she is asked if she would like to see the doctor free of charge. If these suggestions are declined, it is explained that in the circumstances she cannot be admitted, as to do so would be unjustly to expose other lodgers to infection; such refusals, however, are extremely rare.

The houses open at 8 p.m.; it is desired that the women leave in the morning by 10 a.m. Doubtless when circumstances permit the Committee will consider the desirability of providing day rooms: it would seem probable that at present such convenience, important as it is, could only be arranged at the expense of the more primary need of the provision of as many beds as possible for the money available which is being raised by public subscription. It costs a minimum of £7,000 to start a house, but once the premises are open they pay their way on the shillings contributed nightly by the lodgers.

Inspections.

During the year 619 houses occupied by the working classes were inspected; this number consisted of 502 registered lodging houses and 117 non-registered houses occupied by working classes. The total number of buildings in the Borough occupied for dwelling purposes is given by the Census, 1921, as 3,473. The number of tenements occupied by working classes as returned to the London County Council is 8,571. This figure represents the total tenements in the Borough consisting of one, two, three or four rooms.

Housing Scheme, Betterton Street.

In the Annual Report for 1928 reference was made to an extension of the Housing Scheme in Betterton Street by the construction of a second block of 15 flats, in accordance with plans prepared by the Borough Engineer, Mr. J. E. Parr, A.M.Inst.C.E. Owing to unforeseen difficulties the progress of the work was so much delayed that the flats were not available for occupation until April, 1930. **A very large number of applications for these flats was received. Many were from heads of families whose hours of work necessitates residence in the immediate locality or whose weekly income is too small to meet travelling expenses incurred by residence in an outlying district. Ample evidence was afforded of the urgent need for more accommodation for the working classes in the Central London area.**

Boswell Court Site.

The Housing of the Working Classes Committee devoted much time during the year to the consideration of proposals for a housing scheme on land in Boswell Court. Although for some years there has been no buildings on this land many difficulties, including the very high value of land in Central London, have hindered its use for housing purposes; but the strenuous efforts of the Committee have by now succeeded in overcoming much of the difficulty, and plans prepared by

the Borough Surveyor for the construction of about seventy tenements have been provisionally approved. It is hoped that during the year 1930 the site will be acquired and the work of construction commenced.

Accommodation on L.C.C. Housing Estates.

In the year 1924 arrangements were made by the London County Council for a certain number of houses on several of that Council's housing estates to be available for applicants nominated and recommended by the Metropolitan Borough Councils. The arrangement was primarily to secure reduction in overcrowding, that is, to provide housing accommodation for families residing more than 2 per room. It was, however, recognised that other cases of hardship existed and the scheme was extended to include these. Applications for such accommodation are submitted by residents in this Borough to the Public Health Department where they are examined and before submission to the London County Council the applicants are in all cases interviewed.

During the year 1929, 46 applications were submitted through the Public Health Department to the London County Council for such accommodation. In connection with these, at the date of the preparation of this report, five families have been accommodated; in three cases the applicants refused the accommodation offered, in two cases the applications were withdrawn, nine were refused by the London County Council and two obtained other accommodation. The remainder are still under consideration. In addition to the families for whom houses were provided, as mentioned above, notification was received during the year that accommodation had been provided for 12 other families whose applications were submitted in previous years.

This brings the total number of such cases from the Borough, for whom accommodation has been provided on London County Council estates since the scheme came into operation, up to 149 representing 63 per cent of the applications submitted.

HOUSING CONDITIONS.

Statistics.

YEAR ENDED 31ST DECEMBER, 1929.

GENERAL.

(1)	Estimated population	...	...	...	...	...	...	38,380
(2)	General death rate	...	...	...	...	...	...	15.6
(3)	Death-rate from tuberculosis (all forms)	...	...	...	...	...	...	1.19
(4)	Infantile mortality rate	...	...	...	...	...	...	74
*(5)	Number of buildings containing dwellings	...	...	...	...	(Census, 1921)	...	3,473
†(6)	Number of separate dwellings	...	...	...	...	(Census, 1921)	...	7,202
‡(6a)	Number of working-class tenements	...	...	...	...	(Census, 1921)	...	8,571
(7)	Number of new working-class houses erected	...	...	...	...	1 Block—(15 tenements) in course of construction	...	

*"Buildings."—A structure wholly detached or separated from another by a party wall, e.g., a block of flats is one building.

†"Separate dwelling," i.e., having separate access to street or common landing or staircase, e.g., each flat in a block is a separate dwelling, but a private house not structurally divided is a single unit whether occupied by one or more families.

‡"Working-class tenements," i.e., separate occupations of one, two, three or four rooms only.

The following information is required by the Ministry of Health to be set out in this report:—

Number of New Houses erected during the Year:—

- (a) Total (including numbers given separately under (b)) 1 Block (15 tenements erection continued)
- (b) With State assistance under the Housing Acts:
- | | |
|--|-------|
| (i) By the Local Authority | } nil |
| (ii) By other bodies or persons | |

I.—INSPECTION OF DWELLING-HOUSES DURING THE YEAR.

- | | |
|--|-------|
| (1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) | § 850 |
| (2) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 ... .. | \|\| nil |
| (3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation | nil |
| (4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation | 352 |

II.—REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers ... Not known

III.—ACTION UNDER STATUTORY POWERS DURING THE YEAR.

A. Proceedings under Section 3 of the Housing Act, 1925:—

- | | |
|---|-----|
| (1) Number of dwelling-houses in respect of which notices were served requiring repairs | nil |
| (2) Number of dwelling-houses which were rendered fit after service of formal notices:— | |
| (a) by owners | nil |
| (b) by Local Authority in default of owners | nil |
| (3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close | nil |

§ Practically all these houses were tenement houses containing a number of tenements.
 ¶ All the more insanitary houses are always annually inspected.

B. Proceedings under Public Health Acts:--

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	352
(2) Number of dwelling-houses in which defects were remedied after service of formal notices:—	
(a) by owners	352
(b) by Local Authority in default of owners	nil

C. Proceedings under Sections 11, 14, and 15 of the Housing Act, 1925:—

(1) Number of representations made with a view to the making of Closing Orders	nil
(2) Number of dwelling-houses in respect of which Closing Orders were made	nil
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	nil
(4) Number of dwelling-houses in respect of which Demolition Orders were made	nil
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	nil

Construction of Underground Rooms.

The use of underground rooms for sleeping purposes in London is subject to compliance with the provisions of the Public Health (London) Act, 1891, the Housing Act, 1925, and especially the Regulations made by Local Authorities under the latter Act. In Holborn there recently has been occasion to consider questions relating to the *construction* of underground rooms.

Plans for new buildings have to be submitted to the London County Council for approval under the London Building Act and to the Local Authority for approval so far as drainage work is concerned. For the latter purpose plans were submitted in connection with a block of flats proposed to be constructed in the Borough. The plans disclosed an intention to construct underground sleeping rooms. It appeared that the rooms if constructed as shown on the plans would not comply with the Regulations and their use for sleeping would have called for action to prevent illegal occupation. It seemed a weakness in Public Health law that no municipal authority has any power to prevent the construction of underground rooms which would not be in compliance with the Regulations when used as sleeping rooms. It is true that on occupation of the rooms the Local Authority could take steps to deal with the matter by way of closing order, but such a course in the case of newly-erected dwellings would, to say the least of it, be inconvenient for the tenant who had moved in in all good faith, uneconomical for the owner who might be faced with the loss of rent or considerable outlay for reconstruction, and

moreover might savour of harshness on the part of a Local Authority in the making of a closing order for part of newly-erected premises. In the particular case in question after correspondence and interviews the plans were amended and the underground rooms brought into conformity with the requirements. The absence, however, of any statutory power to prevent such rooms being newly constructed led the Housing of the Working Classes Committee to express the view that architects and others proposing to construct basement rooms in connection with new buildings should be required to submit for the approval of the Local Authority complete plans with appropriate specification and a declaration that the underground rooms proposed to be built would comply with all enactments dealing with the use of basement rooms. If the construction of such rooms cannot be entirely prevented it is not unreasonable to seek powers to ensure that when completed they will comply with the minimum requirements for living purposes.

The Council agreed with the views expressed by their Housing Committee and adopted a resolution accordingly. Copies of the resolution were sent to the Minister of Health, to the Metropolitan Boroughs Standing Joint Committee and to the Councils of the Metropolitan Boroughs and larger provincial towns asking them to take similar action.

Up to the present replies have been received from 42 Authorities, of these 33 supported the Holborn resolution, 9 disagree or decided to take no action.

FOOD.

Dairies, Cowsheds and Milkshops.

By the provisions of the Milk and Dairies Order, 1926, made under the Milk and Dairies Consolidation Act, 1915, no person is allowed to carry on the trade of a dairyman or use any premises as a dairy unless he and such premises are registered with the local sanitary authority. Power is given to the sanitary authority under the Milk and Dairies (Amendment) Act, 1922, under certain conditions to refuse to register a retail purveyor of milk or to remove such person or premises from the register. In connection with the duties imposed on the Council respecting registration, opportunity is taken before entering the premises or the name of the applicant on the register to inspect the premises proposed to be used for the dairy purpose, to ascertain whether they are suitable for the sale of milk thereon. From time to time it has been necessary to postpone registration pending the completion of works found to be required.

At the end of the year 1929, the number of registered dairies and milk shops in the Borough was 127; 1 retail dairy or milkshop was newly registered and 3 were removed from the register on the closure of the businesses. In 2 cases alterations in the register became necessary owing to change of ownership.

In addition to my inspections the Sanitary Inspectors made 83 inspections of milk premises and it is satisfactory to record that it was not found necessary to serve notice for sanitary defects or breach of the Orders in any case.

Itinerant Milk Vendors.

In connection with the sale of milk in the Borough by itinerant vendors, it is our practice, when such milk sellers are not registered by the Council, to communicate with the Medical Officer of Health of the district in which the vendor states he is registered, or in which is situated the address appearing on the barrow, in order to obtain confirmation of registration and ascertain whether the premises of the milk seller, where the milk is stored, utensils cleansed, etc., are in a satisfactory state.

Residue from Milk Clarifiers.

As it would seem probable that pigs have been infected with tuberculosis as a result of feeding with infected milk and slime from clarifiers, enquiry was made at the various establishments in the Borough where milk is cleansed by clarifiers to ascertain what is done with the residue after the milk has been passed through the cleansers. It was found in one case that this residue is at once destroyed by burning in a furnace used in connection with a pasteurising plant, in all other cases it is at once washed down the drains.

Bacteriological Examination of Milk.

Twenty-four samples of milk were examined for the presence of tubercle bacilli ; six of these were also examined to ascertain the number of organisms per cubic centimetre and the smallest volume containing *B. coli*.

Examinations for tubercle bacilli were carried out by animal inoculation ; one of the samples examined was found to contain tubercle bacilli.

Cleanliness of Milk Examined.

Date sample taken.	Nature of Shop where purchased.	No. of Organisms per cc. grown at 37° C for 24 hours.	Minimal volume containing <i>Bacillus Coli</i> .
1929			
Dec. 6	Small general shop ...	138,656	0.01 cc.
Oct. 4	Milkshop (large trade)...	38,200	0.001 cc.
Nov. 7	Milkshop (do.) ...	30,100	0.01 cc.
Oct. 11	Milkshop (do.) ...	29,500	0.1 cc.
Dec. 6	Milkshop (do.) ...	21,400	0.1 cc.
Nov. 7	Milkshop (do.) ...	6,500	Absent in 1 cc.

The cleanliness of the milk thus investigated is more or less satisfactory, but obviously there is room for improvement. Cleaner methods of milk production are being promoted by "clean milk competitions," fortunately more of these are being held and the number of entries are increasing. The hygiene of milk premises is being pulled up in accordance with powers given under the Milk and Dairies Order, 1926. But at the same time there is much to be said in favour of a suggestion that the Minister of Health should be asked to define a bacteriological standard of cleanliness for ordinary (ungraded) milk.

Tubercle Bacilli in Milk.

Although only one of the 24 samples gave evidence of tubercle infection considerable benefit resulted from an examination of milk for tubercle bacilli; the sample of milk in question was purchased from the occupier of a small general shop. A guinea pig killed three weeks after injection showed a somewhat enlarged spleen and a second guinea pig killed at six weeks showed tubercles in large numbers in an enlarged spleen and enlarged inguinal, mesenteric and mediastinal glands. The milk had been supplied to the Holborn retailer by large wholesale dealers. The wholesalers in reply to enquiry stated that the milk in question would no doubt have been lightly treated by heat and refrigeration, but it was impossible to ascertain its source as they drew their milk from numerous producers in various districts. The milk was not sold either to or by the retailer as "pasteurised" and there was no definite evidence that the sample was in fact obtained from a source where the milk was pasteurised as a routine. After some correspondence the wholesalers supplied a list of farms from which their milk was obtained, this covered seven counties; communications were accordingly addressed to the various County Medical Officers of Health concerned, and subsequently information was received that in one county a herd concerned with the supply had been investigated and one cow isolated suffering with tuberculosis (not advanced) and slaughtered. The Medical Officer of Health of another county intimated that as the result of an inspection of one of the farms concerned a cow was slaughtered under the Tuberculosis Order, 1925. From a third county information was received that a cow at one of the farms concerned was also slaughtered under this Order.

We have been adversely criticised by an eminent colleague on the procedure of taking "random" samples. Such criticism does not take sufficiently into account the need of bringing home to the public the existence of a grave problem. This critic, however, supports the position taken up in Holborn that pasteurisation is a half-way measure at best useful for the conservation of milk, but radically useless for the eradication of tuberculosis among bovines and consequently human tuberculosis of bovine origin. It stops the way to radical reform bringing in its train the prevention of the large losses to the British meat industry from the enforced destruction of tuberculous meat. **Conscientious fackling of the problem of tuberculosis in bovines would reinstate British agriculture in its original position.**

Consumption of Milk.

An opinion has been expressed that the development of milk production for sale as liquid milk has almost reached saturation point, but the consumption of liquid milk in this country is very little more than a quarter-pint per head per day. In far too many households milk is used not as a food but as a colouring agent for tea. To reach saturation point the daily consumption should be in the neighbourhood of one pint per head per day. We preach this doctrine day in and day out whenever a suitable opportunity arises.

Milk and Dairies Order, 1926.

Some difficulty is experienced in securing strict compliance with the provisions of the above Order, so far as the cleansing of vessels and appliances is concerned. The Order provides for every vessel, lid and appliance to be thoroughly washed as soon as may be after use and to be cleansed and scalded with boiling water or steam before its use again. The cost of providing proper steam chests is such that

the small retail milk seller is not willing to comply with a suggestion that this course should be taken. In shops where there is only a counter trade probably the vendors cannot reasonably be expected to buy a relatively expensive steam chest, but in milk businesses where there is a round entailing the use of cans or bottles it is essential for strict compliance with the Order that proper plant should be installed.

The Milk (Special Designations) Order, 1923.

During the year 1929 licences available up to the 31st December, 1929, for the sale of designated milk in the Borough were issued as follows:—

Certified Milk	...	...	...	...	...	...	2
Grade A (Tuberculin Tested)	...	...	...	...	...	...	2
Grade A	...	...	...	...	...	...	1
Pasteurised	...	...	...	...	...	...	3

Up to the date of preparation of this report licences for the year 1930 have been issued as follows:—

Certified Milk	...	...	...	...	...	...	3
Grade A (Tuberculin Tested)	...	...	...	...	...	...	4
Pasteurised	...	...	...	...	...	...	3
							<hr/> 10 <hr/>

Condensed Milk.

Samples were taken and examined in order to see that the Public Health (Condensed Milk) Regulations, 1923, were satisfactorily carried out.

During the year 1929, seven samples of condensed milk, viz., five full cream, and two skimmed sweetened, were examined by the Borough Analyst. All the samples complied with the requirements of the Regulations as to labelling and as regards the standard of composition they were found to be equal to or above the standard required. The results are seen below:—

Chemical Examination of Condensed Milk.

				Percentage of milk fat.	Percentage of milk solids (including fat).
Full cream sweetened	...	...	...	10.0	32.8
"	"	...	...	9.1	32.6
"	"	...	...	9.0	32.6
"	"	...	...	9.4	31.9
"	"	...	...	9.1	31.8
Skimmed	"	...	...	0.4	31.1
"	"	...	...	0.8	29.9

Public Health (Dried Milk) Regulations, 1923.

Very few brands of dried milk are sold in the Borough. Four samples, covering those generally used, were obtained during the year, and found to comply with the Regulations which are generally similar to those with regard to condensed milk.

Margarine.

The registration with the local Food and Drugs Authority of wholesale margarine dealers was required by Section 9 of the Margarine Act, 1887, as extended by Section 7 of the Sale of Food and Drugs Act, 1899. Under this Section every wholesale dealer in margarine was required to keep a register showing the quantity and destination of each consignment and the register is open to inspection by any officer of the Board of Agriculture. The Local Authority has no power to refuse registration or to set up any standard of requirements before effecting such registration. The provision is continued by Section 8 of the Food and Drugs (Adulteration) Act, 1928.

There are five registered dealers in the Borough.

Margarine is one of the chief articles of fatty food eaten by the poorer part of the community; it is therefore highly desirable that this substitute for butter should be brought up to the same standard of vitamin potency as butter. Until this is done the menace of health arising from the continual and ever increasing substitution of butter by margarine will remain serious.

Bakehouses.

At the end of the year 1929 there were 25 bakehouses in the Borough of which 18 were factory bakehouses. Although these are described as "factories" they are not large and only supply local needs; a number were formerly workshops and are now classified as "factories" owing to the installation of machinery.

During the year, in addition to my inspections, there were 39 inspections of bakehouses.

Sale of Fish.

During the past year 68 inspections were made of the fish shops and fish stalls in the Borough, exclusive of market street inspections. There were 10 fish shops of which five were in the Central Fish Market (a part of the Smithfield Central Markets, Farringdon Road, the fish being sold by retail). Both wet and dried fish were found to be sold at all the shops; at five, shell fish was also sold. In one instance only, a small quantity of fish was smoked on the premises. In addition to the shops referred to above, there are five stalls in the Borough for the general sale of fish. There is also a shop in the Borough for the sale of shell fish only and two for the sale of stewed eels. These premises were also kept under observation.

A practice which there is reason to believe is becoming more common is that of dyeing dried fish to a colour likely to mislead a customer as to the exact nature of the fish purchased. Examination of samples of such coloured fish has shown that the colouring matter is not harmful and its use is not contrary to the Regulations. Nevertheless the practice cannot be regarded as commendable, and is certainly not one likely to be to the advantage of the consumer.

Fried Fish Shops.

There are also 11 fried fish shops. These are regularly inspected to see that they are kept in conformity with the by-laws made by the London County Council. During the past year 228 inspections of these premises were made. At the same time a careful look-out has been kept on the soundness of the fish and the wholesomeness of the materials used in frying. During the year a sample of fried fish submitted to the Borough Analyst for examination was found to be "genuine."

Market Streets.

There were 893 inspections of market streets, each of which includes a number of stalls at which meat, fish, fruit and vegetables are sold. These streets are regularly inspected daily and on Saturday evenings and Sunday mornings.

The daily inspection of these market streets helps to secure the maintenance by the regular stallholders of good, sound food only, and, in addition, has the effect of keeping away from these markets casual and unsatisfactory hawkers, who generally avoid markets subject to regular and strict supervision.

In order to minimise as far as practicable any contamination of the food exposed for sale in market streets from dust arising during street cleansing, the Borough Surveyor has arranged for these streets to be sufficiently watered before the scavenging to prevent dust arising.

Street Trading.

The London County Council (General Powers) Act, 1927, by Part VI, conferred powers on Local Authorities in London to issue licences to street traders and made it unlawful for any person to sell or expose, or offer for sale, any article or thing from or upon any barrow, cart, stall, or other receptacle occupying a stationary position at a place in the carriage way or footway of any street in any Metropolitan Borough, without such licence. The Act also provided for the making of by-laws by the Borough Council relative to various matters cognate to such street trading, including the storage of and the sanitary supervision (while at the place of intended sale or exposure or offering for sale) of articles of food intended to be sold or exposed or offered for sale under the authority of the licence. By-laws made by the Holborn Council in pursuance of these powers were approved by the Home Secretary and came into operation in the early part of 1928. The enforcement of the by-laws, so far as they deal with the sanitary supervision of the articles exposed for sale, is being undertaken by the Public Health Department.

I received information from the Borough Engineer respecting 100 applications from street traders for licences to sell various articles of food as follows:—

Coffee stalls	6
Confectionery	5
Confectionery and drinks	5
Eels and shell fish	3
Fish—wet and dry	7
Fruit	28
Fruit and vegetables	11
Groceries	3
Ice cream	7
Ice cream and chestnuts	8
Meat	3
Poultry, eggs and provisions	3
Vegetables	11
	<hr/>
	100
	<hr/>

All the storage places situated in the Borough were inspected; communications were sent to the Medical Officers of Health of the districts in which storage places outside the Borough were situated, with a view to inspections being made to ascertain that the storage was under satisfactory conditions. In three cases unsatisfactory conditions were reported and as a result of the action taken the storage in all three was removed to satisfactory premises. In one case although the applicant applied for a licence for the sale of fruit and flowers, it was found that flowers only were sold and in two cases no use was made of the licences issued.

Ice Cream.

With a view to more efficiently dealing with the manufacture, storage and sale of ice cream, provision was included in the London County Council (General Powers) Act, 1928, for the registration with the sanitary authority of premises proposed to be used for such purposes. The provision does not apply to premises occupied as a factory or workshop, respecting which notice is required by Sub-Section I of Section 127 of the Factory and Workshop Act, 1901, nor to any premises used as an hotel, restaurant or club. Although the provision requiring registration of these premises is welcomed as a progressive step towards the better control of the manufacture, storage and sale of this commodity, it is to be regretted that no power is given to local authorities, to refuse registration of unsuitable premises. It is also to be regretted that opportunity was not taken in connection with the promotion of this legislation to include a definition of ice cream. Previous legislation dealing with the matter is contained in the London County Council (General Powers) Act, 1902.

The advantage of registration is that the existence of premises where ice cream is made, stored or sold, will be brought to the knowledge of the local authority; this information will enable the officers of the local authority to see that the provisions of the Act of 1902 are complied with.

The matter is of some importance in Holborn, because of the large quantity of ice cream manufactured in the area known as the "Italian Colony." In connection with the registration of such premises in the Borough a memorandum on the manufacture, storage and sale of ice cream was prepared by the Medical Officer of Health in 1928, and a copy is furnished to every applicant for registration (*see* A.R., 1928, p. 42).

During the year there were 42 premises in the Borough where ice cream was manufactured, and in addition to my inspections 157 inspections of these premises were made. It was not found necessary to serve any notice.

Nowadays the hygienic standard in large factories where ice cream is made is so high that the arrangements for making ice cream in smaller places suffer by comparison. There is no essential reason why ice cream should not be manufactured hygienically in these smaller places, but at the same time owing to this increasing tendency of large manufacturers to undertake the making of ice cream it behoves the makers of smaller quantities to have careful regard to the conditions under which the commodity is made.

Ice cream is manufactured in the Italian colony as follows:—

Premises on which 25 gallons made daily	...	...	1
" " 22 " "	...	...	1
" " 20 " "	...	...	3
" " 10 " "	...	...	4
" " 8 " "	...	...	1
" " 4 " "	...	...	2
" " 2 " "	...	...	9

In addition ice cream was also manufactured on the following premises:—

	Mr. Bennett's	Mr. Clark's	Mr. Larard's
	District.	District.	District.
Restaurants ...	4	1	2
Confectioners ...	1	6	2
Other ...	—	4	1

Bacteriological Examination of Ice Cream.

Date 1929.	Where purchased.	Organisms per cc. on Agar at 37° for 24 hours.	Streptococci present in 1 cc.	Coliform organisms Minimal volume showing presence.	B. Enteritis sporogenes.
21/8	Shop (greengrocer)	896,000	Present ...	0.001 cc.	Absent in 1 cc.
"	Shop (confectioner)	1,536,000	Present ...	0.001 cc.	Present in 1 cc.
"	Shop (greengrocer)	3,078,000	Present ...	0.001 cc.	Present in 1 cc.
"	Shop (confectioner)	15,360,000	Present ...	0.000001 cc.	Present in 1 cc.
"	Shop (confectioner)	119,000	Absent ..	0.01 cc.	Present in 1 cc.
"	Street barrow	7,920,000	Absent ...	0.000001 cc.	Present in 0.1 cc.
28/8	Shop (dairy)...	1,760,000	Present ..	0.00001 cc.	Absent in 1 cc.
"	Shop (confectioner)	648,000	Present ...	0.01 cc.	Present in 1 cc.
"	Shop (confectioner)	780,000	Present ...	0.01 cc.	Present in 1 cc.

The conditions under which cream is sold in the streets have become more satisfactory of late years. The practice of making ice cream sandwiches in the street is becoming less; ice cream is being more and more sold in the form of small bricks wrapped in grease-proof paper or the ice cream is enclosed in paper cartons.

The hateful practice of vending ice cream in glasses to be licked by small boys and others is dying out.

The bacteriological examinations were carried out at the Royal Institute of Public Health. Samples were delivered at the laboratory of the Institute immediately after purchase and arrangements were made for the examinations to be commenced forthwith.

In all cases the ice cream examined was made at premises in the Borough kept under regular supervision.

In the case of the sample found to contain more than 15 million organisms per cc. the premises where the ice cream was made were re-inspected and found to be satisfactory. The maker agreed that in future all utensils used in the manufacture should be sterilised regularly before use.

Where ice cream sold in the Borough is made at premises outside Holborn, it is our practice to ask for information as to the conditions of manufacture from the Medical Officer of Health of the area concerned. On the other hand, we receive a number of such enquiries from other districts respecting ice cream made in Holborn, principally in the "Italian Colony," and sold in other districts.

Public Health (Meat) Regulations, 1924.

These Regulations came into operation on the 1st April, 1925; they deal with slaughter-houses, meat marking, the handling of meat in wholesale markets, conditions of transport, the protection of meat in butchers' and other shops and on stalls from contamination by flies, mud and other contaminating substance.

The following summary shows the number of butchers' shops and meat stalls in the Borough, and the number of other shops where meat is sold:—

Butchers' shops	...	...	...	...	...	...	27
Butchers' stalls	...	...	...	...	...	...	3
Provision dealers	...	...	...	...	...	...	28
Provision dealers' stalls	...	...	...	...	...	...	3
Offal shops	...	...	...	...	...	...	3
Cooked meats	...	...	...	...	...	...	5
Wholesale (bacon; sausage)	...	...	...	...	...	...	3
							—
							72

All the butchers' shops and meat stalls in the Borough are regularly inspected to ensure compliance with the regulations; during the year 643 such inspections were made.

It is regretted that in a few cases (seven) the undesirable practice continues of exposing meat for sale outside the shop on stallboards projecting beyond the building line. If all butchers selling from shops were required to discontinue the practice of exposing meat in front of their shops it is difficult to see that any hardship would be caused. It is noteworthy that during the hot weather, in the best shops, very little meat is displayed; it is in the cold storage plant, but no one contends that the sale of meat is thereby prejudiced. Any attempt to convert the benches into imitation stalls is not in accordance with hygienic ideals. The existence of stalls in market streets in the form allowed by the Regulations is countenanced because it is thought their existence enables meat to be sold at competitive prices and so tends to bring down the prices generally at which meat is sold to the public.

In all instances in the Borough where meat is exposed for sale outside shops or on stalls suitable screens are provided and used for the protection of meat, as far as practicable, from dust, mud and other contaminating substances such as soot; frequent reinspections are made to see this is done.

Steps are being constantly taken to ensure that customers do not handle butchers' meat; improvement has occurred. In shops where "pieces" are sold a notice is exhibited urging customers not to handle meat before purchase, and forks are provided to enable the pieces to be turned over by purchasers without direct handling. As a result of their observations and enquiries the Inspectors report that the forks so provided are generally used.

That these Regulations are reasonable is shown by the ready response of the vendors to remedy any temporary omission either on their part or on the part of their assistants; it has not been necessary to serve a notice for any breach of the Regulations.

Places where Food is prepared for Sale.

Under this head are included kitchens of hotels, restaurants and eating-houses of all sorts, slaughter-houses, tripe, offal and other meat shops, fried fish, eel and other fish shops, premises where ice cream is made, and other places where food is prepared for sale, excluding bakehouses.

The number of such places on the register at the end of the year was as follows:—

Hotels, Restaurants and Eating Houses	248
Slaughter-houses	1
Tripe, offal and other meat shops	33
Fried fish shops	11
Fish shops	13
Ice cream (Manufacture)	42
Poulterers	4

During the year 2,366 inspections of such food premises and market streets were made and 12 notices served for sanitary defects found.

Unsound Food.

The following unsound food was condemned during the year 1929:—

Commodity.	Quantity.	Condition.	Result of Action taken.
FISH:—			
Cods' roes	14 lbs. ...	Offensive smell	Surrendered
Witches	3 stone ...	Decomposed	Do.
Catfish	7½ „ ...	Decomposed	Do.
VEGETABLES:—			
Carrots	1 ton	Rotten	Do.
French Beans	3 baskets ...	Decomposed	Do.
Onions	4 tons 4 cwt ...	Rotten	Do.
Brussell Sprouts	16 cwt. 1 qr. 6 lbs.	Decomposed	Do.
FRUIT:—			
Pears	2 cases... ..	Rotten	Do.
MEAT, ETC.:—			
Beef	2 cwt.	Damaged and covered with splinters of broken glass	Do.
Kidney	14 lbs.	Decomposed	Do.
Brisket	22 stone 3 lbs.	Tainted with paraffin ...	Do.
Bacon	1 ton 6 cwt. 2 qrs, 2 lbs.	Abscess-decomposed, tainted	Do.
Pheasant.	10 birds	Decomposed	Do.
Turkeys	6 birds	Decomposed	D

The Public Health (Preservatives, etc., in Food) Regulations.

In the year 1929 only four articles of food were found on analysis to contain preservative contrary to the provisions of the Regulations, namely, two sausages containing sulphur dioxide (reference to these is made on page 50), one sample of minced meat, preserved with sulphur dioxide (*see* page 50), and one sample of cream which contained boric acid (*see* page 50).

Every attempt is made to co-operate in any way possible with vendors of foodstuffs in the Borough. At the latter part of the year a prosecution was reported in the daily press of a retailer charged with selling caviare which contained preservatives contrary to the Regulations. The attention of grocers and provision merchants in the Borough likely to sell this commodity was drawn to the Regulations prohibiting the use of preservatives in caviare; the replies received expressed their appreciation of the action taken in this way.

Food and Drugs Adulteration Act, 1928.

On the 1st January, 1929, the Food and Drugs Adulteration Act, 1928, consolidating the four Food and Drugs Acts of 1875, 1879, 1899 and 1928, came into force. The Margarine Act of 1877 and the Butter and Margarine Act of 1907 are also included in the scope of the new Act. Much progress has been made by the consolidation of these Acts; the consolidation is a great convenience. Although the proportion of articles found adulterated is low the careful administration of the Act is valuable as a preventive measure.

Articles Analysed.

FORMAL SAMPLES.

ARTICLE.	Number Purchased	Result of Analysis		Proceedings taken.	Convictions.	Fines and Costs.
		Genuine.	Adulterated.			
Apricots, dried	1	1	...	...	...	...
Ale	3	3	...	...	...	...
Almonds, ground	3	3	...	...	...	...
Baking Powder... ..	2	2	...	...	...	...
Beans, tinned	1	1	...	...	...	...
Bicarbonate of soda	5	5	...	...	...	...
Borax	5	5	...	...	...	...
Brandy	1	1	...	...	...	...
Brawn	9	9	...	...	...	...
Bread and butter	3	3	...	...	...	...
Butter	62	62	...	...	...	...
Cake	6	6	...	...	...	...
Candied peel	3	3	...	...	...	...
Calomel ointment	3	3	...	...	...	...
Cheese	7	7	...	...	...	...
Christmas pudding	3	3	...	...	...	...
Cinnamon	2	2	...	...	...	...
Coffee extract	4	4	...	...	...	...
Coffee and chicory extract... ..	5	5	...	...	...	...
Cream	15	14	1	...	...	...
Crystallised fruit	3	3	...	...	...	...
Custard powder	2	2	...	...	...	...
Dripping	10	10	...	...	...	...
Egg substitute	4	4	...	...	...	...
Fish paste	6	6	...	...	...	...
Fish roll	1	1	...	...	...	...
Fruit cordial	1	1	...	...	...	...
Gall and opium ointment	1	1	...	...	...	...
Gin	3	3	...	...	...	...
Ginger ale	1	1	...	...	...	...
Ginger beer... ..	2	2	...	...	...	...
Glycerine	3	3	...	...	...	...
Glycerine and borax	2	2	...	...	...	...
Grape juice	2	2	...	...	...	...
Ice cream	9	9	...	...	...	...
Jam	6	6	...	...	...	...
Jam roll	1	1	...	...	...	...
Kola	1	1	...	...	...	...
Lard	6	6	...	...	...	...
Lemonade	2	2	...	...	...	...
Lemonade powder	2	2	...	...	...	...
Lemon juice	3	3	...	...	...	...
Lime juice cordial	6	6	...	...	...	...
Liniment	1	1	...	...	...	...
Liniment of iodine... ..	2	2	...	...	...	...

ARTICLE.	Number Purchased.	Result of Analysis.		Proceedings taken	Convictions.	Fines and Costs.
		Genuine.	Adulterated.			
Liniment of turpentine ...	7	7	...	...	...	...
Margarine ...	18	18	...	...	...	...
Marmalade ...	5	5	...	...	...	...
Meat paste ...	4	4	...	...	...	...
Meat pie ...	7	7	...	...	...	...
Meat, minced ...	6	5	1	1	1	£5 fine
Milk ...	176	173	3	1	1	Fine 30s. Costs, 10s. 6d.
Milk, condensed ...	7	7	...	...	...	...
Milk, dried ...	4	4	...	...	...	...
Minced meat ...	3	3	...	...	...	...
Oil, camphorated ...	2	2	...	...	...	...
Oil, olive ...	2	2	...	...	...	...
Ointment, blue ...	2	1	1	...	...	...
Ointment, boracic ...	2	2	...	...	...	...
Orange crush ...	1	1	...	...	...	...
Paregoric ...	3	3	...	...	...	...
Peaches dried, ...	1	1	...	...	...	...
Pearl barley ...	3	3	...	...	...	...
Peas, tinned ...	1	1	...	...	...	...
Pepper ...	6	6	...	...	...	...
Pickles ...	2	2	...	...	...	...
Prescriptions ...	6	6	...	...	...	...
Prunes ...	1	1	...	...	...	...
Quinine and orange wine ...	3	3	...	...	...	...
Rasins ...	1	1	...	...	...	...
Roe ...	2	2	...	...	...	...
Salad oil ...	3	3	...	...	...	...
Sauce ...	3	3	...	...	...	...
Sausages ...	21	16	5	1	...	...
Sausage roll ...	3	3	...	...	...	...
Spinach, tinned ...	2	2	...	...	...	...
Sponge cake ...	3	3	...	...	...	...
Sugar ...	3	3	...	...	...	...
Sultanas ...	4	4	...	...	...	...
Suet, shredded ...	5	5	...	...	...	...
Sweet corn ...	1	1	...	...	...	...
Sweet spirits of nitre ...	3	3	...	...	...	...
Swiss roll ...	4	4	...	...	...	...
Sweets ...	3	3	...	...	...	...
Syrup ...	2	2	...	...	...	...
Tea ...	8	8	...	...	...	...
Tincture of iodine ...	1	1	...	...	...	...
Tripe ...	2	2	...	...	...	...
Vinegar ...	13	12	1	1	1	Fine, 20s. Costs, 10s. 6d.
Whisky ...	4	4	...	...	...	...
Wine ...	6	6	...	...	...	...
Zinc ointment ...	3	3	...	...	...	...
TOTAL ...	595	583	12	4	3	Fines, £7 10s. Costs, £1 1s.

INFORMAL SAMPLES.

ARTICLE.	Number Taken.	Result of Analysis.	
		Genuine.	Adulterated.
Cocoa ...	2	2	...
Rissole ...	1	1	...
Almonds, ground ...	1	1	...
Spice, mixed ...	1	1	...
	5	5	...

The Borough Analyst, J. Kear Colwell, Esq., F.I.C., has kindly supplied the following notes:—

During the year 600 samples were submitted to me for analysis under the Food and Drugs Adulteration Act, 1928, 595 having been purchased with the usual formalities and five obtained informally.

Of this total, 12 samples (2 per cent.) were found to be adulterated: they were cream, milk, minced meat, sausages and blue ointment.

Cream.—Only one of the fifteen samples of cream examined was certified to be "not genuine" a small quantity of boric acid being present.

Milk.—The improvement in the quality of the milk supply was well maintained throughout the year as only three of the 176 samples (1.7 per cent.) fell below the limits prescribed by the Board of Agriculture for genuine milk of the poorest quality. In two cases 2.6 and 10 per cent. of fat, respectively, had been abstracted and in the third at least 7.5 per cent. of water had been added. There can be no doubt that the systematic sampling of the milk supply has a very beneficial effect from the consumer's point of view.

Minced Meat.—The sample of minced meat certified to be adulterated contained sulphite (110 parts per million in terms of sulphur dioxide).

Blue Ointment.—Blue ointment prepared in accordance with the British Pharmaceutical Codex should contain 10 per cent. of mercury. The sample certified to be "not genuine" contained 16 per cent., an excess of 60 per cent. It cannot be emphasised too strongly that prescriptions should be dispensed exactly as prescribed.

It is interesting to note that, with this exception, the prescriptions submitted during the year were very accurately dispensed.

Sausages.—Five of the 21 samples of sausages (about 24 per cent. or nearly one in five) had been preserved with sulphites, the quantity of sulphur dioxide found varying from 220 to 370 parts per million.

Informal Samples.—None of the informal samples was adulterated.

J. KEAR COLWELL.

Action taken in Connection with Samples Reported to be Adulterated.

MILK.

Three samples of milk were adulterated. In one case where fat had been abstracted to the extent of 2·6 per cent. the deficiency was so small that the case was met by a letter of caution addressed to the vendor. One sample was found to be 10 per cent. deficient in fat; in this case as the proprietor of the small shop where the milk was sold was in hospital, no legal proceedings were instituted, but a communication was addressed to the vendor on his discharge from hospital, drawing attention to the matter. In the third case a sample was certified to contain 7·5 per cent. of added water. Legal proceedings were taken, and the vendor of this milk was convicted and fined 30s. and 10s. 6d. costs.

CREAM.

One sample of cream was found to be preserved with 0·037 per cent. boric acid. Correspondence ensued between the Council and the vendor of the cream and the wholesale dealer from whom he obtained his supply. It was ascertained that this cream was imported from the Irish Free State and information respecting the presence of preservative in the cream was therefore sent to the Department of Local Government and Public Health of the Irish Free State.

SAUSAGES.

Five samples of sausages were found to contain preservatives, namely, sulphur dioxide.

In three cases there was evidence that notices were exhibited in the shops disclosing the presence of preservative. In one of the two remaining cases where 370 parts per million sulphur dioxide was found, proceedings were instituted against the vendor. The defendant pleaded that notice as required by the Regulations had been exhibited in the shop, and the magistrate dismissed the summons. The fifth case concerned sausages containing 350 parts per million sulphur dioxide; in this case having regard to the circumstances connected with the sale of the sample, the Public Health Committee were satisfied that a letter of warning addressed to the vendor would be sufficient.

MINCED MEAT.

One sample of minced meat was found to contain preservative, namely, sulphur dioxide to the extent of 110 parts per million. Proceedings were instituted against the vendor who was convicted and fined £5.

MILK.

The table below shows the fat content of the 176 samples of milk examined:—

Percentage of Fat.	Number of Samples.			
	Shops.	Restaurants.	Streets.	Total.
Less than 3.0	2	—	—	2
3.0	3	—	—	3
3.1	8	1	—	9
3.2	8	—	1	9
3.3	21	1	—	22
3.4	18	1	1	20
3.5	21	—	2	23
3.6	19	3	2	24
3.7	13	3	5	21
3.8	12	2	3	17
3.9	7	—	2	9
4.0	3	—	—	3
4.1	2	1	—	3
4.2	2	—	—	2
4.5	1	—	—	1
5.0	1	—	—	1
5.1	2	—	—	2
5.9	1	—	—	1
6.2	1	—	—	1
6.5	1	—	—	1
6.7	1	—	—	1
7.6	1	1	—	1
	147	13	16	176
Average	3.62	3.85	3.66	3.64

Attention should be called to the presence of high percentage of fat in some samples; 10 per cent. of the samples contained 4 per cent. or more fat. Milk with this fat content does not appear to be uncommon; our experience is that a high fat content does not mean the milk has not been plunged. We endeavour to ascertain whether in such cases stirring or plunging has been omitted when milk samples are taken, a note is usually made on this

point. Out of 17 instances where the fat content subsequently proved to be 4 per cent., the milk was stirred, in seven with a hand measure before serving, in another instance the sample was from a newly-filled counter pan; in two instances where the milk was served from counter pans the agent could not say whether or not the milk was stirred or plunged before sale. It is very doubtful if even distribution of milk can be served by casual mixing with hand measures; efficient plungers would secure this.

Monthly Variation of Chemical Composition of Milk.*

For several years information has been given on this subject in the Holborn Annual Health Reports. The average composition of milk samples purchased during each month of 1929 is shown below:—

	Number of Samples examined.	Total Solids. Per cent. average.	Solids Non-fat. Per cent. average.	Fat. Per cent. average.
January	14	12.34	8.80	3.54
February	12	12.47	8.87	3.60
March	15	12.20	8.77	3.43
April	18	12.38	8.88	3.51
May	12	12.46	8.96	3.50
June	17	12.77	8.89	3.38
July	18	12.38	8.84	3.54
August	7	12.48	8.74	3.74
September	12	12.47	8.92	3.55
October	15	13.04	9.04	4.00
November	20	12.51	8.85	3.66
December	16	13.27	9.00	4.27
Whole year	176	12.52	8.88	3.64
Legal minimum		11.50	8.50	3.00

*Those interested in this subject should refer to the Annual Health Reports of Stepney which contain valuable cognate information.

Merchandise Marks Act, 1926.

Section 9 of the above Act confers on Food and Drugs Authorities (in London, the Borough Councils) the power to execute all provisions of the Act (except those relating to importation) in respect of foodstuffs which are subject to an Order in Council made under the Act.

The Orders which have been so far made in respect of foodstuffs are as follows:—

The Merchandise Marks (Imported Goods) No. 3 Order, 1928, relating to honey and fresh apples.

The Merchandise Marks (Imported Goods) No. 5 Order, 1928, relating to currants, sultanas, raisins, eggs in shell, dried eggs and oat products.

The Merchandise Marks (Imported Goods) No. 4 Order, 1929, relating to raw tomatoes.

The Orders No. 3 and No. 5 were referred to in the Annual Report for 1928, and particulars of the requirements under these Orders were set out in that Report.

Order No. 4 dealing with tomatoes, in addition to the provisions for marking on importation which does not concern the Local Authority, requires that:—

(a) The outer container of imported raw tomatoes shall be marked with the indication of origin on exposure for sale wholesale and on sale, whether wholesale or by retail, by printing, stencilling, stamping or branding, either on the container itself or on a label securely attached thereto, in letters not less than half an inch in height:

(b) When imported raw tomatoes are exposed for sale by retail, they shall be marked by means of a show ticket, clearly visible to intending purchasers, bearing the indication of origin in letters not less than half an inch in height;

(c) When imported raw tomatoes are sold in quantities of 14 lbs. or less, they are not required to bear the indication of origin on sale; but the Ministry of Health is advised that this does not affect the provision requiring marking on exposure for sale, however small the quantity may be.

In the early part of the present year (1930), legal proceedings were instituted against a shopkeeper in the Borough for breach of the Merchandise Marks (Imported Goods) No. 3 Order. In this case batches of imported apples, bearing no indication of the countries of origin, were exposed for sale in the window and round the interior of the shop. The manager of the retail shop was verbally warned by the Inspector, and a written communication drawing attention to the breach of the Order was sent by the Medical Officer of Health to the proprietor of the establishment. As the breach continued, samples of the imported apples were taken from five different batches of the fruit, and particulars of the marks on the packages, invoices and consignment notes were obtained. Following this action information was laid before a magistrate at the Police Court, and after several hearings the defendants were convicted and fined £5 and five guineas costs.

The greatest offenders at present are itinerant fruit vendors: the personnel and pitch varies so much from day to day that it is not easy to keep in touch with them. Moreover, information obtained from the stallholder may be correct or incorrect; it would facilitate efficient administration of the orders if itinerant vendors were required to have their names and addresses exhibited on the barrows.

Agricultural Produce (Grading and Marking) Act, 1926.

This Act provides for the grading and marking of agricultural produce and gives power to the Ministry of Agriculture and Fisheries by regulations to prescribe "designations" and "marks" to indicate the quality of such produce.

The following Regulations have been made under the Act:—

- Agricultural Produce (Grading and Marking) (General) Regulations, 1928.
- Agricultural Produce (Grading and Marking) (Eggs) Regulations, 1928.
- Agricultural Produce (Grading and Marking) (Apples and Pears) Regulations, 1929.
- Agricultural Produce (Grading and Marking) (Tomatoes and Cucumbers) Regulations, 1929.
- Agricultural Produce (Grading and Marking) (Wheat Flour) Regulations, 1929.
- Agricultural Produce (Grading and Marking) (Beef) Regulations, 1929.
- Agricultural Produce (Grading and Marking) (Malt Flour and Malt Extract) Regulations, 1929.
- Agricultural Produce (Grading and Marking) (Potatoes) Regulations, 1929.
- Agricultural Produce (Grading and Marking) (Broccoli) Regulations, 1930.
- Agricultural Produce (Grading and Marking) (Eggs) Regulations, 1930.
- Agricultural Produce (Grading and Marking) (Strawberries) Regulations, 1930.

Food Standards.

It is very encouraging to those who are working for the purity and quality of food to see the action which is being taken by Parliament to promote this end. Although in this country we have not yet reached the level of the Dominions, there is reason to hope that this matter is more and more engaging the attention of workers in Public Health, in this country. and even more important still, that part of the general public whose thoughts turn towards the improvement of the Public Health. The path is devious and may appear insignificant. For several years now attempts have been made to establish a standard of purity of ice cream—a chemical standard has been formulated—within a reasonable time we may expect the formulation of a bacteriological standard. Is it too much to hope that this may eventually lead to a bacteriological standard for ordinary milk.

For such reasons we must welcome the efforts made in connection with vinegar in a Bill introduced into the House of Commons in the Session 1928, the object of which was to fix a standard of quality for vinegar. True vinegar is a brewed product prepared by the alcoholic and subsequent acetous fermentation of barley or some other cereal, the starch of which has been converted by malt. It is possible to produce more cheaply an imitation prepared by diluting commercial acetic acid, staining and flavouring it to resemble the true article. The Food and Drugs Adulteration Act is designed to ensure that a customer shall get what he pays for, but for want of a standard of quality, the purchaser may be supplied with spurious vinegar unless he demands malt vinegar. The Bill proposed to establish a standard of quality and to enforce labelling of imitation vinegar. Enactments standardising vinegar are in force in Canada, Australia, New Zealand, South Africa and the United States of America.

The desire of the public to consume a natural product or at any rate to know when they were offered an artificial product found expression in the Artificial Cream Act of 1929.

Artificial Cream Act, 1929.

This Act which came into operation on the 1st June, 1929, has for its object the regulation and sale of artificial cream. Under the Act it is an offence to sell, or expose for sale, artificial cream under any designation which includes the word "cream" unless that word is preceded by the word "artificial." Every vessel containing artificial cream, whether in transit or exposed for sale, must bear the words "artificial cream" in large and legible type either on the receptacle or on a label securely attached thereto. The Local Authority must keep a register of all premises where artificial cream is manufactured, sold, or exposed for sale, except premises where (a) the artificial cream is manufactured by any person solely for his domestic purposes, (b) is used in the manufacture or preparation on the premises of some other article of food, or (c) is not supplied otherwise than in the properly closed and unopened receptacles in which it was delivered.

During the year no application was received for registration under the Act.

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES.

The relative importance of the commoner infectious diseases as regards numbers of deaths caused is shown by the following table :—

ENGLAND AND WALES.

COMMON INFECTIOUS DISEASES.

Deaths at all Ages.

	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	Yearly average 1919-1928
Pneumonia (all forms) ...	38,949	37,149	34,708	40,930	33,413	38,970	36,990	32,339	37,242	31,014	36,170
Pulmonary Tuberculosis ...	35,984	32,791	33,505	33,919	32,097	32,690	32,382	30,108	31,066	29,799	32,434
Measles ...	3,534	7,190	2,241	5,694	5,316	4,834	5,337	3,483	3,622	4,302	4,555
Whooping Cough ...	2,605	4,401	4,576	6,370	4,162	3,983	6,058	4,118	3,681	2,976	4,293
Diphtheria ...	4,888	5,648	4,772	4,075	2,722	2,501	2,774	2,994	2,732	3,191	3,629
Scarlet Fever ...	1,221	1,430	1,305	1,382	993	888	988	677	579	580	1,004
Enteric Fever ...	577	537	613	465	450	496	388	367	367	438	469

The total number of notifications relating to Holborn residents received during the year was 643 in comparison with 495 in the year 1928.

The increase is accounted for by the larger number of notifications received of the following diseases:—

Diphtheria	...	...	...	72 in comparison with 54 in 1928.
Scarlet Fever	...	...	130	„ „ 59 „
Whooping Cough	...	...	153	„ „ 82 „
Pneumonia	...	...	89	„ „ 48 „

Also there were 43 notifications of smallpox and 25 of acute rheumatism in comparison with none in 1928.

Attention has had again especially to be called to the non-notification of whooping cough and primary pneumonia. A special reference card with complete list of notifiable diseases is supplied to all doctors practising in the Borough.

In addition to the above we received 218 notifications respecting patients not residing in Holborn, many being in-patients of hospitals in the Borough. All these were forwarded to the Medical Officers of Health of the districts concerned. The diseases notified were:—

Diphtheria	...	...	...	...	...	...	...	...	47
Scarlet Fever	...	...	...	...	...	...	...	...	21
Puerperal Fever	...	...	...	...	...	...	...	...	1
Pneumonia	...	...	...	...	...	...	...	...	5
Erysipelas	...	...	...	...	...	...	...	...	3
Cerebro-spinal Meningitis	...	...	...	...	...	...	...	...	1
Encephalitis Lethargica	...	...	...	...	...	...	...	...	3
Tuberculosis	...	...	...	...	...	...	...	...	90
Enteric Fever	...	...	...	...	...	...	...	...	6
Whooping Cough	...	...	...	...	...	...	...	...	14
Acute Poliomyelitis	...	...	...	...	...	...	...	...	3
Measles	...	...	...	...	...	...	...	...	4
Dysentery	...	...	...	...	...	...	...	...	19
Ophthalmia Neonatorum	...	...	...	...	...	...	...	...	1
									<hr/> 218 <hr/>

Smallpox.

Although the present outbreak of smallpox has been of the mild type, owing to the extensive communications between London and all parts of the world, some of which at times are hot-beds of virulent smallpox, no one can seriously maintain that we are free from the risk of the introduction of severe smallpox into our midst. The present wide spread of mild smallpox is an indication of the extent to which severe smallpox could spread in a community so ill-vaccinated as this country is at present. It is unnecessary to stress the advantages of vaccination or dwell on the trouble and disturbance to the employer when an employee is found to be suffering even from mild smallpox.

Number of Cases and Contacts.

In the Borough of Holborn the Public Health Department has during 1929 been called upon to deal with 55 cases of which 43 were residents and 12 were non-resident workers in the Borough. Twenty-four of the residents were notified by the Medical Officer of Health, but practically all the others were seen by him in consultation with medical practitioners.

The forty-three Holborn cases occurred in 26 homes of which 22 were houses let in lodgings, in contact with these were 674 persons in the home and 635 at their places of work in Holborn. The twelve non-resident cases occurred at 11 places of work in Holborn, in contact with these there were 968 persons.

Cases in Houses Let in Lodgings.

In Holborn a large part of the inhabitants live in houses let in lodgings with sanitary accommodation and water supply in common. The intermingling of the people living in such houses is such that all those occupying these large houses have to be dealt with as contacts. The result is that a case of smallpox in a resident in Holborn usually carries with it more dangers of spread than in many other areas and vigilance is imperative.

The most striking of the cases occurring in such houses occurred in a family consisting of father and mother and four young children, ages 8, 6, $4\frac{1}{2}$ and $1\frac{1}{2}$ years, all of whom were in turn attacked. The father was a house painter in and out of work, and had been in receipt of poor law relief. None of the family had been vaccinated except possibly the mother, who was said to have been done in infancy 32 years previously. The family were living in one room under unsatisfactory conditions. The mother and a boy of 6 years were found to be attacked and duly removed to hospital, the rest of the family going to the Council's Shelter for the night during the disinfection of their room. The following day another child in the same family was found to be attacked. We hoped that the relatives would lend a hand to the distressed father who had the almost hopeless task of looking after the two remaining children, one of whom was a baby of 14 months. He, however, was given very slight, if any, help by his neighbours, certainly none from relations who were living close by, not even by his sister-in-law. We kept in close touch with the home, and the next day, finding him distracted, communicated with the Relieving Officer (Mr. Reed); he promptly came along to the house, and at once without any demur arranged for the two little children to be admitted to the Holborn and Finsbury Hospital, where they too subsequently developed the disease. A few days later, six days after the removal of the mother, the father was also attacked and was removed to the South Wharf Hospital, Rotherhithe.

Tailor Outworkers.

Smallpox occurred in the workplace of a tailor "outworker," the patient being a daughter employed in the workroom. At the place of work the others employed included his wife, another daughter, one son and two older women living in another Metropolitan Borough. The Factory and Workshop Act prohibits work being carried on in such infected premises and the employers on representation being made to them carried out the only course possible and withheld work for a period of three weeks. The family, although undoubtedly in poor circumstances,

bore their trouble courageously without grumbling. Fortunately the Public Health Department was able to act as intermediary between the contacts and the Ministry of Labour and to arrange for them to receive some out-of-work pay, much less, of course, than their ordinary wages. It is worth considering whether out-of-work pay should not be made payable to contacts for the whole period of exclusion from work instead of after six days as at present. There is undoubtedly hardship when all members of a family are prevented from working. A number of employers have paid part wages, and in some cases the whole wage, during the period of exclusion of contacts, but it is not every employer that can afford to be so generous.

A Case at a Hospital.

As already mentioned, in the early part of 1929 extensive propaganda work was carried out to secure vaccination of hospital staffs. Late in the year a case of smallpox appeared in a non-resident worker, a stoker, who had refused to be vaccinated although the authorities at the hospital were very keen, and practically the whole of the staff were vaccinated if they had not been vaccinated during the past five years. This patient became ill on 20/12/29; he got over his initial illness and returned to work without saying much about it. That evening a Christmas dance for the maids was going on which some of the nurses attended; the stoker attracted by the music came over and mingled with those looking on. The very considerable majority of these, however, were well vaccinated and consequently protected. Subsequently the patient's rash came out and he was removed to hospital from his home in another Metropolitan Borough. He did not come in contact with any of the patients, either in-patients or out-patients; that he was evidently in a very infectious condition is shown by the fact that two further cases infected by him were subsequently removed from his home.

" Tuscania " Outbreak.

A father, mother and daughter—caretakers of lawyers' offices in the Borough—visited a woman who had been a passenger on the " Tuscania " just previous to her being removed to hospital with smallpox of the severe type associated with this outbreak. The Sanitary Inspector (Mr. Clark) succeeded in getting them vaccinated the day following his visit; the Medical Officer of Health visited especially to detect the very first sign of the disease, and we are thankful they did not become the means of starting a very serious outbreak.

Information Supplied Through the London County Council.

Following arrangements made in previous years, information of all cases in the Greater London area giving particulars of the illness and the names and addresses of contacts were distributed to Medical Officers of Health by the Medical Officer of the London County Council. During the year upwards of 1,700 circulars with such information were received. All of these had to be carefully looked through; 83 were found to contain the names and addresses of patients or contacts residing or working in the Holborn Borough. Fortunately, the London County Council have since January 1st, 1930, adopted a new method of setting out these particulars which will lighten our task.

Distribution Throughout the Year.

The months of the year in which the 55 cases occurred were:—

						Non-Residents.	Residents.
January	...	...	...	...	...	—	—
February	...	...	...	...	...	5	3
March	...	...	...	...	...	—	—
April	...	...	...	...	...	1	16
May	...	...	...	...	...	—	16
June	...	...	...	...	...	1	1
July	...	...	...	...	...	1	—
August	...	...	...	...	...	—	—
September	...	...	...	...	...	1	2
October	...	...	...	...	...	—	2
November	...	...	...	...	...	2	1
December	...	...	...	...	...	1	2
						12	43
						—	—

Distribution in Groups.

We were able to trace a connection between many of the cases resident in Holborn:—

Group 1 consisted of three cases discovered in February, brought to light as a result of enquiries made after the receipt of information from the Medical Officer of Health of Leigh-on-Sea that a patient in his district with smallpox had been employed in Holborn. On enquiry at the place of employment, one of the largest buildings in High Holborn accommodating many firms, and investigation into recent illnesses and absentees in all these firms, an errand boy (living in Holborn) was found to be recovering from an attack of smallpox. Examination of his family resulted in the notification of two of his sisters.

Group 2.—The main set of cases, 20 in all, ranged from the beginning of April up to and including the first week in May. It was a school outbreak, the first case being a boy attending the Princeton Street L.C.C. Boys' School. It very soon became evident that he had been infected by a missed case because on the same day, or the following day, four other children attending the same school became ill and also the mother of the original patient. Other cases amongst children of the same school or members of the affected families were notified within the normal incubation period following the first detected case until in all 20 cases (three crops, including the original missed case as a crop) were infected from this source. Of these, 15 were children in attendance at this school; the other five included a mother, a father, two sisters and a brother of children attending the school. All the children in the school were examined by the London County Council medical staff in order to detect any other missed cases, but none was found.

Group 3.—Four cases all in one house, three in the same family. The first case brought to our notice was a girl, aged 16 years, whom the Medical Officer of Health was asked to see on the 23rd April. She had been ill for some 10 days, was found to be suffering from smallpox and removed to hospital. The Medical

Officer of Health at the same time found two brothers of this girl also suffering from smallpox. One of these, a boy, aged 14, had been excluded from school for a month with "chicken pox." A few days later a contact in the same house was notified and removed to hospital.

Group 4.—Two boys of 9 years old. Their illnesses commenced on two successive days in August after an interval during which the Borough had been free from the disease. There was reason to believe that both boys had spent part of their school holiday in the grounds of the Foundling Hospital, open for play purposes, and it is very possible that there was a common source of infection.

Group 5.—After the Borough had been free from smallpox for some weeks five cases were notified, two in one family at the end of October, a third in the same family 12 days later, and two in another family a week afterwards. The earliest of the three in the first family, F.M.S., was a girl attending Rosebery Avenue L.C.C. School, Infants' Department, the earlier of the two in the second family, E.G., was also a girl attending the Girls' Department of the same school; the twelve days' interval suggests that F.M.S. infected E.G.

Not Grouped.—Seven cases notified during the year were not apparently associated with any of the foregoing groups.

Ward Distribution.

The 55 cases were notified from the following Wards:—

		Non-Resident	Resident	Sanitary Inspector
Ward B	Central St. Giles ...	—	4	Mr. Bennett
Ward C	Lincoln's Inn ...	—	1	Mr. Larard
Ward E	South Bloomsbury ...	1	1	Mr. Clark
Ward F	St. George-the-Martyr ...	1	19	Mr. Clark
Ward G	North St. Andrew ...	1	15	Mr. Clark
Ward H	South-East St. Andrew ...	7	3	Mr. Larard
Ward I	Saffron Hill ...	2	—	Mr. Larard
		12	43	
		55		

Vaccination Campaign.

Early in the year the Chairman of the Public Health Committee (Lt.-Col. J. H. Boraston, C.B.) suggested that a vaccination campaign might with advantage be undertaken. The suggestion was enthusiastically adopted. Vaccination, so to speak in peace time, is undoubtedly the best means of preventing smallpox; vaccination of contacts at the time of discovery of a case is a measure of far less value. Already the Medical Officer of Health had taken steps to get the staffs of all the hospitals in their Borough vaccinated, but prompt steps were taken to put Col. Boraston's suggestion into force; a case of smallpox presenting extreme difficulties in diagnosis from chicken pox having occurred in a hotel, efforts were first directed towards securing the vaccination of the staffs of hotels of all descriptions, including boarding houses.

Obviously smallpox in a London hotel is a matter of very considerable importance; if a member of the staff infected the visitors the disease would in

all probability be scattered to different centres throughout the country and the custom of the hotel would suffer.

The Medical Officer of Health visited all the larger hotels in the Borough and saw either the proprietor or the manager. Prompt action was taken at the hotels catering for the well-to-do. At some of the less expensive hotels the management were dubious, thinking that the difficulty of retaining the domestic staff would be increased. The Medical Officer of Health also got into personal touch with the two largest firms in the Borough—both Assurance Companies. To the remainder of the hotels and larger firms in the Borough a printed letter signed by the Mayor (Alderman Albert J. Clark, J.P.), the Chairman of the Public Health Committee (Lt.-Col. J. H. Boraston, C.B.), and the Medical Officer of Health was sent advising vaccination or revaccination of their staffs, giving full information as to the means of securing this, either in the area in which the workers lived, or in Holborn if preferred. Some months later a change was made in the method of vaccination and the opportunity was taken to send a similar letter signed by the present Mayor (Councillor Percy Hill, J.P.), the Chairman of the Public Health Committee (The Rev. Wilfred H. Davies, M.A.), and the Medical Officer of Health, drawing attention to the recent instructions issued to the public vaccinators for limiting the incisions exposed to the action of vaccine lymph; these suggested that at most four scratches $\frac{1}{4}$ inch in length should be made. It was pointed out that in all probability the amount of constitutional disturbance and any interference of work caused by vaccination by this method would be extremely small.

Various other measures put into force to promote vaccination include:—

- (i) The arranging of visits of the Public Vaccinator to certain schools, especially those in the vicinity of cases of smallpox;
- (ii) Much useful propaganda at the Maternity and Child Welfare Centres;
- (iii) Distribution throughout the Borough of an illustrated leaflet advising vaccination by means of the school organisation, by Sanitary Inspectors and Health Visitors, also by District Nurses (with the kind permission of Miss Wilmhurst, acting on behalf of the Metropolitan Nursing Association); and
- (iv) The general exhibition of posters supplied by the Guardians of the Poor giving information respecting vaccination and the names and addresses of the Public Vaccinators; these have unfortunately now been up for a long time and will have to be up for a longer time still.

In 1929 the number of persons vaccinated by Dr. A. E. C. Hallen (western part of the Borough) was 864, by Dr. P. J. Connolly (eastern part of the Borough), 1,694, making a total of 2,558.

Procedure.

As regards the procedure carried out, it is necessary to consider five classes in which different action is called for:—

1. Cases of smallpox residing in the Borough.
2. Cases of smallpox working in the Borough, but residing elsewhere.
3. Residents in the Borough who have been in contact with smallpox either at their place of employment or elsewhere outside the Borough.
4. Contacts residing elsewhere, but employed in the Borough.
5. Cases of chicken pox or any suspicious illness brought to our notice.

The course of action adopted in these separate classes is as follows:—

Cases of Smallpox Residing in the Borough.—Upon receiving a notification of smallpox, the premises are visited, arrangements made for the removal of patient to a hospital of the Metropolitan Asylums Board, the room or rooms disinfected, the bedding and clothing removed and disinfected at the Council's disinfecting station. The names, ages and place of employment or schools attended, together with the vaccinal condition of the contact, and any other information which may be useful are obtained. The schools attended or the Medical Officers of Health of the Borough in which they are employed are notified.

Arrangements are made for the Public Vaccinator to attend to vaccinate or revaccinate all contacts. It is usual, and in some cases imperative, for the Sanitary Inspector to be in attendance to assist the Public Vaccinator and to influence the contacts.

For instance, a case occurred in Goldsmith Buildings, a building consisting of a number of separate tenements occupied by 27 families containing 92 people; here, owing to the irregular hours in which by the nature of their employment they could be found at home, a number of visits had to be made to interview the occupants. Eventually, however, almost all the contacts were revaccinated or primarily vaccinated by Dr. A. E. C. Hallen, the Public Vaccinator of the District, and no secondary case occurred. The last item of the procedure is to visit all contacts daily for 19 days and to report any suspicious case of illness to the Medical Officer of Health.

Cases of Smallpox Working in the Borough, but Residing Elsewhere.—These patients have in most cases been working in the Borough until the day before or until the day of their removal to hospital, so that they must be dealt with as actually occurring here; therefore the premises and contacts are dealt with in the same way as those in the above class.

The Medical Officers of Health of the areas in which the contacts reside are notified; in as many instances as possible arrangements are made for the Holborn Public Vaccinator concerned to attend at place of work. Owing to the fact that usually there are a large number of contacts the Public Vaccinator often has to be helped; the Medical Officer of Health and as many disengaged medical friends as he can get together, the Sanitary Inspectors and part of the clerical staff of the Public Health Department are pressed into service. This is done in order to strike while the iron is hot, when there is little or no objection to vaccination.

In some firms the number of contacts have been large—260, 175, 167, 161 and 68; practically all were vaccinated or revaccinated. In some of these instances these numbers represent the employees of one firm; in others the large numbers are made up of the employees of many firms working in the large double or even triple buildings found in the important business streets of the Borough. We have had in several instances to thank managing directors, directors, and chiefs of staff for setting an example and being the first to be vaccinated. Any suspicious illness among the employees within the period of danger can be gone into by the Medical Officer of Health. In one firm an errand boy was found to be suffering with smallpox; subsequently his two sisters, contacts in the home, were also found to be suffering from smallpox.

Residents in the Borough who have been in Contact with Smallpox either at their Place of Employment or elsewhere outside the Borough.—Their homes are visited as soon as notified to ascertain if any illness of a suspicious character exists and to advise revaccination. If these contacts are kept under observation at their place of employment, visits at the week-end only are made.

Contacts Residing Elsewhere, but Employed in the Borough.—The place of work is visited and revaccination of the employees advocated. In instances of this nature the employer often sends the contact home and only allows him to return to work at the expiry of the period of danger.

All cases of chicken pox, whether notified by the school authorities or by a medical practitioner, are visited and enquiries made particularly as to revaccination. A well-vaccinated child under 10 years of age is almost certainly not suffering from smallpox, in fact the earliest age at which such a child has contracted smallpox during the present epidemic is 13 years of age. Any doubtful case is visited at once by the Medical Officer of Health.

In a number of instances the medical practitioners have called upon the services of the Medical Officer of Health to exclude the diagnosis of smallpox—the evening surgeries and the presence in the Borough of two such large hospitals as the Hospital for Sick Children and the Homœopathic Hospital, result in his services being called upon at many of the different hours of the seven days of the week.

Vaccination.

The following table kindly supplied by the Vaccination Officer of the Holborn Union on the 28th January, 1930, gives information respecting vaccination in the Borough of Holborn:—

	Total Number of Births	Vaccinated	Died before Vaccination	Cons. Objectors	Insus- ceptible	Post-poned by Medical Certificate	Removed. No information as to Vaccination	Temporarily unaccounted for
HOLBORN SUB-DISTRICT:								
12 months ended 30th June, 1929	183	79	15	24	0	24	23	18
ST. GILES AND BLOOMSBURY SUB-DISTRICT:								
12 months ended 30th June, 1929	94	45	7	15	0	10	10	7
	277	124 45%	22	39	0	34	33	25

As in previous years a leaflet respecting the advantages of vaccination was sent to the parents of all infants born in, or belonging to, the Borough. No opportunity is lost of speaking about the vital importance of vaccination whether for the baby or for the older person.

A Medical Officer of Health has described non-vaccination as "free trade in smallpox." All statistics prove this. To any qualified medical man or woman it seems almost incredible that there is to-day any question about the power of

vaccination to prevent smallpox absolutely for a certain number of years, and to diminish its virulence for a longer time.

We need not have the smallpox in London that we have to-day—all the trouble, inconvenience and at times unpleasant illness so abundant to-day all because people will not listen to what they are told by those who are competent to advise.

Diphtheria.

We received notifications relating to 72 cases of diphtheria occurring in residents in the Borough; of these one was sent in as being a "carrier" of diphtheria bacilli.

Of the clinical cases of diphtheria all but one were removed to hospital. The "carrier" was also removed to hospital.

Age at Notification of 64 Clinical Cases of Diphtheria.

0—1	1—5	5—15	15—25	25—45	45—65	Total.
1	19	24	14	3	3	64

Two cases were notified as laryngeal diphtheria, they were 3 and 5 years old respectively.

Two deaths occurred, one at the age of 2 years, the other at the age of 7 years.

Secondary cases were seven in number; details follow:—

Primary Case	Age.	Date notified	Secondary Case	Age	Date notified	Remarks <i>e.g.</i> Character of Premises
J. R.	5 yrs	20th April	M. R.	6 yrs	23rd April	House let in lodgings
E. D.	3 yrs	17th May	P. D.	1½ yrs	25th May	House let in lodgings
P. H. B.	1½ yrs	13th Sept.	M. T. B.	2 yrs	16th Sept.	House let in lodgings
O. M. P. (Hospital Nurse)	20 yrs	21st Oct.	L. S.* (Patient)	22 yrs	22nd Oct.	Hospital
M. R.	6½ yrs	9th Nov.	J. R.	2 yrs	11th Nov.	House let in lodgings
W. A.	39 yrs	8th Dec.	H. A.	3 yrs	10th Dec.	Flat in Tenement Dwellings
— F. (Hospital Nurse)	22 yrs	31st Dec.	— W.* (Patient)	30 yrs	31st Dec.	Hospital

*The secondary case occurred in the ward in which the primary case worked.

Two "return" cases were notified from the same family nine days after the return home of the primary case from hospital.

Three cases of diphtheria were removed on the 31st December, 1928, and are included because, for statistical purposes, the year 1929 commenced on the 30th December of the previous year. The primary case (B.G.) is interesting as an example of recurring diphtheria. This patient was first removed with diphtheria in January, 1927. B.G.'s second attack and removal to hospital occurred in January, 1928. He was again notified for a third time in

November, 1928; he was removed to hospital on the 1st of that month and discharged to his home on the 22nd December of the same year. On the 31st December, the two "return" cases (R.G. and A.G.) occurred, B.G., the primary patient, was re-notified by the Medical Officer of Health and again removed to hospital. The diagnosis on removal was not varied on any of the four occasions.

In London, 11,788 cases were notified giving rise to 337 deaths.

We endeavour to co-operate with the Medical Superintendents of the Fever Hospitals serving the County of London; information is now sent to them as to any bacteriological examinations before admission or after discharge of the patients, and also with regard to return cases of diphtheria or scarlet fever.

Diphtheria in Hospitals.

During the year 26 notifications of diphtheria were received from two hospitals in the Borough. Of these 26, 11 were reported as "nasal" cases and three as harbouring diphtheria bacilli. Twenty-three of the notifications related to in-patients. The remaining three were nurses on the staffs of hospitals; all these three were clinical diphtheria.

The number of cases of diphtheria occurring from year to year amongst the staff of hospitals suggests the need for their immunisation. It would seem to be obvious that fever hospital nurses and ward maids should be protected against diphtheria and it is difficult to avoid the conclusion that all assisting in children's wards should be immunised. It must be within the experience of many that nurses in children's hospitals are attacked and subsequently the disease spreads from them to the children.

The possible objection that such people would have to be immunised against diphtheria, scarlet fever and typhoid and paratyphoid fevers does not carry much weight. Many during the war were immunised against more diseases than these—those going East were protected against smallpox, typhoid and the paratyphoid fevers, cholera, dysentery and plague. Who can show that they suffered any harm by taking advantage of the progress of science?

The Schick test and immunisation against diphtheria is already being successfully applied to the nursing and domestic staffs in certain hospitals, including those of the Metropolitan Asylums Board. Moreover it is becoming more and more the rule for nurses on the staffs of infectious diseases hospitals to be immunised against the diseases they might contract as the result of their being in contact with infectious patients.

We are able to report that diphtheria immunisation has been or is being carried out at several hospitals in the Borough.

Diphtheria Contacts.

As in former years we have continued to swab all diphtheria contacts among school children and toddlers.

Results of Bacteriological Examinations and Virulence Tests.

No. of contacts swabbed	...	...	...	58
Negative at first examination	...	...	...	35
Positive at first examination	...	...	...	23 (39.66 per cent.)
Virulence tests made	...	...	...	7 (all negative)

Analysis of the swab results relating to the contacts is given below:—

	Contacts swabbed.	Positive Results.			Contacts positive.
		Nose and Throat.	Nose only.	Throat only.	
First Examination	58	4	17	2	23
Second	20*	1	8	—	9
Third	5**	—	4	—	4
Fourth	1***	—	—	—	nil

*3 positive contacts removed to M.A.B. Hospitals.

**4 virulence tests made in the case of positive contacts—all negative.

***Virulence tests made in the case of 3 positive contacts—all negative.

The parents or others in charge of children harbouring diphtheria bacilli were given written directions as to the precautions necessary.

The results of the examinations of child contacts were communicated to the School Medical Department of the London County Council so that children harbouring diphtheria bacilli could be kept from school providing there was no evidence that the organisms were avirulent.

Diphtheria antitoxin was available free of charge on application by medical practitioners. In two cases doses were supplied of 10,000 units each and in one 8,000 units.

The Schick Test and Immunisation against Diphtheria.

This work has been carried on since 1922 at the Council's Maternity and Child Welfare Centre, 10, John Street, on Wednesday afternoons.

Enquiries as to the effect of the testing and inoculation on the individual were made as a routine; *we are able to record that any disturbance caused was negligible.* The use of toxoid antitoxin does away with the risk of fatality incurred by using improperly-made toxin antitoxin.

TABLE I.
HOLBORN MUNICIPAL INFANT WELFARE CENTRE, 1922-1929.

SUMMARY OF WORK DONE.

Ages.	6 to 12 months	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	5 to 6 years	6 to 7 years	7 to 8 years	8 to 9 years	9 to 10 years	10 to 11 years	11 to 12 years	12 to 13 years	13 to 14 years	14 to 15 years	ADULTS 15 and above years	
Total for 8 years, 1922-29.	78	225	167	127	102	76	61	56	45	58	47	31	27	31	5	102	Total Schick Tested = 1228
RESULT OF SCHICK TEST.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	
Total for 8 years.	72 6	214 8	149 8	109 17	73 27	47 27	41 20	41 15	29 16	24 34	23 24	17 14	12 15	11 20	3 2	41 57	906 Pos. 310 Neg. 12 Not read.
Immunised without Pre- liminary Schick Test (Jan. 1927 end of 1929).	36	69	28	13	8	2	0	1	0	1	0	0	1	—	—	—	Total immuni- ed without preliminary Schick Test 159
Ages of Persons Immunised	94	242	144	102	67	39	47	41	22	23	18	15	9	7	2	19	Immunised (full immu- nisation course) 891

Eight years, 1922-29.

1065

† 73 of these removed from the Borough.

§ 17 of these have removed from the Borough.

†† These retests include those made up to 28th February, 1930.

NORW.—Columns E F G H give details of the total 707 given in Column I.

Columns I-J give details of the total 1065 positives given in Column CD.

We have not altered the *routine procedure*, except that owing to the increased confidence of the public in the measure we no longer find it necessary to test children under 5 years of age, but proceed at once to the immunisation.

The following table gives particulars of 707 cases re-tested, of whom 81 were found to be Schick positive after immunisation with either 3 c.cms. of T.A.M. or one inoculation with T.A.F.

TABLE III.

Re-Schick tested after an interval of years or fraction of years	Number re-tested after this interval			Number found positive	Age in years and sex of positives when first tested	Further particulars (Unless otherwise stated the dose refers to Toxoid Antitoxin.)
	Total.	M.	F.			
	707	(319)	(388)	81	M. 34 F. 47	
5/52	10	(6)	(4)	1	13, F.	Negative after further inoculation ; 4 c.cm. in all
6/52	3	(1)	(2)	Nil	Nil	Nil
7/52	6	(4)	(2)	Nil	Nil	Nil
2/12	28	(14)	(14)	4	(a) 9, M. (b) 5, M. (c) 1, F. (d) 1, F.	Negative after further inoculation ; 6 c.cm. in all Given further inoculation ; not re-tested Negative after further inoc. ; 1.1 c.cm. T.A.F. in all Negative after further inoc. ; 1.1 c.cm. T.A.F. in all
2½/12	18	(6)	(12)	1	6, F.	Negative after further inoculation ; 3 c.cm. T.A.T. + 0.5 c.cm. T.A.F. in all
3/12	178	(79)	(99)	15	(a) 8, M. (b) Ad., F. (c) 3, M. (d) 9, M. (e) 6, M. (f) 11/12 M. (g) 5, M. (h) 2, M. (i) 5, F. (j) 7, F. (k) 6, F. (l) 6, M. (m) 7, F. (n) 4, F. (o) 5, F.	Negative after further inoculation ; 4 c.cm. in all Given further inoculation ; not re-tested Given further inoculation ; not re-tested Negative after further inoculation ; 4 c.cm. in all Negative after further inoculation ; 6 c.cm. in all Negative after further inoculation ; 4 c.cm. in all Given further inoculation ; not re-tested Given further inoculation ; not re-tested Negative after further inoculation ; 6 c.cm. in all Given further inoculation ; not re-tested Given further inoculation ; not re-tested Given further inoculation ; not re-tested Given further inoculation ; not re-tested Negative after further inoculation ; 6 c.cm. in all Negative after further inoculation ; 4 c.cm. in all

Re Schick tested after an interval of years or fraction of years	Number re-tested after this interval	Number found positive	Age in years and sex of positives when first tested	Further particulars (Unless otherwise stated the dose refers to Toxoid Antitoxin.)
3½/12	31 (14 17)	2	(a) 4, F. (b) 1, F.	Negative after further inoculation; 5 c.cm. in all Negative after further inoculation; 5 c.cm. in all
4/12	91 (42 49)	12	(a) 4, F. (b) 6, F. (c) 10/12, M. (d) 2, F. (e) 1, F. (f) 6, F. (g) 4, F. (h) 1, M. (i) 1, F. (j) 6, M. (k) 7, F. (l) 1, M.	* Negative after further inoculation; 4 c.cm. in all Negative after further inoculation; 5 c.cm. in all Negative after further inoculation; 4 c.cm. in all Negative after further inoculation; 5 c.cm. in all Negative after further inoculation; 5 c.cm. in all Given further inoculation; not re-tested Negative after further inoculation; 5 c.cm. in all Negative after further inoc.; 1 c.cm. T.A.F. in all Negative after further inoculation; 0.5 c.cm. T.A.F. + 3 c.cm. T.A.T. in all Negative after further inoculation; 4 c.cm. in all Given further inoculation; not re-tested Given further inoculation; not re-tested
4½/12	6 (1 5)	2	(a) 5, F. (b) 2, F.	Negative after further inoculation; 6 c.cm. in all Negative after further inoculation; 4 c.cm. in all
5/12	50 (20 30)	5	(a) 2, F. (b) 2, M. (c) Ad., F. (d) 3, M. (e) 1, F.	Negative after further inoculation; 6 c.cm. in all Negative after further inoculation; 4 c.cm. in all Given further inoculation; not re-tested Given further inoculation; not re-tested Given further inoculation; not re-tested
6/12	47 (22 25)	8	(a) 1, M. (b) 2, M. (c) 3, M. (d) 4, F. (e) 2, M. (f) 6, M. (g) 3, M. (h) 3, M.	No re-attendance Negative after further inoculation; 5 c.cm. in all Given further inoculation; not re-tested Negative after further inoculation; 5 c.cm. in all No re-attendance Negative after further inoculation; 4 c.cm. in all Negative after further inoculation; 6 c.cm. in all No re-attendance
7/12	22 (9 13)	1	9, F.	Negative after further inoculation; 6 c.cm. in all
8/12	23 (9 14)	3	(a) 11, F. (b) 1, F. (c) 8, M.	No re-attendance No re-attendance No re-attendance

* Another child in same family (F.), aged 4 years was negative.

Re-Schick tested after an interval of years or fraction of years	Number re-tested after this interval	Number found positive	Age in years and sex of positives when first tested	Further particulars (Unless otherwise stated the dose refers to Toxoid Antitoxin.)
9/12	14 (9 5)	3	(a) 1, M. (b) 9, M. (c) Ad. M.	No re-attendance Given further inoculation; not re-tested Given further inoculation; not re-tested
10/12	14 (6 8)	1	4 F.	† Negative after further inoculation; 8 c.cm. in all
11/12	9 (3 6)	1	1 M.	Negative after further inoculation; 4 c.cm. in all
1	9 (3 6)	1	9/12 F.	Negative after further inoculation; 4 c.cm. in all
1-2	85 (42 43)	15	(a) 1, F. (b) 2, M. (c) 11/12, M. (d) 2, M. (e) 2, F. (f) 6, M. (g) 7, F. (h) 8, F. (i) 9, M. (j) 9, F. (k) 6, F. (l) 12, M. (m) 12, F. (n) Ad. F. (o) 1, F.	Negative after further inoculation; 4 c.cm. in all Negative after further inoculation; 4 c.cm. in all Negative after further inoculation; 0.5 c.cm. + 3 c.cm TAT Negative after further inoculation; 4 c.cm. in all Negative after further inoculation; 4 c.cm. in all Negative after further inoculation; 4 c.cm. in all Negative after further inoculation; 4 c.cm. in all Given further inoculation; not re-tested Given further inoculation; not re-tested No re-attendance No re-attendance No re-attendance Given further inoculation; not re-tested Negative after further inoculation; 5 c.cm. in all Negative after further inoculation; 4 c.cm. in all
2-3	62 (28 34)	6	(a) 2, F. (b) 5, F. (c) 12, F. (d) 3, F. (e) 4, M. (f) 8, F.	Negative after further inoculation; 6 c.cm. in all Negative after further inoculation; 4 c.cm. in all Given further inoculation; not re-tested Given further inoculation; not re-tested Given further inoculation; not re-tested No re-attendance
4-5	1 (1 0)	Nil	Nil	Nil
	707 (319 388)	81	M. 34 F. 47	

† Three children in this group were members of one family: 2 negatives (M.), aged 2 years, (F.), aged 6 years; 1 positive (F.), aged 4 years.

In addition, one child re-Schick tested 15 months after 1 c.cm. T.A.T., was found positive, and two children retested after 3 c.cm. were on the information given by the mother considered to be slightly positive. Sixty-seven of those positive on re-Schick have been further inoculated, and 46 of them further tested and found negative. Efforts are being

made to continue the inoculation of the remainder. One child (F., aged 4 years) was positive to the second re-Schick after 6 c.cm., but was negative after 8 c.cm.; this child was the eldest of four girls; the three younger ones were negative after the routine 3 c.cm.; two of these receiving their routine injections on the same day and from the same batch of antitoxin as the eldest.

Of the 707 persons retested, 319 were males and 388 were females. Among the positive were 34 males and 47 females. Neither age nor interval seems to have any influence on the phenomenon. It would seem conceivable that some batches of toxin antitoxin might prove to be less efficacious than others. An analysis of the results obtained in Holborn would seem to indicate clearly that this is so; also that the toxoid antitoxin used was as efficacious as the toxin antitoxin. The toxin-antitoxin mixtures used were all 3 L + per c.cm. mixtures, the toxoid antitoxin contained toxoid diluted 1-10 with added antitoxin.

Use has also been made of T.A.F. (flocculated toxin-antitoxin) in the case of 23 persons found Schick positive. Of these 23 persons, 22 have been retested; in five of these the reaction to the first test was so slight that they were recorded as suitable for immunisation with only one dose, if T.A.M. had been used. 11 of these (nine children and two adults) were negative to the retest.

Eleven (ten children and one adult) were positive to the re-Schick test; of these, six were further inoculated with T.A.F. (three of these were negative to the second re-Schick), five were further inoculated with toxin-antitoxin (three of these were negative to the retest). The use of T.A.F. has been discontinued for the time being.

An interesting use of the Schick test was made in connection with a family in which a baby, A.G., six weeks old, developed diphtheria. There were three other children in the same family, a boy, L.G., aged 10 years, and girls, M.G. and O.G., aged 9 and 8, as well as the mother and father.

Swabs from children contacts were taken; the boy and the girl aged 9 years were shown to be harbouring diphtheria bacilli in their noses. On reswabbing a fortnight later the bacilli in the nose of the girl morphologically resembled diphtheria bacilli, but the virulence test proved negative.

On the 26th February O.G. and A.G. both gave a negative Schick reaction and on the 5th March L.G. and M.G. also gave negative reactions. As a matter of interest the mother was tested and gave a positive Schick reaction.

Retesting.

Retesting is unpopular with parents, and the need for it does not help to increase their confidence in immunisation. Of 707 that have been retested 70 were found to be still Schick positive after three inoculations and 11 after T.A.F. The facts relating to these are given in Table III.

Diphtheria in Children Treated with Immunising Injections.

Up to the end of the year 1929 nine cases of diphtheria occurred in children who had been found positive on Schick test and treated with three immunising injections; the details of these are given in Table IV.

Diphtheria was also notified as having occurred in six other children who had completed their course of inoculation, but the diagnosis in these cases was eventually not confirmed. Two of these (brother and sister) were removed to M.A.B. hospitals as suffering from diphtheria, but they were diagnosed as suffering from rubella and "carrying" diphtheria bacilli but not as suffering from diphtheria. Both these children had been found negative to the re-Schick test some time previously. Three others were removed to M.A.B. hospitals as suffering from diphtheria, but were shortly afterwards discharged as not cases; neither had been re-Schicked since being inoculated; one case after his return from hospital gave a negative reaction to the re-Schick test. The sixth was notified as suffering from scarlet fever and diphtheria, but was later diagnosed as suffering from scarlet fever only.

The following table gives particulars of the nine cases of diphtheria:—

TABLE IV.
Diphtheria in Children Schick-Tested and Treated with Immunising Injections.

Initials	Age in years at date of Schick Test	Sex	Type of Home	Date of Schick Test	First In-jection	Final In-jection	Retest	Result of Retest	Date of onset of Diph-theria	Interval between last injection and date of onset of disease	Confirmation of diagnosis by	Character of Attack
1. A.C.	4 $\frac{1}{2}$	M.	Artizan—moderately satisfactory; house let in lodgings	30/1/24	7/2/24	20/2/24 (Third)	none	—	18/3/25	13 months	Metropolitan Asylums Board (N.E. Hospital)	Very severe
2. G.L.	6 $\frac{1}{2}$	M.	Higher Artizan—model dwellings	4/4/23	11/4/23	25/4/23 (Third)	none	—	29/5/25	13 months	Metropolitan Asylums Board (N.E. Hospital)	Very mild
3. M.T.	3 $\frac{1}{2}$	F.	Higher Artizan—model dwellings	24/9/24	1/10/24	15/10/24 (Third)	none	—	5/4/26	18 months	Metropolitan Asylums Board (N.E. Hospital)	Mild
4. L.P.	6 $\frac{1}{2}$	F.	Higher Artizan—part of private house	11/11/26	17/11/26	1/12/26 (Third)	none	—	23/12/26	22 days*	Metropolitan Asylums Board (N.W. Hospital)	Severe
5. R.H.	7	M.	Residential, separate private house	28/9/27	5/10/27	19/10/27 (Third)	none	—	21/10/27	2 days*	Cuddington Isolation Hospital	Mild
6. P.P.	1 $\frac{1}{2}$	F.	Artizan—model dwellings	5/9/23	12/9/23	26/9/23 (Third)	none	—	26/10/27	4 years	Metropolitan Asylums Board (N.E. Hospital)	Mild
7. J.F.	1 $\frac{1}{2}$	F.	Higher Artizan—model dwellings	13/5/25	20/5/25	10/6/25 (Third)	yes	negative 11/11/25	19/2/28	2 $\frac{1}{2}$ years	Metropolitan Asylums Board (N.E. Hospital)	Mild
8. V.C.	3 $\frac{1}{2}$	F.	Poor, one room; house let in lodgings	9/4/24	30/4/24	18/6/24 (Third)	yes	negative 12/9/24	21/2/28	3 $\frac{1}{2}$ years	Metropolitan Asylums Board (N.E. Hospital)	Mild attack of nasal diphtheria
9. W.J.	3 $\frac{1}{2}$	F.	Fair, two rooms; house let in lodgings	12/1/27	19/1/27	9/3/27 (Third)	yes	negative 19/10/27	15/4/29	2 $\frac{1}{2}$ years	Metropolitan Asylums Board (N.W. Hospital)	Mild

*These two cases occurred before the elapse of 9 months, the period laid down at Edinburgh as required to secure artificial immunisation.

The above table shows that only three of the children were retested after the last injection. It cannot be assumed that immunity invariably follows the administration of three immunising injections, nor that immunity even when once established is invariably permanent. Drs. Parish and Okell have shown that of 440 Schick positive children who were rendered Schick negative by immunisation, 5 per cent. were found to be positive when retested 1-7 years later.

The question of the advisability of using T.A.M. from a bottle that has already been opened has arisen from time to time. In Holborn to save waste we buy T.A.M. in a bottle containing 25 c.c. which is a quantity in excess of that which we are likely to use at one session.

This procedure has been found to be safe; every week as a routine aerobic and anaerobic cultures are made from the bottle of toxoid anti-toxin mixture in use; no organism has ever grown.

What of the Future ?

The aim of everyone who takes up the work must be to get all the children living in the area immunised as soon as possible after they reach the age of 6 months. In Holborn we have not reached this stage yet; the history of vaccination against small pox suggests we never shall. But a local health authority is justified in considering that it has done all in its power to prevent loss of life and illness from diphtheria if it offers immunisation, supported by necessary advice and information to parents.

It might be expected that if the immunisation were carried out among the school population in a large town the parents would come to regard the procedure as more ordinary, and be prepared to allow the younger children to be immunised at infant welfare centres. Apparently it cannot be too often repeated that it is immunisation at a very early age that we want carried out; if it is delayed till school age half the deaths will have occurred.

Immunisation of School Children against Diphtheria.

The decision of the London County Council not yet to take up the matter of diphtheria immunisation in the schools though willing to help the work started in the various boroughs, by affording facility in the schools for the circularisation of information to parents, was somewhat of a disappointment to several Medical Officers of Health of Metropolitan Boroughs. Where a Borough Council has definitely decided in favour of diphtheria immunisation and offers it to children under five years of age, each young child is brought to the Immunisation Centre as a result of individual effort, but the organisation of a public elementary school lends itself so easily to the mass immunisation of a large body of children that it seems very unfortunate that the Borough who has approved the principle should lose this advantage.

Diphtheria at Different Ages.

As a matter of interest and in response to many enquiries we have taken out the age-incidence of attacks of diphtheria (notifications) in the County of London during recent years.

Incidence of Diphtheria in the County of London among Age Groups of Notified Cases for the Five Year Period 1925-1929 Inclusive.

Group.	Males.	Females.	Total.	Percentage.
Under 5	11,518	9,820	21,338	34.7
5-10	10,416	11,135	21,551	35.0
10-15	3,819	4,675	8,494	13.8
15-20	1,276	2,270	3,546	5.7
20-25	707	1,852	2,559	4.2
25-30	420	1,092	1,512	2.5
30-35	271	748	1,019	1.7
35-40	180	459	639	1.0
40-45	107	273	380	0.6
45-50	66	159	225	0.4
50-55	34	103	137	0.2
55-60	18	63	81	0.1
60 and over	22	63	85	0.1
Total ...	28,854	32,712	61,566	100.0

Diphtheria Immunisation is Worthy of an Extensive Trial.

It should be pointed out that the results obtained in Holborn from anti-diphtheria immunisation are not necessarily those which would be obtained from the widespread practice of the procedure throughout the whole of the country. It is a commonplace in the public health world that satisfactory statistics cannot be compiled from a relatively small number of cases.

If we are to reduce the incidence of diphtheria further we are to all intents and purposes forced to employ a method of this nature and for this reason. Diphtheria is a very difficult disease to control; it is spread mainly by healthy "carriers," that is to say, by healthy persons who harbour virulent diphtheria bacteria chiefly in their throats or noses or both, these bacilli are often passed on during the act of coughing or even loud speaking, or perhaps for a very short distance by ordinary breathing, especially in the case of overcrowded vehicles or passenger lifts, or by means of incompletely cleansed drinking vessels or eating utensils placed in the mouth such as spoons, forks, etc.

Diphtheria immunisation is worthy of an extensive trial. The procedure has already gained wide acceptance in the United States of America; other countries nearer home, such as Germany, France and Belgium are immunising their children in this way. In these islands it has proved its worth as a means of preventing diphtheria in hospital nurses and in stamping out diphtheria in institutions where the disease has been present for a considerable time and has given rise to case after case. The Edinburgh statistics relating to school children are, to say the least, very encouraging. The control of smallpox obtained by vaccination is so complete that progressive members of the medical profession have been stimulated to obtain a similar control of other infectious diseases including not only diphtheria, but also scarlet fever and measles, and the measure of success already obtained in controlling diphtheria warrants further effort.

Less Diphtheria in Holborn than in London.

The following table shows the diphtheria notification rates in England and Wales, London, and Holborn during the seven years 1922-28. As the Schick test and immunisation against diphtheria were started in Holborn in the early part of 1922 the figures are of interest:—

Diphtheria—Notification rate per 1,000 population.

	England and Wales	London	Holborn
1922	1.37	3.37	2.52
1923	1.05	2.27	2.25
1924	1.07	2.31	1.58
1925	1.23	2.73	1.75
1926	1.31	2.96	1.69
1927	1.33	2.71	1.28
1928	1.55	2.75	1.45

The figures for England and Wales and London are taken from the Registrar-General's Statistical Reviews for the years 1922-28.

Scarlet Fever.

There were 130 notifications of scarlet fever. All but two were removed to hospital.

Seven cases were returned as not suffering from scarlet fever; one was found to be suffering from erythema, three from German measles, one from lobar pneumonia, and in two no obvious disease was found.

Seven notifications of "secondary" cases were received. From two hospitals in the Borough 17 in-patients were notified as so suffering. None was resident in Holborn.

Two of the cases notified were "return" cases.

The child, V.S., giving rise to these two cases was found to have catarrhal nasal discharge and enlarged glands at the angle of right jaw. The child after return home from hospital slept by herself and was kept away from school for two months from the date of return home from hospital and was then found on further examination by the Medical Officer of Health to be fit for return to school and a certificate was issued accordingly.

There was no death from this disease.

15,855 cases of scarlet fever were notified in London with 77 deaths.

Every endeavour is made to co-operate with the London County Council in connection with infectious diseases. For instance, a child who was a contact with scarlet fever was kept at home by its parents on the grounds that the child was "a carrier of scarlet fever." On the Medical Officer of Health going into the matter, no evidence of this was to be found; the child had slight enlargement of the tonsils, but was considered fit for school.

Acute Rheumatism in Children.

THE HOLBORN (ACUTE RHEUMATISM) REGULATIONS OF 1929 came into force on the 1st April, 1929; these require the notification of acute rheumatism in children up to the age of sixteen years.

Acute rheumatism as defined by the Regulations means—

- (i.) Rheumatic pain or arthritis, if accompanied by a rise in temperature;
- (ii.) Rheumatic chorea (St. Vitus' dance);
- (iii.) Rheumatic carditis.

Forty-eight cases were notified from the 1st April, 1929, up to the end of the year. As regards the source of information:—

- 3 were notified by doctors in private practice.
- 2 were notified by an Assistant School Medical Officer.
- 9 were notified by doctors in institutional practice.
- 11 were notified by the Medical Officer of the Rheumatism Supervisory Clinic.
- 23 were notified by the District Organiser of the L.C.C. Care Committee as having been definitely stated medically to be suffering from rheumatism.

Rheumatism in children attending school is from time to time reported to the Health Visitors by parents; if the child is not already notified as suffering from rheumatism, the information is given to the District Organiser of the L.C.C. Care Committee (Miss H. Bell, to whom we have reason to be grateful) at a monthly conference between the Organiser and the Health Visitors. Miss Bell arranges for medical examination of the child at school.

Of forty-one cases reported by parents to the Health Visitors, the diagnosis of rheumatism was confirmed in eleven.

The notifications are classified as:—

Rheumatic tendency	...	...	...	2
Sub-acute rheumatism	...	...	...	22
Acute rheumatism	...	...	...	12
Post-rheumatic	...	...	...	12

Age and Sex Distribution of notified cases.

Age in years.		Sex		Total.
		M.	F.	
4	...	2	1	3
5	...	1	1	2
6	...	2	1	3
7	...	2	1	3
8	...	4	4	8
9	...	3	6	9
10	..	2	1	3
11	...	—	2	2
12	...	1	4	5
13	...	2	1	3
14	...	—	4	4
15	...	2	1	3
Totals	...	<u>21</u>	<u>27</u>	<u>48</u>

Particulars of cases of acute rheumatism in children coming to our knowledge are recorded in a register under the following headings:—

<i>Name, &c.</i>		<i>Classification and Symptoms</i>	<i>Tonsils, Adenoids and Teeth.</i>
Surname		Rheumatic tendency	Condition of tonsils
Christian name		Sub-acute rheumatism	Presence of adenoids
Sex		Acute rheumatism	Teeth including oral
Date of birth		Post-rheumatic	sepsis
Address		Arthritis accompanied by	
School		rise of temperature	
Source of information		Rheumatic chorea	
		Rheumatic carditis	
<i>Treatment.</i>		<i>Home Conditions.</i>	<i>Sleeping Conditions.</i>
Private doctor—date of first attendance		Position of rooms in house	Separate room
Out-patient at hospital—name of hospital and date of first attendance		Evidence of Dampness	Separate bed in room
		Lighting	Room shared with—
		Ventilation	Adults (number)
In-patient at hospital—name of hospital and date of first attendance		Overcrowding	Children (number)
			Bed shared with—
			Adults (number)
			Children (number)
Convalescent home—name of home and date of admission			
<i>Hours of Sleep.</i>		<i>Clothing.</i>	<i>Food.</i>
Time of getting into bed		Condition of clothing and	Quantity
Time of rising		boots	Suitability

*Help wanted for patient.**History of Rheumatic
Fever.**Contacts.*

Clothing	Rheumatic heart disease	Name
Boots	in family—	Sex
Stockings	Father	Age
Dispensary letter	Mother	Any sore throat
In patient treatment	Brother	Any pains in muscles,
Convalescent home	Sister	joints
Name of organisation	Other members of	Any shortness of breath
referred to	family	Any fidgetiness or ex- treme nervousness

On the occasion of the visit of Miss Bell the register is brought up to date as well as at intervening times. The intention is that no rheumatic child requiring help in any way shall go without it.

The Sanitary Inspection of the homes is made by experienced Sanitary Inspectors; we are requiring for these children as high a standard of environmental hygiene as can reasonably be achieved.

Rheumatism Supervisory Clinic.

A Rheumatism Supervisory Clinic is held every weekday at the Hospital for Sick Children, Great Ormond Street, beginning at 9 a.m.; it is available for children up to 12 years of age. After this age they are automatically transferred to St. Bartholomew's or King's College Hospital, or to the hospital they have attended before they came to Great Ormond Street Hospital.

The Physician in charge of the Clinic, Dr. Wilfred Sheldon, who is also Junior Physician in charge of the Children's Department at King's College Hospital, Camberwell, sees children who attend the medical out-patient department in the same room as two other Physicians who refer children to him; he is also able at the same time to consult conveniently with his two colleagues.

The presence of rheumatism is by no means always easy to determine: in the early stages when obviously a diagnosis is of the greatest value, this can often only be done by watching the child over a period of three to six months, during which time the child attends regularly at the Clinic. A point of interest is the possibility of malingering taking place in the case of elder girls whose services are valuable to the mothers at home for domestic purposes; such girls they say have rheumatic pains and are kept from school, just as the younger ones say they have ear-ache.

At the Clinic comprehensive records are kept as to the children's physical condition. Advice is given on such matters as clothing, exercise, diet, and any alteration desirable to the child's curriculum at school.

At the Great Ormond Street Hospital Clinic all stages of rheumatism are treated, not only the early stages.

For the child who is not damaged beyond repair protracted treatment is possible at the Lancing Convalescent Home, where the child resides for 6-9 months. The children there come under the care of the local medical practitioner, who is versed in the principles of the treatment laid down for rheumatic children; once a month he has the advantage of consulting with Dr. Sheldon, who visits Lancing for the purpose.

Enquiries in Notified Cases of Rheumatism.

Enquiry was made in forty-five cases in relation to:—

- (a) the type of house in which the patient lived;
- (b) the presence of dampness and absence of light and ventilation;
- (c) sleeping accommodation, overcrowding, and the standard of comfort and living;
- (d) the condition of the nose, throat and teeth;
- (e) heredity.

Type of House.

- 19 lived in satisfactory artisan self-contained flats.
- 12 lived in satisfactory artisan homes in divided houses of a comfortable type (a better class of house let in lodgings).
- 11 lived in houses let in lodgings.
- 4 lived in artisan dwellings of an old type, not self-contained but superior to ordinary houses let in lodgings.

It is somewhat curious to note the incidence of acute rheumatism in satisfactory homes.

Dampness in Houses.

Dampness was found in only three houses, due to temporary nuisances which were remedied.

Lighting and Ventilation.

One child lived in a semi-basement flat, and although the lighting was not good, the flat was well built and the street and courtyard adjoining fairly wide, so that lighting and ventilation compared not unfavourably with upper floors in narrow streets and small courtyards.

Most of the remaining homes were well ventilated and the lighting good; in no case was ventilation or lighting markedly unsatisfactory.

Enquiry revealed that two of the forty-eight notified cases did not live at the addresses given; in one case where the patient died very shortly after notification was received, enquiry was limited to the contacts of the case.

Overcrowding and Sleeping Accommodation.

There was no evidence of legal overcrowding in any of the houses; this standard is notably low however. The sleeping arrangements are given in the following table:—

Sleeping Arrangements—45 Cases of Notified Rheumatism.

No. of Rheumatic Children	Separate Room	Bed in Living Room	Separate Bed in Room shared with									Bed shared with								
			Adults			Children			Adults and Children			Adults			Children			Adults and Children		
			1	2	3	1	2	3	1	2		1	2	3	1	2	3	1	2	
45	5	2	2	2	0	7	3	0	1	1		3	0	0	14	3	0	1	1	
45	5	2	16									22								

It will be seen that only five children had a separate room, sixteen had a separate bed in a shared room; twenty-two shared a bed, five of these with more than one person; two children had a bed in the living room, a very unsatisfactory arrangement, seeing the child is disturbed by the late and uncertain hours of going to bed kept by the rest of the family, and also the possibility of disturbance at an early or earlyish hour in the morning.

In some instances where beds were shared, the reason given was the small size of the rooms which made it difficult to get other beds in; whether the bunk bed is a possible solution of this difficulty is not clear, ashore it is an innovation and therefore not popular. Moreover, it is not obtainable at many shops and second-hand stalls, and its existence is overlooked. It is not hygienic for anyone to share a bed.

Social Conditions.

In four homes there was a history of chronic poverty but without acute distress; in one of these the mother has been many years widowed; two have been widowed since the provision of widows' pensions; and in the other, the father's occupation (foreman in stables of a commercial firm) has become obsolete. In the last home, however, the food, owing to the mother's commonsense and industry, is as good, if not better, than in many homes where there is a larger income. In all these homes, difficulty of providing proper clothing, and more especially sufficient boots, may arise at any time, and if this does occur we hope to be able to solve the difficulty.

In none of the families was there any social circumstances of special significance.

Condition of the Nose and Throat.

In fourteen children the condition of the tonsils was normal.

Twenty-two children had their tonsils removed, nine of these also had adenoids removed.

In four cases tonsillectomy was advised, one of the four also requiring removal of adenoids.

In the remaining five cases the tonsils were enlarged at the time of examination but no special treatment was recommended.

Of the twenty-two children referred to above, in seven cases the removal of the tonsils coincided with the reported onset of rheumatism, in that the diagnosis of the rheumatic condition was made in connection with the attendance of the children at hospital on account of tonsillitis. In ten tonsillectomy had been performed at varying periods considerably before the symptoms of rheumatism were observed (from three of these also adenoids had been removed); in five others the children were found to have had tonsils removed as part of treatment for rheumatism.

Teeth.

In three children dental caries was still present: in five others extractions had been made as part of the treatment for rheumatism.

Heredity.

Based on information derived from the parents (notably untrustworthy seeing that they include all forms of rheumatism including fibrositis) the following has been compiled:—

In six the mother had suffered from rheumatism.

In three the father.

In one both mother and father.

In one the brother.

In two cases, the father, mother, brother and other relations.

In one family the mother and her relations.

In one family there was a history of rheumatism in the mother's relations only.

Contacts.

Nine of the notified cases had no contacts.

A history of rheumatic pains was reported in the contacts of six cases. Seven of the contacts were examined at the Rheumatism Supervisory Centre, and as a result one is being kept under observation.

The names of all the other contacts going to school were passed on by the London County Council district organiser to the Divisional School Medical Officer in order that they might be observed and examined if necessary.

History of Patients after leaving School.

Five of those notified, one boy and four girls, have ceased to attend school and are at work. A boy (A.M., æt. 15) works as a lift attendant at a large store, one girl (G. H., æt. 14 years) as a clerk, one (G.M., æt. 14 years) as a relief stamper, one (M.C., æt. 14 years) as a box folder, and one (Q.W., æt. 14 years) as a checker in a laundry receiving office.

Two of these (A.M. and Q.W.) reached 16 years of age in the early part of 1930 and are no longer under supervision as notified cases nor as "children" under any children's care organisation. At the moment all these children are keeping well but would probably benefit by attendance at a Rheumatism Supervisory Centre for adults.

Obviously the nature of employment to be followed by any child who has suffered from rheumatism requires careful consideration by all concerned.

Typhoid Fever and Paratyphoid Fever.

Five cases were notified during the year with no death. In London 851 cases were notified giving rise to 45 deaths.

The following table gives particulars of the cases notified in Holborn:—

Case.	Age.	Sex.	Occupation.	Date of Notification.	Notified as.	Nature of Laboratory Examination.	Diagnosis.	Where treated	Contracted in Borough.	Probable Source of Disease.
R.S.	5	M.	Child	29th May, 1929	Paratyphoid B	Agglutination tests	Para-typhoid B	Belgrave Hospital for Children	Yes	—
K.	18	F.	Not known (Japanese travelling)	9th July „	Enteric Fever	No information (one day at hotel in Borough.)		Nursing Home	No	Was ill on arrival at hotel from Paris
J.L.L.	44	M.	Licensed victualler	1st August „	Typhoid ...	Agglutination tests —negative	? Typhoid	Nursing Home	Yes	—
R.J.	19	M.	American visitor	7th Sept. „	Enteric Fever	Agglutination tests —negative	Food rash	N.W. Hospital	No	Travelling, Sweden, 12th June to 20th Aug, illness began before reaching Holborn
F.J.P.	46	M.	Rotary cutter	23rd Sept. „	Typhoid ...	Agglutination tests —negative	Acute Enteritis	N.W. Hospital	No	Had recently been in Cornwall, 23rd—30th August on holiday

Typhus Fever.

No case of typhus fever was notified during the year in the Borough or in London.

Cerebro-Spinal Fever.

No case of cerebro-spinal fever was notified in the Borough.

One hundred and twenty-one cases were notified in London, giving rise to 85 deaths.

Bacillary Dysentery.

Two cases of bacillary dysentery were notified.

Both were nurses at a hospital in the Borough where they remained for treatment, and both patients recovered.

The excellent scientific work carried out by an eminent pathologist at this hospital results in the presence of dysentery bacilli being discovered in illnesses where otherwise their presence would not have been detected. In many of these cases the illnesses would otherwise have been labelled diarrhoea and in some colitis. As a result of this work articles have been published on the dysentery bacillus as a common factor in colitis in children.

Malaria.

One case of malaria was notified, a male, age 30 years; the disease was contracted abroad, probably in Ceylon.

Encephalitis Lethargica.

One case of encephalitis lethargica was notified in the Borough during the year.

The following table gives information up to the end of 1929 respecting the 12 real cases of encephalitis lethargica notified in the Borough since the Public Health (Encephalitis Lethargica) Regulations came into force on the 1st January, 1919:—

Date of Notification	Patient.	Age when notified.	Subsequent History.
13/1/20	B.R.	32 years	Disease fatal 13/1/20
6/2/20	P.P.	8 years	Disease fatal 28/2/20
7/2/20	W.W.	47 years	Disease fatal 7/2/20
26/4/22	W.H.	14 years	Disease fatal 19/4/22
4/4/24	A.K.	28 years	Disease fatal 28/3/24
16/5/24	G.C.	36 years	Returned to Italy; no further information
20/6/24	R.V.M.	40 years	Went to Australia. Complete recovery reported
9/7/24	F.H.	7 years	Complete recovery
26/9/24	B.V.	53 years	Disease fatal 21/9/24
4/5/25	C.S.	28 years	Right leg partially paralysed, but walking improving; right arm tremulous. Does not sleep well; tired and sleepy during day
29/5/26	H.P.	33 years	Disease fatal 30/5/26
22/7/29	C.M.	47 years	Returned to West Indies; no further information

The table excludes one case notified 15/11/24 who was subsequently found not to be suffering from this disease.

In February, 1928, a communication was received from the Medical Officer of Health of the London County Council respecting non-notified cases of encephalitis lethargica. Information of four such cases in the Borough was forwarded in order that where the patients

were not of school age they could be kept under observation in the same way as notified cases.

The following gives particulars of these cases:—

Date of Onset.	Patient.	Date of Birth.	Where Treated.	Condition at end of 1929.
1/9/20 ...	P.L.	1904	Hospital ...	Slow in speaking, but quite intelligent. Left arm paralysed and muscles left hand wasted. Circulation poor. Conduct improved, helps more in home. Attends hospital for massage.
Jan., 1920	W.P.	1910	Hospital ...	Died 1929.
Feb., 1924	W.B.	1913	Hospital—in patient since 1926	Rather irritable—marked Parkinsonism with coarse tremors (Parents report).
Nov., 1924	K.M.	1911	Hospital—in-patient...	Said to be slightly better.

Acute Poliomyelitis and Acute Polioencephalitis.

No case of acute poliomyelitis or polioencephalitis was notified.

Sixty-six cases were notified in London.

From the coming into operation of the Poliomyelitis Order, 1912 to the end of 1929, 14 cases were notified in the Borough.

The following table gives particulars of these cases with the condition at the end of 1928:—

Date of Notification.	Patient.	Age at date of Notification.	Where Treated.	Subsequent History.
17/7/13	F.D.	1½ years	Hospital	Died from diphtheria.
23/10/13	F.H.	2 "	"	Wears surgical boot; still O.P. at Hospital. Health satisfactory.
26/1/16	A.C.	4 "	"	Died 26/1/16.
27/1/16	T.B.	4 "	"	Working—dragging of leg hardly noticeable.
5/9/16	F.B.	2 months	"	Died.
6/6/20	I.P.	3½ years	"	Recovered—no crippling.
23/7/20	E.W.	15 "	"	No use of lower limbs. Does occasional clerical work.
17/9/20	E.H.	1½ "	"	Recovered—no crippling, "thinness" of leg only. Health satisfactory.
4/9/22	Y.R.	1½ "	Home	Died in Paris.
5/2/23	J.N.	3½ "	Hospital	Recovered—no crippling.
2/5/23	M.H.	11 mths	"	Still an out patient at Orthopaedic Hospital, wears surgical boot—goes to school.
14/8/25	B.T.	26 years	"	Hotel guest; could not be traced.
30/10/25	V.H.	5 "	"	Removed from Borough—lost sight of.

The table excludes one case notified 4/12/18 who was subsequently found not to be suffering from this disease.

Pneumonia.

Eighty-nine cases of pneumonia were notified during the year. Twenty-six of these were influenzal pneumonia. Forty-one deaths were recorded from all forms of pneumonia.

The 63 cases of primary pneumonia were notified at the following ages:—Under 1 year, 4; from 1 to 5 years, 13; from 5 to 15 years, 4; from 15 to 25 years, 4; from 25 to 45 years, 17; from 45 to 65 years, 13; and 65 years and upwards, 8. Twenty were treated at home; 16 were removed to voluntary hospitals; and 25 to Poor Law Infirmary; and 3 to a nursing home. Seven of the patients were nursed by the Metropolitan Nursing Association under the arrangements made by the Council, in all 159 visits being paid to these patients.

Of the 63 cases of primary pneumonia, 20 resided in tenement lodging houses, 22 in separate private dwelling houses or model dwellings, 7 in hotels, and 5 in common lodging houses, 4 in boarding houses, 4 were office caretakers, and 1 was a nurse at a nursery home.

The cleanliness of the houses was reported to be satisfactory in 38 cases, but only fairly so in 11; and in one case as unsatisfactory. The economic conditions of the families concerned were found to be good in 12 cases, fair in 24, poor in 8; 7 cases were nursed in a separate room. In a number of cases information as to the economic condition was not obtainable.

In a number of cases the disease was not ascribed to any special cause, but the following was given in 34 instances:—

Following bronchitis	...	...	...	...	...	...	...	...	8
Following influenza	...	...	...	...	...	...	...	...	8
Following cold	...	...	...	...	...	...	...	...	12
Following pleurisy	...	...	...	...	...	...	...	...	1
Following cough and nasal discharge	...	...	...	...	...	...	...	...	1
Following whooping cough and bronchitis	...	...	...	...	...	...	...	...	1
Following exposure to bad weather	...	...	...	...	...	...	...	...	1
After nursing case of pneumonia	...	...	...	...	...	...	...	...	1
After a "stroke"	...	...	...	...	...	...	...	...	1

Influenza.

There were 44 deaths from influenza in comparison with only 3 in 1928, 20 in 1927, 8 in 1926, 9 in 1925, and 11 in 1924. The deaths occurred at the following ages: Under 1 year, 1; 25 to 45 years, 1; 45 to 65 years, 20; 65 to 75 years, 9; over 75 years, 13.

In the early part of the year influenza was prevalent; the increase in the number of deaths from this disease is responsible for the increased death rate in the Borough this year. Ordinary preventive measures do not seem to have any marked effects on the prevalence of this disease; this to a live medical world postulates efforts made in other directions. In this country these efforts are taking the direction of attempts to discover a suitable vaccine to be injected as a preventive at the appropriate time, i.e. before the disease comes rife. Research workers should be helped forward in every way possible in their endeavour to find means to combat this widespread and frequently recurring disease. The public should be willing to spend money on research.

Anthrax.

No case of anthrax was notified in the Borough during the year.

Chicken-pox.

During the year information of 29 cases was received from school teachers and others. Cases of chicken-pox are visited when advisable.

Mumps.

Information was received from school teachers and others of 23 cases of mumps.

Bacteriological Work.

The following table gives details of the examinations made during the year:—

Diphtheria		Pulmonary Tuberculosis		Enteric Fever	
Number Submitted	Result of Examination	Number Submitted	Result of Examination	Number Submitted	Result of Examination
382	Bacilli not found 314 Diphtheria bacilli found 68 Vincents organisms found —	95	Bacilli not found 73 Bacilli found 22	2	Negative 2 Positive 0

Disinfections.

During the year 772 rooms and 5,721 articles of bedding, clothing, etc., were disinfected after various infectious diseases, inclusive of tuberculosis.

Thirty rooms and 298 articles of bedding, clothing, etc., were disinfected after tuberculosis.

Special attention is devoted to toys and more particularly to any toy put in the mouth. One hundred and thirty-two books and 74 toys were disinfected; also two perambulators, two cradles, a violin case, and an attache case.

The disinfections also included 10 lockers, five hospital wards, and three workshops.

Cleansing of Persons Act.

During the year 135 persons (122 men and 13 women) infested with vermin had their bodies and 1,637 articles of clothing disinfested, free of charge, at our cleansing station (Goldsmith Street).

Shelter during Disinfection.

For some years past the arrangement has been in operation with the Council of the Metropolitan Borough of Finsbury for accommodation to be provided at their Reception House, Northampton Road, for residents of this Borough during the disinfection of their homes after infectious disease. In the year 1929 the accommodation was used by 11 Holborn families comprising 18 adults and 13 children. Nine families were smallpox contacts; two were admitted on account of verminous home conditions. Ten families remained at the shelter one night each and one for two nights.

Verminous Conditions and Scabies.

In connection with our co-operation with the London County Council School Medical Service, information is received from the Medical Officer of Health of the London County Council respecting children attending elementary schools and residing in the Borough found to be verminous or suffering from scabies.

During the year information was received under this arrangement respecting 18 children in 11 homes. Two children were reported as verminous twice during the year. All the homes were visited as soon as practicable after the receipt of each report. In one home only the Health Visitor reported dirty conditions, although in this home there was no definite evidence of vermin: there were two very dirty flock mattresses and the rooms were very dirty. The mattresses were destroyed and the rooms cleansed. In another case, although the home was clean it was found that the mother went out to work and to some extent consequently neglected the child. After the service of notice this mother gave up her work; as her husband was in good regular work there was no need for her to work.

Two cases of scabies were brought to our knowledge. In one instance the home was found to be clean and disinfection was carried out after the patient's complete recovery. In the second instance, two children were found to be infected in August, 1929. They were admitted to the Holborn and Finsbury Hospital from which they were discharged in October as being cured. On the removal of the children to hospital, all the bedding, children's clothes, towels, etc., were disinfected, and the rooms occupied by the family were fumigated. In the first month of the present year (1930) information was received that one of these children was again suffering from scabies as was also her mother. Both were attending hospital for treatment; arrangements were made for the mother to attend the cleansing station for sulphur baths daily for a week. The personal clothing and bed linen were disinfected at the Council's Disinfecting Station, the process being repeated at weekly intervals for a month. At the end of February, 1930, the family was reported well, and the children were then again attending school. At the date of the preparation of this report further visits had been made and the family was still reported to be well.

Extermination of Vermin.

With a view to encouraging active steps for the extermination of vermin, arrangements were continued for a supply of a vermin-killing solution to be stocked in the Health Department and to be available at cost price for occupiers of infested houses and tenements. A small sprayer for diffusing the solution was also made available on loan.

The solution has been found effective for the destruction of bugs, cockroaches, fleas and other small insect pests, and the convenience of being able to obtain a small quantity has been appreciated by a number of occupiers of small tenements.

During the year eight gallons of the solution in small quantities were sold to 24 purchasers.

One hundred and seventeen verminous rooms were disinfested.

When fumigating verminous rooms we endeavour, whenever practicable, to repeat the fumigation at the end of a week, by which time it is expected that any eggs of bugs will have hatched out; a single fumigation of any severely infested room cannot be regarded as satisfactory. In 71 cases last year this second fumigation was carried out. Where this course for any reason was impracticable the occupiers were encouraged to use the solution referred to above or take other effective steps to prevent any recurrence of the nuisance.

Tuberculosis.

Summary of Notifications and Deaths.

The following table gives the number of new cases of tuberculosis and deaths from the disease in the Borough during 1929 in the form required by the Ministry of Health:—

Age periods.	New Cases.				Deaths.			
	Pulmonary.		Non-pulmonary.		Pulmonary.		Non-pulmonary.	
	M	F	M	F	M	F	M	F
0	—	—	—	—	—	—	—	—
1	—	—	1	—	1	—	—	—
5	2	—	2	1	—	—	—	—
10	1	—	—	—	—	—	—	—
15	1	—	2	1	1	—	—	—
20	4	9	1	2	1	2	—	—
25	5	8	—	—	7	4	—	1
35	15	6	1	—	12	1	1	—
45	6	5	—	—	2	3	1	—
55	3	2	—	1	1	4	—	—
65	7	2	—	—	3	1	—	—
	44	32	7	5	28	15	2	1

The initiation of the Tuberculosis Care Committee as a local institution and the administrative change whereby all correspondence concerning tuberculous patients is sent to the Borough Medical Officer of Health continue to prove beneficial; knowledge of the patients thus made available for the local public health staff is increased in a natural and easy way and the interest in the work encouraged.

Total number of cases on the Register of Tuberculosis in the Borough on the 31st December, 1929	...	...	...	320
Number of these patients residing in common lodging houses	...	...	...	32
The average number of cases notified annually during the past ten years	...	...	...	95
The number notified in the year 1929	...	...	...	88
Of the 88 cases notified in 1929, the number who attended the Dispensary	...	...	...	34
Total number of new cases examined at the Dispensary for the first time in 1929, including the above 34, and all contacts	...	...	...	173
Total attendances at the Dispensary in 1929	...	...	...	860

Supervision of home conditions; visits paid by—

Tuberculosis Officer	30
Dispensary Nurse	1,193

The present arrangements for the Tuberculosis Dispensary are as follows:—

The Dispensary is at the University College Hospital, Gower Street, in the Borough of St. Pancras.

The Dispensary covers the whole of the Borough of Holborn.

The Tuberculosis Officer attends three sessions each week, namely, Monday and Wednesday afternoons and Thursday evenings.

The Dispensary Nurse assists at the Dispensary and visits cases in their homes.

Public Health (Tuberculosis) Regulations, 1912.

Summary of Notifications during the period from the 30th December, 1928, to the 28th December, 1929, in the Metropolitan Borough of Holborn.

Age-periods.	Notifications on Form A.												Notifications on Form B.				Number of Notifications on Form C.			
	Number of Primary Notifications.											Total Notifications on Form A.	Number of Primary Notifications.			Total Notifications on Form B.	Poor Law Institutions	Sanatoria.		
	0 to 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 and upwards.		Total Primary Notifications.	Under 5.	5 to 10.				10 to 15.	Total Primary Notifications.
Pulmonary Males	1	1	1	3	5	13	5	2	6	37	49	...	...	...	...	...	27	26
„ Females	9	8	4	4	2	1	28	35	...	...	...	...	...	15	23
Non-pulmonary Males	...	1	2	...	1	1	...	1	...	...	...	6	7	...	...	...	...	...	...	2
„ Females	1	...	1	2	...	...	...	1	...	5	6	...	...	...	...	...	...	4

Supplemental Return.

New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the period from the 30th December, 1928, to the 28th December, 1929, otherwise than by notification on Form A or Form B under the Public Health (Tuberculosis) Regulations, 1912, or by notification in pursuance of the Local Government (Emergency Provisions) Act, 1916.

Age-periods.	0	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards.	Total Cases.
Pulmonary Males	1	...	...	1	...	2	1	1	1	...	7
„ Females	2	1	...	1	...	4
Non-pulmonary Males	1	...	...	...	...	...	...	...	1
„ Females

Six of the 12 were ascertained from the death returns and five were transfers from other areas, and one was a posthumous notification.

Tuberculosis Notifications.

Excluding duplicates the total number of notifications received on Forms A or B during the year 1929 was 70; 12 other cases were brought to my knowledge (making 88 new cases in the year). These were:—Private cases 21, hospital cases 39, Poor Law cases 18, from death returns 6, transfer from other districts 4.

Correction of Tuberculosis Register during the year 1929.

Number of cases on Register, 31st December, 1928 ...	309
New cases registered, 1st January to 31st December, 1929 ...	88
	<hr/>
	397

Removed from the Register during the same period for following reasons:—

Removed from Borough ...	22
Recovered ...	6
Died ...	46
Not suffering from tuberculosis (Notification withdrawn.) ...	—
Not traced ...	3
	<hr/>
	77
	<hr/>
Number on Register, 31st December, 1929 ...	320
	<hr/>

Of the 88 cases entered on the Register in 1929, 76 were pulmonary tuberculosis and 12 non-pulmonary tuberculosis. Sixty-four of the cases were removed for treatment to hospital, infirmary or sanatorium.

Sleeping Conditions.

In 69 of the 88 new cases of tuberculosis in 1929 it was possible to obtain information as to the sleeping conditions at the date of notification. Fifteen of the remaining cases were residents in common lodging houses; in three cases incorrect addresses were given, or the patients no longer resided in the Borough, and in five cases no information was obtainable.

The following is a summary of the information in the 69 cases above referred to:—

Patient slept in—

Separate bed room ...	19
Separate bed in living room ...	2
Separate bed in room shared with—	
1 adult ...	4
2 adults ...	3
3 adults ...	1
1 adult and 1 child ...	2
1 adult and 2 children ...	1
	<hr/>
Carried forward ...	32

Shared bed with—		Brought forward		...	...	32	
No others in room	{	1 adult (Husband or Wife)		...	..	15	
		1 adult (not Husband or Wife)			...	6		
		2 adults	...	...	...	1	
		1 child	...	...	...	1	
		1 adult and 2 children		...	...	1	
		1 adult and 4 children		...	...	1	
Shared bed with—								
1 adult	...	Other persons in bedroom	{	3 adults		2
1 adult	...			2 adults and 1 child		...	2	
1 adult	...			1 adult and 2 children		...	2	
1 adult	...			1 adult and 3 children		...	1	
1 adult	...			1 adult, 1 child...		..	1	
2 adults	...			2 adults, 2 children		...	1	
1 child	...			1 child ...		...	1
1 child	...			2 adults, 1 child		...	1	
1 child	...			1 adult, 1 child...		...	1	

69

Classification of Homes.

The classification of homes as suggested by the London County Council has been reported on as far as practicable with the following results:—

" A."—Good environment, clean, well-kept, separate bedroom (or in the case of husband and wife, no other occupant of bedroom), good food and clothing	...	14
" B."—Fair. Separate bed, but not separate bedroom	...	50
" C."—Bad. Dirty environment, dirty ill-kept home, no separate bed, bad management as to food and clothing	...	6
		70

Summary.

The following summary gives the position at the end of 1929 of the 88 new cases respecting which information was received during the year:—

Dead	...	24
Cases removed to Hospital or Infirmary and still in-patients at the end of year	...	10
In-patients in Sanatoria at end of year	...	9
Not traced—Incorrect address	...	2
Removed from Borough	...	10
Dispensary Treatment or supervision	...	—
Home Treatment—Private or Panel Doctor	...	29
Away in country	...	2
No information	...	2
		88

Non-attendance at Tuberculosis Dispensary.

Thirty-four of the 88 cases attended the Holborn Tuberculosis Dispensary.

The following indicates the reasons for non-attendance in the remaining cases:—

Removed to Hospitals, etc., for treatment without prior attendance at Dispensary	22
Out-patients at other Hospitals or Dispensaries	3
Dead before notification or died before attendance at Dispensary	10
Treatment at home by private doctor	4
Not traced and common lodging house cases	10
Removed from Borough	5
	—
	54
	—

Delayed Notification.

The Public Health (Tuberculosis) Regulations, 1912, require notification within 48 hours of the medical practitioner first becoming aware that the person is suffering from tuberculosis. It is still found that medical practitioners do not notify cases of this disease until tubercle bacilli have been found in the sputum and in a number of cases notifications are not received until the death of the patient or shortly before death takes place. In the past year nine cases were notified only at death, six within one month of death, seven within three months and two within six months of death. Twenty-two of these cases died in hospitals.

It is unfortunate that by a proviso in the Regulations of 1912, a medical practitioner is not required to notify a case of tuberculosis if he has reasonable grounds for believing that the case has already been notified. It would seem that any disadvantage accruing from duplication would be easily outweighed by the advantage of the additional encouragement to promote early notification which would ensue from the withdrawal of this proviso from the Regulations.

Institutional Treatment.

During the year notifications were received of 97 admissions to institutions. These admissions represent 82 patients, some of whom are transferred from one institution to another, and others are discharged, or take their own discharge, and subsequently are re-admitted.

The admissions were to the following institutions:—

Poor Law Institutions	42
Institutions of the Metropolitan Asylums Board	40
Other Institutions	15

Visits to Homes, etc.

During 1929 the Tuberculosis Officer made 30 visits to the homes of patients. The general visitation of the patients and supervision of home conditions is carried out by the Tuberculosis Nurses who made 1,193 visits.

Contacts.

All contacts are invited to attend for examination at the Tuberculosis Dispensary.

Ninety contacts, viz., 32 adults and 58 children under fifteen years of age, responded to this invitation and were examined for the first time during the year 1929. Of these, two children were found to be definitely suffering from tuberculosis; four adults were doubtfully tuberculous. Eighty-four were definitely diagnosed as not suffering from the disease. The routine examination of contacts is desirable as a means of discovering not only cases of tuberculosis in early stages of infection, but also advanced and infective cases which may be disseminating infection although remaining undiscovered and untreated.

Arrangements were continued during the year for fuller co-operation with the school medical service so as to ensure that no contacts of school age will remain unexamined; if such examination cannot be carried out at the Dispensary the School Medical Officers are notified so that the examination may be carried out at the school. Information as to the results of such examinations, whether at the Dispensary or the schools, is interchanged as necessary.

Prevention of Spitting.

The necessity for the prevention of spitting, with a view to minimising the spread of tuberculosis, has been emphasised by the issue of warning cards on the subject. These have been exhibited in the various buildings in the control of the Council, also in common lodging houses, and in the workrooms of a number of large firms in the Borough. In addition specially designed opal plates have been placed on the Council buildings. They ask people not to spit and so prevent not only tuberculosis, but pneumonia and other diseases the germs of which are carried in the mouth and nose. It is very conceivable that such a disease as encephalitis lethargica is spread in this way in towns.

Deaths from Tuberculosis.

The number of deaths from pulmonary tuberculosis during the year was 40, a death rate of 1.04 per thousand in comparison with 1.04 for 1928. There were also four deaths from other forms of tuberculosis, a rate of 0.10 per thousand.

The following table shows where the patients died in their own homes or institutions:—

Showing the number of Patients who died in their own homes and the number who died away from home in Hospitals or other Institutions.

	0-	1-	5-	10-	15-	20-	25-	35-	45-	55-	65-	All Ages		
												Males.	Females.	Total.
Number of patients who died at home	1	3	4	1	1	...	5	5	10
Number of patients who died in hospitals, etc.	...	1	...	...	1	2	9	10	5	4	2	24	10	34
	...	1	...	...	1	3	12	14	6	5	2	29	15	44

Tuberculosis Dispensary.

The following is the Report of the Tuberculosis Officer, J. A. Struthers, M.D., B.Ch., M.R.C.P., D.P.H., for the year 1929:—

Return showing the work of the Dispensary during the year 1929.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.			
	Adults.		Children.		Adults.		Children.		Adults.		Children.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—NEW CASES examined during the year (excluding contacts):—												
(a) Definitely tuberculous ...	23	20	1	0	0	4	6	0	23	24	7	0
(b) Doubtfully tuberculous ...	—	—	—	—	—	—	—	—	5	5	0	0
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	1	12	2	2
B.—CONTACTS examined during the year:—												
(a) Definitely tuberculous ..	0	0	0	0	0	0	2	0	0	0	2	0
(b) Doubtfully tuberculous ...	—	—	—	—	—	—	—	—	1	4	0	0
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	7	21	30	26
C.—CASES written off the Dispensary Register as												
(a) Cured	—	—	—	—	—	—	—	—	—	—	—	—
(b) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)	—	—	—	—	—	—	—	—	13	42	32	28
D.—NUMBER OF PERSONS on Dispensary Register on December 31st:—												
(a) Diagnosis completed ...	70	67	5	2	8	16	12	3	78	83	17	5
(b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	1	1	—	—

1. Number of persons on Dispensary Register on January 1st, 1929	163	9. Number of patients to whom Dental Treatment was given, at or in connection with the Dispensary	2
2. Number of patients transferred from other areas and of "lost sight of" cases returned ...	6	10. Number of consultations with medical practitioners:—	
		(a) At Homes of Applicants	12
3. Number of patients transferred to other areas and cases "lost sight of"	16	(b) Otherwise	89
4. Died during the year	24	11. Number of other visits by Tuberculosis Officers to Homes	30
5. Number of observation cases under A(b) and B(b) above in which period of observation exceeded 2 months	0	12. Number of visits by Nurses or Health Visitors to Homes for Dispensary purposes	1675†
6. Number of attendances at the Dispensary (including contacts)	860	13. Number of	
		(a) Specimens of sputum, &c., examined ...	168
7. Number of attendances of non-pulmonary cases at Orthopaedic Out-stations for treatment or supervision	—	(b) X-ray examinations made	22
		in connection with Dispensary work	
8. Number of attendances, at General Hospitals or other Institutions approved for the purpose, of patients for		14. Number of Insured Persons on Dispensary Register on the 31st December	90
(a) "Light" treatment	370	15. Number of Insured Persons under Domiciliary Treatment on the 31st December	26
(b) Other special forms of treatment ...	6*	16. Number of reports received during the year in respect of Insured Persons:—	
		(a) Form G.P. 17... ..	1
		(b) Form G.P. 36	1

* Artificial pneumo thorax refills.

† Includes 482 visits by nurses for nursing purposes.

Annual Return showing in summary form the condition of all Patients whose case records are in possession of the Dispensary at the end of 1929, arranged according to the years in which the patients first came under Public Medical Treatment for pulmonary tuberculosis, and their classification as shown on Form A.

Condition at the time of the last record made during the year to which the Return relates.				Previous to 1926.				1926.				1927.				1928.				1929.								
				Class T. B. minus.	Class T. B. plus.				Class T. B. minus.	Class T. B. plus.				Class T. B. minus.	Class T. B. plus.				Class T. B. minus.	Class T. B. plus.								
					Group 1.	Group 2.	Group 3.	Total (Class T. B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T. B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T. B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T. B. plus).	Group 1.	Group 2.	Group 3.	Total (Class T. B. plus).	
ALIVE.	Discharged as cured.	Adults	M.	7	2		2																					
			F.	6	2		2																					
		Children	M.	3																								
			F.																									
	Disease arrested.	Adults	M.	6	3	1	4																					
			F.	5	3		3	2																				
		Children	M.																									
			F.																									
	Disease not arrested.	Adults	M.	4	8	5	1	14	1	1	1		2	7	2	1		3	5	6	1		7	5	5	4	3	12
			F.	3	14	7	2	23	2					5					3	5	3		8	4	4	3	2	9
		Children	M.	1						1			1	1					1							1		1
			F.		1			1											1									
CONDITION NOT ASCERTAINED DURING THE YEAR.																												
LOST SIGHT OF OR OTHERWISE REMOVED FROM DISPENSARY REGISTER.				35	27	17	5	49	5	5	4	2	11	2	1		1	7	2	1	1	4	1		1	1	2	
DEAD.	Adults	M.	1	2	5	7	14	1	1	4		5	5	8	3	6	17		2	4		6			2	3	5	
		F.	2		4	2	6		1	4		5		1	1		2			1		1		1	2		3	
	Children	M.													1		1											
		F.																										
Totals ...				73	62	39	17	118	11	9	13	2	24	20	12	6	6	24	17	15	10	1	26	10	10	13	9	32

Non-Pulmonary Tuberculosis.

Condition at the time of the last record made during the year to which the Return relates.				Previous to 1926.					1926.					1927					1928.					1929.				
				Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.
ALIVE.	Discharged as cured.	Adults	M.	1				1																				
			F.		1			1																				
		Children	M.	1	1	1	1	4																				
			F.																									
	Disease arrested.	Adults	M.	1				1																				
			F.			1		1																				
		Children	M.								2	2																
			F.				2	2																				
	Disease not arrested.	Adults	M.	1		1		2					1	1			2	1	1	1	3							
			F.	3	2	1	1	7		1		1				1	1			2		1	2	1		4		
		Children	M.										1		1	2	4	1		1		2	1		3		4	
			F.	1				1																				
TRANSFERRED TO PULMONARY ...																												
CONDITION NOT ASCERTAINED DURING THE YEAR.																												
LOST SIGHT OF OR OTHERWISE REMOVED FROM DISPENSARY REGISTER.				8	4	4	8	24	1	1		3	5		1		1	2	2	1		3	1			1	2	
DEAD.		Adults	M.	1				1																				
			F.						2				2															
		Children	M.																						1		1	
			F.		1			1				1	1															
Totals. ...				17	9	8	12	46	3	2		6	11	2	2	1	4	9	5	3	2		10	3	2	5	1	11

During the year 81 new cases and 84 contacts were examined. Of the former 54, and of the latter three, were found to be tuberculous. Many, however, of the contacts—particularly the children—were found to be weakly and were visited and re-examined from time to time, and where necessary, appropriate treatment arranged. In several instances among children, enlarged and diseased tonsils were found and tonsillectomy was performed at the Royal Ear Hospital.

The number of deaths this year was 24. This increase—as compared with 13 of the previous year—was chiefly due to the epidemic of influenza which occurred in January and February. To this epidemic the patients, already weakened by tuberculosis, naturally offered less than normal resistance. It is noteworthy also that several cases were encountered among the new patients in which the onset of tuberculosis was attributed to an attack of influenza.

Local medical practitioners continue to make good use of the Dispensary, and on several occasions have accompanied their patients. Co-operation is also maintained with University College Hospital, whither several patients have been sent for treatment, particularly in the special departments.

It is a pleasure to acknowledge once again the invaluable help received from the Tuberculosis Care Committee in dealing with the numerous and varied needs of the patients.

An investigation was made into certain aspects of the work of the preceding quinquennium. Of the results, the most interesting was that relating to the incidence of marital tuberculosis. A detailed study of the records of 14 patients, the wives or husbands or widows or widowers of patients who had also suffered from pulmonary tuberculosis, failed to reveal any evidence that the secondary cases were instances of infection by the husband or wife primarily affected. On the other hand, investigations of family history of patients left no doubt as to the importance of the familial factor in the incidence of the disease.

In view of the Report of the Joint Tuberculosis Council for the year 1928-29, in which notification is advocated for "cases of hæmoptysis or pleural effusion where other symptoms and signs point to the existence of tuberculosis," the findings among cases at the Holborn Dispensary are of interest. Of 246 patients suffering from pulmonary tuberculosis three were known to have had pleural effusions previously while others had probably suffered similarly. Of the six patients diagnosed as suffering from pleural effusion when first seen—and subsequently followed up for periods varying from 18 months to seven years—all received sanatorium treatment and none was found to be suffering from pulmonary disease. As regards hæmoptysis this occurred in 30 per cent. of cases with positive, and in 55 per cent. of those with negative, sputum. On the other hand, there were 12 patients who had suffered from hæmoptysis, whose illness was eventually found to be non-tuberculous.

Annual Report of the Tuberculosis Care Committee.

The Committee has met 10 times during the year. The average attendance of members at each meeting has been 7·8.

Sixty-two cases have been considered—38 new and 24 old cases.

Forty-nine cases—41 adults and eight children—were referred to the Committee for assessment. Thirty-one were assessed to pay contributions, varying from 2s. 6d. to 30s. per week, towards the cost of their treatment and maintenance; 18 cases were recommended for free treatment. Four cases were reconsidered later owing to changes in their circumstances, and the assessments altered; three were reduced and one was raised.

Contributions towards the cost of treatment and maintenance amounting to £248. 10s. 6d. were collected on behalf of the London County Council in 36 cases—28 adults and eight children. Eight of these were still under treatment at the close of the year. Three cases were referred to the Official Collector of the London County Council on account of non-payment of contributions.

Fifteen quarterly reports on eight children were received from the London County Council and the information contained therein conveyed to the parents.

Nine hundred and fifty-four visits have been paid to patients or their families during the year in addition to visits to Societies, Schools, Hospitals, Approved Societies, Ministry of Health, Ministry of Pensions, Relieving Officer, etc., in connection with cases.

The Committee gratefully acknowledges the co-operation and assistance of other organisations and societies, especially that of the British Legion and United Services Fund Benevolent Committee, the British Red Cross Emergency Help Fund, the Charity Organisation Society, and the Invalid Children's Aid Association.

Nine families have removed from the district during the year; of these, three obtained accommodation through the London County Council. One family was transferred to the Care Committee of another Borough. One family obtained better accommodation within the Borough.

Twenty-six patients known to the Committee have died during the year. Of these, 10 died in L.C.C. Institutions, eight died at home, five died in the Guardians' Hospitals, two in Voluntary Hospitals, and one in a Home for the Dying.

Convalescence has been arranged in five cases. Two were sent away with Convalescent Home letters, two through the Invalid Children's Aid Association, and one through Stafford's Charity. One child was sent away through the Shaftesbury Society while her mother was undergoing institutional treatment. Three children were sent away through the L.C.C. Contact Scheme; the children in another family were recommended under the Contact Scheme, but the mother made other arrangements for sending them away.

One case was referred to the Borough Council for assistance to obtain dentures. The patient's Approved Society contributed half the cost and the Borough Council granted the balance.

Nine widows were helped with their applications for the Widows' Pension; one patient was helped to make her will—which eased her mind considerably; several were helped with their National Health Insurance difficulties and many others were helped in a variety of small ways. For one patient an appeal was made to the B.R.C.S. Library Committee for books on a technical subject. The patient, an active young man, had found institutional treatment very wearisome, and had discharged himself. He was given a second chance, and a grant of books on his favourite subject enabled him to settle down to complete his treatment.

Meetings of the Standing Conference of Metropolitan Borough Tuberculosis Care Committees were held in March, June and November, and were attended by representatives of the Committee.

Home Nursing for Tuberculous Patients.

With the sanction of the Minister of Health arrangements were continued for nursing of tuberculous patients by the Metropolitan Nursing Association.

The service is most useful for nursing patients whose removal to hospital is not practicable or where removal for some reason is necessarily delayed; it is not allowed to stand in the way of admission to institution.

During the year five such cases were nursed, a total of 482 visits being paid to these patients.

Dental Clinic for Tuberculous Persons.

Arrangements were continued for tuberculous persons referred from the Tuberculosis Dispensary to receive dental treatment as part of the Council's Tuberculosis Dispensary Scheme, at the Clinic of the British Dental Hospital, No. 10, John Street, W.C.

Scaling and gum treatment was given in one case. Extractions with general anæsthetic in three cases. Two dentures were provided.

In one case arrangements were made for the patient to pay the cost of the denture by instalments; in the other the Public Health Committee was satisfied that the patient's means did not permit any contribution being made towards the cost.

The Clinic is held by the British Dental Hospital at the Council's Maternity Centre, 10, John Street, on Tuesday evenings.

Employment of Tuberculous Persons.

The problem of the employment of tuberculous persons still remains as acute as ever, and there is little hope that it will be diminished so long as the rate of general unemployment remains as high as it is at present. The majority of the patients discharged from Sanatoria and Hospitals are either incapable of work, or are fit only for light work; their disability varies in degree from time to time and consequently their output is not dependable. In the few instances in which special workshops for tuberculous persons have been instituted, they have proved successful from the medical point of view, the employees have generally maintained their health and capacity for work. It seems desirable, therefore, that these people should be provided with work suited to their capacity, under hygienic conditions. Special workshops cannot be commercially sound propositions; they must be subsidised in some way. From physical and moral points of view it would seem to be more economical to give financial assistance to schemes for employment of tuberculous persons than to maintain such persons entirely at the public charge.

General Dental Clinic.

By arrangement with the British Dental Hospital, a Dental Clinic open for inhabitants and workers in the neighbourhood is held on Tuesday evenings at the Council's Maternity and Child Welfare Centre, No. 10, John Street.

The Secretary of the Hospital has kindly supplied the following information of the work at the Clinic during the year 1929:—

Summary of Work carried out at Dental Clinic, 10, John Street, Holborn, on Tuesday Evenings, during 1929.

Number of sessions held	...	...	...	...	...	...	47
Number of patients' attendances	...	...	...	...	...	...	240
Number of fillings	...	...	...	...	...	...	21
Number of scalings	...	...	...	...	...	...	3
Number of extraction cases	Without anæsthetic						None
	With local anæsthetic						16
	With gas						38
	Number of teeth extracted						201
Number of dentures (including repairs)	...	...	...	...	...	...	29
Number of dressings	...	...	...	...	...	...	10
Number for advice	...	...	...	...	...	...	50
Number of denture visits	...	...	...	...	...	...	71
Number of new patients	...	...	...	...	...	...	41

Cancer.

During the year 1929, 61 deaths were recorded as due to Cancer in comparison with 66 in the previous year. The deaths in 1929 were equal to a rate of 1.58 per thousand, the corresponding rate in 1928 being 1.68 per thousand. In the year 1909 the death rate from Cancer in the Borough was only 0.95, the decennial average rate was 1.20 for the ten years, 1909-1918, and 1.44 for the ten years, 1919-1928.

It will be seen that the death rate from Cancer in the Borough in 1929 was lower than in the previous year, being 1.58 per thousand in comparison with 1.68 per thousand. The rate, however, for one year in districts of comparatively small populations does not furnish a reliable indication of the prevalence of a particular disease. The decennial rates which afford much more reliable indication of the seriousness of Cancer show that in the past 20 years there has apparently been a marked increase in the death rate from this disease, for while the decimal average for the ten years, 1909-1918, was 1.20, the corresponding rate for the ten years, 1919-1928, was 1.44. Some part of this increase may reasonably be attributed to improved facilities for diagnosis. The figures indicate the high mortality from malignant diseases.

MATERNITY AND CHILD WELFARE.

Notification of Births.

During the year 256 births were registered as occurring in the Borough. During the same period 227 notifications of births occurring in the Borough were received. Of these, 215 were from doctors and midwives, 12 from parents.

The mothers were attended at their confinement by:—

Private Doctors	...	...	...	...	...	36
Private Midwives	...	...	...	...	...	46
Out-patient Midwifery Departments of General Hospitals and Institutions:—						
Externs and others	...	...	...	...	...	59
Midwives.—University College Hospital	...	...	...	...	...	24
Middlesex Hospital	...	...	...	...	...	15
Other Institutions	...	...	...	...	...	8
Training Institution for Midwives, Myddelton Square	...	...	...	...	...	39

227

Four of these notifications related to stillbirths.

Number of Births.

The number of births transferred to the Borough from outlying institutions was	148
The number of births transferred from the Borough to other districts was	12
The number of net births belonging to the Borough was	392
There are no maternity hospitals or public lying-in institutions in the Borough but maternity cases are admitted to certain nursing homes in the area.	

Births in Crowded Homes.

The following table is an indication of the home conditions of 326 mothers in relation to their confinement:—

Living in :—	Confined at home.		Confined in hospital.	
	No.	Percentage of Total Births.	No.	Percentage of Total Births
One roomed homes ...	47	14	38	12
Two " " ...	127	39	50	15
Three " " ...	27	8	11	3
Four " " ...	16	5	10	3

These figures show that many of the women are confined under very uncomfortable and unfavourable circumstances.

Home Visiting.

The visits paid to the homes by the Health Visitors during the year were as follows:—

	First Visits.	Revisits.	Total.
Expectant Mothers ...	158	276	434
Children under 1 year of age	362	631	993
Children 1 to 2 years of age...	6	233	239
Children over 2 years of age...	5	305	310
Enquiries <i>re</i> stillbirths ...			4
" <i>re</i> ophthalmia			
<i>neonatorum</i>			7
Other visits			359

Four hundred and thirty-four visits related to infants who came under further observation in their own homes or at Infant Welfare Centres; of this number 209 were recorded as attending a Centre, *i.e.*, 48 per cent.

Thus nearly one-half of those visited attended an Infant Welfare Centre and of these nearly 70 per cent. attended the Council's Centres.

Attendances at Infant Welfare Centres.

The Centres attended were the following:—

141	attended the Council's M. & C. W. Centre at 10, John Street.
24	" " " " " Short's Gardens.
2	attended the Centre at Onslow Street School, Saffron Hill.
8	" " " " Charing Cross Hospital.
7	" " " " Myddelton Square.
8	" " " " Middlesex Hospital.
5	" " " " University College Hospital.
9	" " " " Royal Free Hospital.
5	" " " " other Centres.

209 attended an Infant Welfare Centre.

Work at Centres.

HOLBORN CENTRE, 10, JOHN STREET.

The following is an analysis of the attendance at this Municipal Centre:

	Tuesday.		Wednesday.	Thursday.		Friday.
	Medical Consultation (alternate weeks) 2-5.30 p.m.	Ante-natal and Post-natal cases only (alternate weeks) 2-5.30 p.m.	Medical Consultation 2-5.30 p.m.	Class 3-5.30 p.m.	Dentist. 2-4 p.m.	Medical Consultation 2-5.30 p.m.
No. of Sessions	52	52	51	41	51	51
Total attendances—						
Children	243	...	1679	...	75	1679
Mothers	115	215	256	557	217	286
Average weekly attendances—						
Children	5	...	33	...	1	33
Mothers	2	5	5	14	4	6

ST. GILES' CENTRE, SHORT'S GARDENS.

The attendances at this Branch Centre during the year 1929, were as follows:—

	Monday 2-5.30 p.m.		Thursday Medical Consultation 2-5.30 p.m.
	Class.	Children weighed.	
No. of Sessions	47	47	52
Total attendances—			
Children	—	53	392
Mothers	75	—	65
Average weekly attendances—			
Children	—	1	8
Mothers	2	—	1

The total number of attendances made by the Health Visitors at the Centres in 1929 was 387.

At the Holborn Centre, No. 10, John Street, 5,322 attendances were made by a number of mothers, including 71 expectant mothers, and 502 children, of whom 261 were under one year, 90 between one and two years old, and 151 aged 2-5 years on the date of their first attendance.

At the St. Giles' Centre, Short's Gardens, 585 attendances were made by 20 mothers and 85 children, of whom 39 were under one year, 25 from one to two years and 21 between two and five years.

Ante-Natal Hygiene.

Under the scheme for the voluntary notification of pregnancy which came into force in January, 1928, 124 voluntary notifications were received as compared with 40 in 1928. All these expectant mothers, and those already known to the Health Visitors from other sources, were visited in their homes, and in addition to instruction in hygiene generally were all informed verbally and by means of a leaflet of the special facilities afforded by the Holborn Council.

Confinement in Institutions and Housing Conditions.

Any expectant mothers living in crowded homes in Holborn are advised to enter hospital for confinement. In order to carry out this the cognate particulars relating to all pregnant women of whom we hear are set out on a sheet and each case followed up to a successful issue or until it becomes clear that the woman will not enter hospital; social reasons are at least as important as the difficulty of securing accommodation in suitable institutions.

In order to provide accommodation for those whose home circumstances make confinement at home specially undesirable and who are willing to enter hospital an arrangement has been made with one of the principal Maternity Hospitals within reasonable reach of Holborn to accept normal cases for admission on social grounds only.

Ante-Natal Centres.

During the year, enquiries were made of mothers as to their attendance at an Ante-Natal Centre immediately previous to the birth of the child visited. Of 460 mothers, about whom information was obtained, 294 (64 per cent.) were found to have attended Ante-Natal Centres or received ante-natal care as under:—

Number of enquiries made	...	...	...	...	...	460
<i>Centre Attended:—</i>						
Holborn Centre, 10, John Street	...	...	...	...	...	30
Holborn Centre, Short's Gardens	...	...	...	...	...	1
Royal Free Hospital	...	...	...	...	...	34
Middlesex Hospital	...	...	...	...	...	24
Charing Cross Hospital	...	...	...	...	...	29
University College Hospital	...	...	...	...	...	40
Myddelton Square Institution	...	...	...	...	...	32
St. Bartholomew's Hospital	...	...	...	...	...	29
City of London Hospital	...	...	...	...	...	13
Queen Charlotte's Hospital	...	...	...	...	...	1
Elizabeth Garrett Anderson Hospital	...	...	...	...	...	17
Other Centres	...	...	...	...	...	6
Ante-natal care from private doctors	...	...	...	...	...	28
Ante-natal care from midwives	...	...	...	...	...	10
						<hr/> 294 <hr/>

Nature of defects found at Municipal Centres.

	10, John Street, Holborn.	Short's Gardens, St. Giles.
No. of women attending ante-natal clinics ...	75	7
Women expectant for the first time ...	17 (4 found to be not pregnant)	—
No. of attendances made ...	169	10
Defects found specially connected with pregnancy :—		
Deformed pelvis ...	5	—
Threatened miscarriage ...	6	—
Extra-uterine pregnancy ...	1	—
Breech presentation ...	1	—
Transverse presentation ...	2	—
Excessive vomiting ...	2	1
Œdema ...	9	—
Varicose veins ...	17	—
Excessive vaginal discharge ...	5	1
Albuminuria ...	4 (2 slight)	1
Venereal disease ...	1	—
Other defects ...	9	—
Other defects :—		
Pulmonary tuberculosis ...	1	—
Heart disease ...	3	—
Anæmia ...	3	—
Respiratory diseases ...	4	1
Constipation ...	28	1
Dental caries ...	24	—
Dyspepsia ...	5	1
Pyorrhœa ...	8	—
Other defects ...	8	—
No. referred to maternity hospitals :—		
Normal ...	...	4
Abnormal ...	...	13
No. referred to dental clinic ...	...	12
No. of urine tests made ...	...	90

The urine of two women showed a fair amount of albumin; dietetic advice was given and the patients referred to hospital for confinement. In two other instances there was a faint trace only.

Post-Natal Consultations.

Twenty-one mothers attended the post-natal consultations at the Centre, 10, John Street, eight of whom had attended the Centre as ante-natal cases. They made 33 attendances in all.

In ten no abnormality due to pregnancy was found.

In eleven defects were found including :—

Retroversion of uterus ...	2	Referred to hospital
Fibroid ...	1	Referred to hospital
Prolapsed uterus ...	1	Referred to hospital
Ovarian cyst ...	1	Referred to hospital
Laceration of cervix ...	2	Referred to hospital
Venereal disease suspected ...	1	Referred to hospital for Wasserman test
Prolonged lochia ...	1	Treated at clinic
Vaginitis ...	1	Treated at clinic
Leucorrhœa ...	1	Treated at clinic

Instruction in Mothercraft and Hygiene.

For some years, both in the home and in the Centres, we have made use of leaflets written in non-technical language dealing with the hygiene of infancy and maternity and have hung the walls of the Centres with pictures and mottoes to give point to our teaching and to draw attention to the series of leaflets.

Propaganda posters are pasted on the outer walls at the Centres. There is also a glass-fronted case for the display of a special poster; this poster is changed frequently.

In addition to the ordinary weekly mothercraft class given at the Centre there were two courses of cookery demonstrations given during the year: demonstrators from the National Milk Publicity Council gave a useful series on dishes suitable for young children, made principally from milk, also 12 demonstrations on household cookery were given by the teaching staff of the Gas, Light and Coke Company.

Miss Mary Carter and Miss Edith Joyce have continued to give us a great deal of valuable assistance during the year by making children's garments for busy mothers from materials supplied by the mothers and from their own resources. Assistance is given at the Centres in cutting out garments at any time; patterns of the most suitable woven garments are given away, also directions for making knitted garments and advice as to the choice of suitable materials. A sewing machine is available for use of the mothers at 10, John Street and instruction in its use is given at any time. We are careful to keep up-to-date model garments for babies and young children always on view at the Centres.

Four hundred and ninety-five hanks of wool of a special quality obtained from Wales were sold at cost price to the value of £23. 14s. 4½d.

The maternity bags were used during the year by two mothers.

Maternity outfits are placed on sale at the Centre at cost price, 6s. 2d., two being sold last year. It is to be regretted that the price of these puts them beyond the reach of the poorest, who are often the least well equipped, and therefore most in need of the outfit.

Summer Outing.

The Summer Outing was held in the garden of Mr. and Mrs. Crosfield, at Woodridge, Knotty Green, near Beaconsfield; we are grateful to them for their generous hospitality. The party consisted of 35 mothers many of whom carried infants in arms, also 16 other children nearly all of whom were below school age. The cost of the fares of some of the mothers was met in part by private subscriptions.

Maternal and Infant Consultations.

The following summary refers to maternal and infant consultations at 10, John Street and the Short's Gardens Centres during the year 1929:—

Reasons for attendance.	10, John Street.	Short's Gardens.
Mothers :—		
(Healthy)	70	—
Difficulty with breast feeding	38	10
Disorders of generative organs	20	1
Venereal disease	2	—
Heart disease	2	—
Anæmia	14	2
Respiratory disease	4	—
Digestive disorders	5	1
Debility	40	4
Other disorders	35	1
Dental caries	43	1
Rheumatism (sub-acute)	12	—
Children :—		
(Healthy)	208	38
Alimentary disorders	46	16
Rickets	30	3
Heart disease	2	—
Rheumatism (sub-acute)	7	—
Respiratory disorders	31	10
Congenital syphilis	2	1
Marasmus	7	—
Debility	11	8
Hernia, umbilical	15	—
Hernia, inguinal	4	—
Phimosis	18	—
Diseases of skin	22	3
Disease of eye	22	—
Disease of ear	9	4
Disease of nose and throat	23	1
Dental caries	19	—
* Other diseases	24	1

(In this table, if the patient has more than one ailment, only the more important has been recorded.)

Mothers and children attending the Municipal Centres during 1929 were referred to other departments of organisations for assistance as follows:—

	Mothers.	Children.
Ante-natal Clinic	7	—
Tuberculosis Dispensary	1	1
Rheumatism Clinic	—	6
Minor Ailments Clinic	37	113
Dental Clinic	47	20
Metropolitan Nursing Association	18	7
Private doctor	1	2
Hospitals	21	43
Convalescent Homes	7	12
Assistance Sub-Committee (for milk)	37	18
Relieving Officer	1	—

Breast Massage.

The following summary gives particulars of mothers referred for breast massage from 10, John Street in 1929:—

Number referred to Metropolitan Nursing Association	22
---	-----	-----	-----	----

Results:—

Lactation completely restored	...	...	...	...	11
Breast secretion re-established, but small bottle feeds required in addition to breast feeding	...	...	...	...	5
Massage unsuccessful	...	...	...	...	5
Information unobtainable	...	...	...	...	1

Diarrhœa.

In spite of the hot dry summer there was a marked decrease in the number of cases of diarrhœa seen at the Centres, all but one were cases of simple diarrhœa:—

	10, John Street.	Short's Gardens.
Simple diarrhœa	17 cases	3 cases.
Ordinary summer diarrhœa	none	1 case.

Stillbirths.

During 1929 24 stillbirths were registered, 20 of which were legitimate.

Eight occurred in the private practice of doctors, one in the private practice of a midwife, two in the extern practice of an institution, and in 11 instances the confinement took place in hospitals; in two cases no information was obtainable on this point.

Difficult labour was responsible for 10; for nine of these a more or less definite reason can be assigned. In four abnormal presentation occurred; in two the mother's pelvis was contracted; in one there was abnormality of the placenta; in one there was fibroid growth in the vaginal tract; in one the fetus was abnormally large. Constitutional maternal disorders appeared to account for three stillbirths; toxæmia of pregnancy for one; prematurity for one and degeneration of the placenta for another. In two cases no useful information as to any possible cause was forthcoming. Two of the stillbirths occurred in homes above the standard for enquiry; in four no information was obtainable, the parents not being traceable.

Illegitimate Children.

The births of 42 illegitimate children were registered; six of these were above the standard for enquiry; nine lived with both their parents who had a permanent home together; two with their mothers who worked to support them; two with their mothers who remained in their parents' home; two were boarded out with foster mothers; one died in early infancy; four were stillborn; 16 children could not be traced, the mother often not having stayed at the address given for more than one or two nights before the birth of the child.

Dental Treatment.

The following is a summary of the work during 1929 at the Council's Dental Clinic, No. 10, John Street, open on Thursday afternoons for nursing or expectant mothers, and children under five years of age:—

	Women.	Children.	Total,
Number of sessions held	51	51	51
Number of new Patients	26	35	61
Total attendances	203	81	284
Extractions—			
Without anæsthetic	—	1	1
With local anæsthetic	6	1	7
With general anæsthetic	44	31	75
Scaling	15	—	15
Dressings (of teeth before final filling) ...	28	1	29
Fillings—			
Simple	17	6	23
Root	1	—	1
Dentures (including 6 repairs)	22	—	22
Advice	40	38	78

In one case where the patient was very poor the denture was provided free of charge; contributions towards the cost were required in 14 cases and in seven instances the patients were required to pay the whole cost.

Supply of Milk and Food for Expectant and Nursing Mothers and for Infants.

The supply of milk and food at less than cost price was continued during the year under the Maternity and Child Welfare Act, 1918, for nursing mothers, expectant mothers in the last three months of pregnancy, children up to three years of age and, exceptionally, to children between three and five years of age.

During the year 179 applicants received free or assisted milk under the scheme. This number included 87 who were receiving such assistance at the end of 1928. Grants were made to 92 new applicants.

At the end of the year 1929, 80 applicants were receiving assistance, viz. :—

	Mothers.	Children.	Total.
Free milk	43	24	67
Half-price milk	4	5	9
Prepared milk	—	4	4
	47	33	80

The following table shows in detail how the 92 new applicants were assisted in 1929 :—

	Milk.		Prepared Milk.	
	Free.	Part Cost.	Free.	Part Cost.
Expectant mothers ...	17	1	—	—
Nursing mothers ...	29	1	—	—
Children	32	4	6	2

Home Help.

The Council's Home Help attended 24 cases during the year in comparison with 24 in the year 1928. In eight of these the whole-time officer attended entirely and in 13 she attended during the earlier part of the lying-in period, being replaced later by one of the Home Helps from the emergency panel in order to take over new cases. In three cases emergency Home Helps only were employed. The latter were engaged when more than one case occurred at the same time and during the absence of the Home Help on summer vacation and sick leave.

All applications for the services of the Home Help are considered by the Assistance Sub-Committee of the Maternity and Child Welfare Committee.

In four cases of extreme necessity the services of the Home Help were granted free. In all other cases the applicants were required to contribute towards the cost, contributions ranging from 3s. 6d. per week up to the full cost. The services of the Home Help have been much appreciated; it has been found that the Council's provision meets a much felt want in the Borough.

Convalescent Homes.

Six mothers and their babies were sent away, two being also accompanied by a second child. In three cases where the applicants were very poor convalescence was provided free; in the remaining three cases the applicants were required to contribute towards the cost. With one exception these mothers with babies were admitted to convalescent homes belonging to the Church Army.

Ten other applications were granted for convalescent home accommodation for children under five years of age, but in four cases the parents failed to take advantage of the facilities provided. Six children were sent away, one free: the parents of the other children were required to pay part of the cost. All these children were admitted to the Hopedene Convalescent Home at Barnet through the kind co-operation of Sister Hope of the West London Mission, Kingsway.

Saffron Hill Maternity and Child Welfare Centre.

Consultations in connection with this Voluntary Centre are held at the St. Winifred Club, St. Peter's School, Onslow Street, Saffron Hill.

During the year ended 31st March, 1930, 206 infants and children under 5 attended the consultations, 60 of the total number coming from the Holborn Borough.

Extra food and nourishment was provided, also convalescent treatment at country and seaside Homes; classes and lectures on health, care of the home, food, economy and kindred subjects were held. The Chairman and Honorary Secretary is Miss Mary Canney, 75, Lamb's Conduit Street.

Deaths of Children 1 to 5 Years, 1929.

Ten children between the ages of 1 to 5 died from the following causes:—

Cause of Death.	Ages.								Total. 1-5		
	1-2		2-3		3-4		4-5		M.	F.	Both Sexes
	M.	F.	M.	F.	M.	F.	M.	F.			
Diphtheria ... ..	...	...	...	1	...	...	...	...	...	1	1
Measles ... ..	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	2	3	...	...	...	...	...	...	2	3	5
Tuberculosis (pulmonary) ... ..	...	...	1	...	...	...	...	...	1	...	1
Pneumonia ... ..	...	...	1	...	1	...	1	...	3	...	3
Totals	2	3	2	1	1	...	1	...	6	4	10
Totals—Both Sexes	5		3		1		1		10		

Deaths of Infants under One Year of Age, 1929.

The homes were visited in a large proportion of the infant deaths, and any requisite information obtained, and when required, suitable advice given.

The cause and age of death are given in the following Table:—

Cause of Death	Under 1 Week		1-2 Week		2-3 Weeks		3-4 Weeks		Total under 4 Weeks			4 Weeks and under 3 Months		3-6 Months		6-9 Months		9-12 Months		Total under 1 Year		
	M	F	M	F	M	F	M	F	M	F	Both sexes	M	F	M	F	M	F	M	F	M	F	Both sexes
Whooping Cough...	1	1	1	1	2
Influenza	1	...	...	...	1	...	1
Pneumonia (all forms)	2	1	...	...	1	...	3	1	4
Diarrhoea	1	...	...	...	1	1	...	...	1	2	3
Enteritis
Nephritis	1	...	1	...	1
Congenital Malformations
Premature Births	3	1	...	...	2	1	...	5	2	7	1	2	1	...	...	...	...	...	7	4	11
Atrophy, Debility, Marasmus
Bronchitis	2	...	...	...	...	...	...	2	...	2
Other causes	1	1	...	...	...	...	...	1	1	2	...	1	1	...	...	...	1	...	3	2	5
Totals	...	4	2	...	...	2	1	...	6	3	9	1	4	6	1	2	1	4	1	19	10	29
Total both sexes	...	6	...	...	3	...	...	...	9	...	...	5	...	7	...	3	...	5	...	29	...	...

Net births registered during the calendar year.						Net deaths registered during the calendar year.					
	Males	Females	Both sexes			Males	Females	Both sexes			
Legitimate Infants ...	160	190	350			18	9	27			
Illegitimate Infants ...	17	25	42			1	1	2			

INFECTIOUS DISEASES AMONG MOTHERS AND CHILDREN.

Puerperal Fever and Puerperal Pyrexia.

No.	Initials	Date of Notification	Primipara or Multipara	Ante-natal Care	Birth occurred in		Onset subsequent to	Recovery	Remarks
					Patient's Home	Institution			
PUERPERAL FEVER—ONE CASE.									
1	L.B.	1-7-29	Multipara	—	Yes	—	Adherent placenta which had to be removed owing to profuse postpartum hæmorrhage	Recovered	Council's obstetric specialist called in. Patient later removed to hospital
PUERPERAL PYREXIA—FIVE CASES.									
1	S.D.	10-10-29	Primipara	Nil	Yes	—	Partial retention of placenta after incomplete abortion	Recovered	Abortion at third month; mild sapremia
2	L.M.	15-7-29	Primipara	Yes	—	Yes	Followed on prolonged and difficult labour complicated by fibroid growth	Recovered	Full time pregnancy. Child stillborn
3	I.L.	1-7-29	Multipara	Yes	—	Yes	Postpartum pyelitis	Recovered	Full time pregnancy
4	I.H.	21-6-29	Primipara	Yes	—	Yes	Urinary infection and mumps	Recovered	Full time pregnancy
5	C.C.	6-5-29	Multipara	Yes	Yes	—	Influenza	Recovered	Full time pregnancy

Ophthalmia Neonatorum.

During the year 7 cases of ophthalmia neonatorum were brought to our notice, 5 of which were notified in pursuance of the Public Health (Ophthalmia Neonatorum) Regulations, 1926 and 1928; 2 of the notifications were from doctors in private practice; 2 from the Medical Officer of a hospital, and 1 from the Medical Officer of a dispensary.

In 2 cases notification in accordance with the Regulations were not received; information respecting these came from the London County Council.

Unless each case is notified to the local Medical Officer of Health, the public will be ignorant of the real extent of the disease; the whole of the cases cannot be followed up to ascertain the amount of permanent damage done to the eyesight. In addition information concerning 4 cases of slight inflammation of the eyes was received from the London County Council.

FIVE CASES NOTIFIED IN ACCORDANCE WITH THE PUBLIC HEALTH (OPHTHALMIA NEONATORUM) REGULATIONS,
1926 & 1928.

Case Number.	Age when Notified.	Age at Onset.	By whom Notified.	Type of Disease on Health Visitor's first visit.	Where Treated.	Medical Attendance and Nursing.	Result.	Birth Notified by.
1	17 days ...	13 days	Doctor (Dispensary Practice)	Not seen (removed to Hospital)	At Out-patient department & in Hospital	Out-Patient, Charing Cross Hospital; In-patient, Royal Free Hospital and Holborn and Highgate Hospital	Cured ...	Not born in Holborn
2	8 days ...	6 days	Doctor (Hospital)	Not seen	In Hospital	Maternity ward, Royal Free Hospital, later in-patient St. Margaret's Hospital	Cured ...	Extern Department, Hospital
3	17 days ...	3 days	Doctor (Private Practice)	Slight in both eyes	At Home	Private doctor	Cured ...	Doctor (Private Practice)
4	13 days ...	10 days	Doctor (Hospital)	Not seen	In Hospital	Maternity ward, Charing Cross Hospital. Later in-patient St. Margaret's Hospital	Cured ...	Intern Department, Hospital
5	7 days ...	6 days	Doctor (Private Practice)	Moderate; right eye only	At Home	Private doctor—District nurse	Cured ...	Doctor (Private Practice)

TWO CASES NOT NOTIFIED IN ACCORDANCE WITH THE PUBLIC HEALTH (OPHTHALMIA NEONATORUM) REGULATIONS, 1926 and 1928.

6	13 days ...	1 day	London County Council	Slight (both eyes)	Home ...	University College Hospital Out-patient, later In-patient St. Margaret's Hospital	Cured ...	Extern Department, Hospital
7	8 days ...	2 days	London County Council	Slight case only ...	Home ...	Charing Cross Hospital Out-patient	Cured ...	Extern Department Hospital

Ophthalmia neonatorum is one of the most important causes of blindness. Fortunately, however, no case coming to our knowledge last year in the Borough suffered permanent injury in this way.

This result was secured by the expenditure of much time and energy, and incidentally money, by all concerned; the occurrence of most, if not all, of the cases could have been prevented by a simple procedure. Some years ago the Scottish Board of Health issued a circular to medical practitioners strongly recommending the installation of silver nitrate solution into the eyes of newly-born children, and intimating that they will in future require a report, with particulars of treatment from Medical Officers of Health in all cases in which there occur loss of vision. In this country the installation has been recommended with fortunate results by at least several Medical Officers of Health to those attending childbirths in their areas, but legislation in some form advocating or requiring its adoption generally is required so that the whole country may benefit.

Whooping Cough.

Visits were paid to 195 persons suffering from whooping cough. Of these, 149 were notified by doctors; in 22 others the information was derived from the schools; 11 from health visitors; 13 from the M.A.B.

Seven died, between the age of 1 and 5 years.

Age.

Twenty were children under 1 year, 113 were aged 1 to 5, and 62, 5 to 16 years.

Contacts*

(195 enquiries.)

Eighty had no contacts; 115 had contacts. The number of contacts was 549, of whom 333 were susceptible, 216 already having suffered from an attack.

No. of cases and No. of contacts	24	38	12	9	6	12	3	1	3	2	9	2	1	1	1	1
	1	2	3	4	5	6	7	8	9	10	11	15	16	17	18	19
No. of cases... and No. of susceptible contacts	29	31	15	4	4	4	3	3	5	1	1	1				
	1	2	3	4	5	6	8	9	10	11	12	13				

Spread of Infection in Family.

The 195 cases occurred in 145 families. In 109 families 1 case occurred; in 25 families 2 cases occurred, and in 12 families 3 cases occurred.

Removal.

Seventy-seven children were removed to hospital, approximately 40 per cent. All these were admitted to hospitals of the M.A.B.

*This refers to children of and below school age—the L.C.C. definition being used. A susceptible contact is one who has not already had the disease.

Spread of Infection in Whooping Cough.

There is much difficulty in getting parents to realise that the child of pre-school age must be sheltered from the risk of infection as much as the child attending school. Parents realise that the school child is a potential focus of infection for many other children, and should be guarded from infection; they fail to realise that the pre-school child, although less likely to spread the disease, is less able to resist the dangers of an attack; many parents state candidly that they send children with whooping cough into the squares and streets during school hours when "there are no other children about." The continued advice to parents to look upon a child suffering from whooping cough as a serious menace to others has drawn their attention to the fact that this disease is one which should be viewed with more concern than it is at present. Parents frequently express the view that there is need to educate public opinion in the dangers of whooping cough and the way in which it is caught.

The treatment of children suffering with whooping cough in out-patient departments is viewed by many Medical Officers of Health with disfavour. Surely some of these children, possibly many of these children, are still infectious. They travel to the hospitals in public vehicles: although admitted to canteens now provided by many hospitals, some of these children are taken into eating-places. There can be no doubt that the disease is spread in some measure by these practices.

Again when a child contracts whooping cough in hospital or at a convalescent home surely all such children should be removed in an ambulance or some other suitable vehicle, not in a public conveyance.

Once a child has been taken into a hospital, convalescent home or any such place on account of its health, it is a very poor result if the child has to be sent back home still suffering from disease, even if it is a new one. The job of improving the child's health once undertaken ought to be finished. If the child falls ill with another disease and this new disease cannot be treated in the first institution, it would seem only fitting that the child should be transferred to another institution.

Fortunately the Metropolitan Asylums Board (now the London County Council) fever hospitals accept patients with whooping cough. Last year 77 children (40 per cent. of the notified cases) were admitted from Holborn to hospitals of the Board.

Measles.

The notification of measles was discontinued at the end of 1919 but during 1929 I received information of 40 cases of measles. Of these, 11 were notified by school teachers and 10 by medical practitioners; information of 15 was given by hospital authorities, 3 by the health visitors, 1 by parents.

Age.

Two were under 1 year, 4 were between 1 and 5 years, 17 were between 5 and 16 years, and 17 were over 16,

Contacts.

Twenty-three had no contacts; 17 had contacts. The number of contacts was 38 of whom 10 were susceptible, 28 having already suffered from an attack.

No. of cases ...	9	3	2	0	1	2
and						
No. of contacts ...	1	2	3	4	5	6
No. of cases ...	6	0	0	1		
and						
No. of susceptible contacts...	1	2	3	4		

Spread in Family.

The 40 cases occurred in 38 families. In 36 families 1 case occurred, in 2 families 2 cases occurred.

Removals.

Twenty-five patients (62.5 per cent.) were removed to hospital, 20 to M.A.B. hospitals and 5 to the London Fever Hospital.

Measles Control in Schools.

The special arrangements of the London County Council for securing through the school organisation earlier information of measles was continued.

German Measles.

During the year information was received relating to 58 cases; 9 were notified by doctors and information of 18 cases was received from schools, 28 from hospital authorities, 3 from health visitors and 1 from a parent.

Ages.

- 5 were between 1 and 5 years.
- 15 were between 5 and 16 years.
- 38 were over 16 years.

Contacts.

Twenty-five enquiries were made relating to 20 cases under 16 years and to 5 adults in private houses and hotels. Thirty-three adults were residents in business and social hostels and had no contacts within the London County Council definition. Of the 25 cases where enquiry was made 9 had no contacts; the number of contacts with the other 16 cases was 38, of whom 10 were susceptible, 28 having already suffered from an attack.

No. of cases ...	6	6	1	2	1
and					
No. of contacts ...	1	2	3	5	7
No. of cases ...	7	2			
and					
No. of susceptible contacts	1	5			

Spread in Family.

There was a spread of infection in 1 family in which 2 cases occurred.

Removals.

Twenty-nine cases were removed:—

22 to the London Fever Hospital.

6 to M.A.B. hospitals.

1 to a voluntary hospital.

Application was made by the authorities of a large institution in the Borough for removal to the hospitals of the Metropolitan Asylums Board of a number of cases of illness certified to be "measles." On admission to the hospital the patients were found to be suffering from *German Measles*. The Metropolitan Asylums Board were reluctant to admit secondary cases from the same institution although certified as measles on the grounds that such patients would also be found to be suffering from German measles, a disease for which the Board's hospitals were not available. There was no available accommodation at the London Fever Hospital. The incident emphasised the difficulty experienced by large residential institutions when faced by an outbreak of infectious disease for which provision is not made in the hospitals of the Metropolitan Asylums Board and points to the need of facilities for isolation of such cases being provided by all such institutions.

Epidemic Diarrhoea.

The disease is notifiable in only a few districts in London, and is not notifiable in Holborn. The number of deaths of young children under two years of age classified under the head Diarrhoea and Enteritis was 3, all of whom were under 1 year. The deaths were equal to a rate of 7.6 per 1,000 births in comparison with 10.7 for all London. The methods used to deal with the disease have been detailed in a previous report; the most important perhaps is that during the third quarter of the year extra visits are paid to those homes in which epidemic diarrhoea is more likely to occur.

Nursing Arrangements.

The services of the nurses were used as follows in 1929:—

Deficient Lactation	24 Cases	248 Visits.
Complications after Pregnancy	5 ..	132 ..
Whooping Cough	2 ..	34 ..
Ophthalmia Neonatorum ...	4 ..	70 ..
Pneumonia	7 ..	159 ..
Influenza	3 ..	18 ..
Tuberculosis	5 ..	482 ..
Puerperal Fever or Pyrexia ...	1 Case	33 ..
Total ...		1,176 Visits.

Health and Baby Week.

Health and Baby Week was observed in the Borough during the first week in October, when we again had the advantage of co-operation with the school

organisation. Arrangements were made for health lessons to be given, and for the children to write essays on the subject during Health Week. The best three essays in each school department were selected by the Head Teacher for examination in the Public Health Office and two prizes, one for girls and one for boys, were awarded to each school. The Mayor and Mayoress (Alderman Albert J. Clark and Miss Gladys Clark) kindly entertained to tea the prize winners and the children whose essays were selected from the various schools. It is satisfactory to record that with only one exception, all the elementary schools in the Borough took part in this movement, which has become a useful and well-established custom in Holborn.

It is difficult for a worker in Public Health to avoid taking an interest in the teaching of health whether it be to babies, young children, boys and girls, adolescents, or older people.

In Holborn, the Mayors especially, but also the whole of the Council, have always taken a great interest in the school children and have done all they could for the coming generation of Holborn residents. Not the least valuable of their efforts have been towards promoting the teaching of hygiene. For some years the school children have been encouraged to take part in Health Week activities. Even when the need for economy has been paramount we have maintained the practice of rewarding the school children who have proved their interest in hygiene by writing answers to examination papers and essays on hygiene. But everyone appreciates that in the first line come the teachers.

It is largely by their efforts to inculcate the practising of good habits and to secure the higher aim that the older children should know why good habits promote health, and bad habits are detrimental to health, that success will come. The school teachers above all are instrumental in establishing in the minds of the children a "health conscience."

In our schools advantage is taken of the teaching and spirit of the Boy Scout and Girl Guide Movements. It is never too young to learn health; the younger children are brought in as Wolf Cubs and Brownies and are given the advantage of play in the open air. When the child's natural instincts are not enough, he or she is being taught to play; play at all ages is one of the pillars of good health. We are grateful to all those workers whose efforts have succeeded in maintaining so far a portion of the site of the Foundling Hospital as a place for play and not least to the benefactor whose generosity has made this possible. That success is meeting the efforts of all concerned is apparent. When the Council see the children massed together on such occasions as Empire Day they can observe, not only the physique of the children, but all those features which make for hygiene—cleanliness, tidiness, smart carriage and evident self-respect.

In order not to disturb a series of cookery demonstrations at the Maternity Centre in the early part of October, the special gathering for mothers in connection with Baby Week was postponed to the 9th January, 1930. At this gathering an address was given by Dr. Letitia Fairfield, O.B.E., on "Rheumatism in Children"; the mothers and all the workers at the Centre were greatly encouraged by the presence of the Mayor and Mayoress (Councillor Percy Hill, J.P., and Mrs. Hill).

Minor Ailments.

One of the features of the year has been the continued and increased success of the minor ailments clinic first opened in June, 1925. Here on Tuesday and Friday afternoons certain ailments in mothers and children are dealt with which tend to be neglected if left to home treatment and care only.

The number of patients attending has increased from 183 in 1926 to 236 in 1929, and the number of attendances from 369 in 1926 to 502 in 1929. Amongst the children's ailments dealt with in the order of frequency were:—Otorrhœa, conjunctivitis, impetigo, protruding umbilicus, sore buttocks, nasal catarrh, constipation, tonsillitis and ringworm. Among the mothers, mastitis, varicose veins, leucorrhœa and pyorrhœa have been the most common complaints to receive treatment.

Medical Inspection and Treatment of School Children.

The medical inspection and treatment of children attending Public Elementary Schools in Holborn is carried out by the London County Council.

The following treatment Centres are provided under the L.C.C. Schemes:—

- (1) Finsbury Centre, Spencer Street, Goswell Road.
- (2) Moorfields Ophthalmic Hospital, City Road.
- (3) Soho Centre, Gerrard Street.
- (4) Lancing Street Centre, Lancing Street, N.W. 1.
- (5) Cleansing Station (Scabies) Children's Baths, Central Street, E.C. 1.

Centres are also provided at the following Hospitals and Dispensaries:—

- (1) St. Bartholomew's Hospital.
- (2) Bloomsbury Dispensary.
- (3) Central London Ophthalmic Hospital.
- (4) Central London Throat and Ear Hospital.
- (5) Dental Hospital.
- (6) Homœopathic Hospital.
- (7) Hospital for Sick Children.
- (8) Italian Hospital.
- (9) Metropolitan Ear, Nose and Throat Hospital.
- (10) Middlesex Hospital.
- (11) Royal Free Hospital.
- (12) Tuberculosis Dispensary, University College Hospital.
- (13) University College Hospital.

We endeavoured to co-operate with the Education Authority by giving information respecting children suffering from infectious disease and child contacts attending public elementary schools.

A suggestion was made that this co-operation might be extended by facilities being given for the establishment at the Council's Centre, No. 10, John Street, of a Medical Inspection and Treatment Centre for children attending the elementary schools in the Borough. From a communication (March, 1929) received from the Education Officer of the London County Council, it appears, however, that there are difficulties in the way of the adoption of this proposal.

ROUTINE MEDICAL EXAMINATION OF ELEMENTARY SCHOOL CHILDREN IN HOLBORN IN 1929.

Age Group.	Number examined.	Clothing and Boots.			Nutrition				Cleanliness of Head.			Cleanliness of Body.			Condition of Teeth.			Vision.		
		Good.	F air.	Poor.	Good.	Average.	Below normal.	Bad	Clean.	Nits.	Pediculi.	Clean.	Dirty.	Pediculi.	All sound.	Less than four decayed.	Four or more decayed.	6/6 in both eyes.	6/9 in either eye.	6/12 or worse in either eye.
Entrants—																				
Boys	218	15	203	—	48	155	15		212	6	—	208	10		140	53	25	—	—	—
Girls	213	15	197	1	45	153	15		197	15	1	209	4		142	49	22	—	—	—
Age 8—																				
Boys	203	25	175	3	35	155	13		195	8	—	200	3		138	37	28	125	42	29
Girls	203	41	161	1	28	165	10		187	12	4	202	1		126	61	16	125	37	36
Age 12—																				
Boys	163	22	136	4	36	117	9		152	9	1	159	3		134	28		111	14	35
Girls	159	25	132	2	27	124	8		121	33	5	157	2		129	30		114	9	34
Age 14—																				
Boys	207	21	183	3	43	149	15		203	3	1	206	1		162	35	10	152	18	33
Girls	166	26	138	2	38	122	6		151	13	2	162	4		120	41	5	115	30	28
Total	1,531	190	1,325	16	300	1,140	91		1,118	99	14	1,503	28		1,091	334	106	742	150	195
Holborn %		12.4	86.6	1.0	19.6	74.5	5.9		92.6	6.5	0.9	98.2	1.8		71.3	21.8	6.9	68.3	13.8	17.9
London %		57.8	41.3	0.9	19.7	75.5	4.8		94.4	5.1	0.5	97.4	2.5	0.1	64.8	27.5	7.7	56.3	25.5	18.2

Medical Routine Examination of Elementary School Children in Holborn, in 1929.

Defect.	Boys.								Girls.							
	Entrants		Age 8		Age 12		Age 14		Entrants		Age 8		Age 12		Age 14	
Number Examined ...	218		203		162		207		213		203		159		166	
	Cases	+	Cases	+	Cases	+	Cases	+	Cases	+	Cases	+	Cases	+	Cases	+
Malnutrition ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Skin Disease ...	1	1	—	—	1	1	2	1	1	—	2	2	—	—	—	—
Enlarged Tonsils ...	10	5	5	5	3	3	1	1	11	6	7	5	6	5	4	2
Adenoids ...	15	14	5	5	1	1	—	—	10	8	4	3	3	2	3	3
Tonsils and Adenoids .	2	2	—	—	2	2	1	1	4	3	4	4	—	—	—	—
Other Nose and Throat	1	1	2	1	—	—	—	—	—	—	1	1	—	—	—	—
Enlarged Glands ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
External Eye Disease...	7	7	1	1	2	2	3	2	9	9	5	3	1	1	—	—
Vision ...	—	—	—	21	—	24	—	26	—	—	—	24	—	23	—	30
Otorrhœa ...	2	2	2	2	—	—	3	1	3	2	1	1	2	2	2	2
Other Ear Disease ...	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
Hearing ...	2	1	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Stammering and Speech	1	—	1	1	1	—	—	—	—	—	—	—	—	—	—	—
Heart ...	1	—	1	—	—	—	1	—	—	—	2	—	1	—	—	—
Anæmia ...	1	1	—	—	—	—	1	1	—	—	1	1	—	—	—	—
Lungs ...	3	—	—	—	—	—	2	—	2	1	—	—	—	—	—	—
Nervous Disorders ...	2	1	1	1	—	—	—	—	—	—	3	1	1	1	—	—
Phthisis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other T.B. Disease ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rickets... ..	2	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Spinal Defects ...	—	—	—	—	1	1	1	1	—	—	—	—	1	—	3	3
Other Deformities ...	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
Other Defects ...	1	1	1	1	—	—	—	—	1	1	—	—	—	—	1	—
Teeth ...	—	65	—	62	—	26	—	44	—	63	—	63	—	26	—	42
Number of Children for treatment ...	94		81		52		68		80		89		51		61	

Defects, however slight, are included under "Cases." Those severe enough to require treatment are shown under +.

Deaths of Children 5 to 15 Years, 1928.

Twelve children (7 boys and 5 girls) died during the year between the ages of 5 and 15 years.

One death (a girl, aged 7) was due to diphtheria; two deaths (a boy, 10 years, and a girl, 14 years) were due to heart disease. One boy, aged 8, died from pleurisy with effusion. A boy, aged 14, died from appendicitis. A girl, aged 8, died from rheumatic fever. Four deaths (3 boys, aged 8, 8, and 14 respectively, and 1 girl, aged 6 years) were certified as due to violence (accidents). The two other deaths (a boy, aged 6, and a girl, aged 9) were certified as due to osteomyelitis.

SANITARY ADMINISTRATION.

Public Mortuary.

The Public Mortuary provided by the Council is situated in Goldsmith Street. During the year 74 bodies were deposited. There were 54 post mortem examinations made, and 28 inquests held. The inquests are held in the Court Room at the Town Hall. On 20 occasions bodies awaiting burial were removed to the mortuary on account of inadequate accommodation in the homes; 51 bodies were brought in by order of the Coroner, and 3 by the police.

Inquests.

During this year 47 inquests were held on the bodies of Holborn parishioners. Many of these died outside the Borough and the inquests were held in the district where death took place, the deaths being subsequently transferred to Holborn. The causes of death certified as a result of such inquests were:—Natural causes, 9; Accidents, 17; Suicide, 14; Misadventure, 7.

The causes of death certified as a result of such inquests were as follows:—

<i>Natural Causes.</i>				<i>Accidents.</i>			
Pulmonary Tuberculosis	...	...	1	Falls	...	...	7
Heart Disease	...	...	4	Gas Poisoning	...	...	3
Cerebral Hæmorrhage	...	...	2	Burns	...	...	1
Alcoholism	...	...	1	Motor Accidents	...	...	6
Rupture	...	...	1				
			—				17
			9				—
<i>Misadventure.</i>				<i>Suicide.</i>			
Operations	...	...	3	Gas Poisoning	...	...	7
Suffocation	...	...	2	Drowning	...	...	2
Fall	...	...	1	Firearms	...	...	1
Poisoning	...	...	1	Hanging	...	...	1
			—	Jump from window	...	...	1
			7	Other	...	...	2
			—				—
			—				14
			—				—

The Removal of Aged, Infirm and Diseased Persons.

Power to deal with this matter was included in the London County Council (General Powers) Bill, 1928, which received the Royal assent on the 3rd August of last year. This Act provides that if a Medical Officer of Health certifies in writing that any person:—

(a) is aged or infirm or physically incapacitated and resides in premises in the district which are insanitary owing to any neglect on the part of the occupier thereof or under insanitary conditions; or

(b) is suffering from any grave chronic disease; the Medical Officer of Health may under certain circumstances, and subject to the conditions specified in the Act, apply to a petty sessional court for an order for the removal of such person, to a suitable hospital, infirmary, poor law or other institution.

The power is not to be put into operation by a Medical Officer of Health unless he is authorised by a resolution of the sanitary authority so to do, either generally or in any particular case in which the powers are proposed to be executed.

Rent and Mortgage Interest (Restriction) Acts, 1920 and 1923.

Three applications were received during the year for certificates under the above Acts, that the houses concerned were not in all respects reasonably fit for human habitation or otherwise not in a reasonable state of repair. In all three cases the certificates applied for were granted.

In all cases the work needed to render the houses fit for habitation was carried out, but in one instance the owner obtained vacant possession of the rooms before the work was done:—

In one case where a certificate had been given in the previous year, the work required to render the premises fit for habitation was completed and on the application of the owner a certificate, certifying the satisfactory completion of the work was issued.

Nuisances—Complaints from Relieving Officers.

Under Section III of the Public Health (London) Act, 1891, it is the duty of every Relieving Officer in accordance with the regulations of the Authority having control over him, to give information to a Sanitary Authority of any nuisance liable to be dealt with summarily under the Act.

This co-operation with the Officers of the Board of Guardians is found to be most useful.

Nuisances Caused by Dogs.

With a view to the prevention of nuisances from the fouling of footways by dogs the Council, in the year 1926, made the following by-law:—

“No person being in charge of a dog in any street or public place and
“having the dog on a lead shall allow or permit such dog to deposit its
“excrement upon the public footway.”

The by-law after being in force for an experimental period until the 1st June, 1928, was made permanent.

Nuisance from Pigeons.

The London County Council (General Powers) Act, 1927, gives power to local authorities to deal with nuisances caused or which might be caused by the congregation at any place in the County of London of house doves or pigeons. The arrangements made for giving effect to the Act were fully dealt with in the Annual Report for 1928.

During the year 1929, the Council extended these arrangements by sanctioning a payment for pigeons eggs brought in by the Contractor from nests in the Borough. During the year 222 pigeons and 213 eggs were brought in and destroyed in the presence of an official of the Public Health Department.

In the Report for 1928, reference was made to the number of pigeons on or about the British Museum premises. In the early part of 1929, the Museum Authorities intimated that the number of birds had been reduced to well below the figure contemplated by the Council, and that the Council might well be satisfied with what had then been done. The Museum Authorities seize any opportunities which offer of collecting and destroying eggs; a preventive measure of more permanent value is wire netting which is being placed in suitable positions near the top of the columns so as to exclude the birds.

Transport of Unguarded Sheets of Glass.

When a workman or other person has been seen carrying sheets of glass along in the street not protected by a wooden frame or other means, the attention of the person or persons responsible has been called to the danger of the practice. The danger is increased when a man brings unprotected sheets of glass into a crowded train or lift. I have also had to call the attention of a firm recently to the undesirability of transporting unprotected sheets of glass in a side car. "Metropolitan life is only made possible by mutual consideration."

Electrolysis in Gas Pipes.

A complaint, fortunately of a very unusual nature, was lodged with this Department by a tenant of a block of expensive flats: a gas pipe had burst below a bedroom floor, and two people sleeping in the room had been nearly asphyxiated. A month or two later, another leakage occurred near the same spot and a few days after a third leakage; this occurred in the flat immediately below. The bedroom in which the tragedy had nearly occurred was alive with electricity.

At the time of the first inspection a wall near the leakage was markedly damp, probably due to a defect in a water service pipe (running to a hand basin) buried in the wall; this, however, had recently been discovered and repaired. The external brickwork was of glazed brick and had been repointed in an endeavour to remedy the damp; evidently the effect of rendering the outer skin impervious was to drive the moisture very slowly towards the inside of the wall. The Public Health Department, the Gas Company and the Electric Light Company were all called in; by our joint efforts it was established that the damp had caused a defect to

develop in the electric light wiring resulting in the passage of electricity through the structure of the building; the current had set up electrolysis and subsequent rusting in the gas pipes making a large hole through which of course gas escaped. The gas supply was cut off for a time, and when the dampness abated, the wiring was made good. When tested later, there was no leakage of gas or electricity.

Demolition of Old Buildings.

The London County Council (General Powers) Act, 1927, gave power to that Council to make by-laws in relation to the demolition of old buildings.

By-laws dealing with the subject were made by the London County Council in July, 1929, and were approved by the Ministry of Health on the 14th November last year. These by-laws are enforceable by the Metropolitan Borough Councils, and pursuant to Section 53 (v) of the before-mentioned Act, they do not apply to any building (not being a dwelling-house) belonging to any railway company and used by such company as a part of, or in connection with, its railway.

Prior to the coming into force of such by-laws suggestions for the prevention of nuisance arising from the demolition of buildings had been prepared for use in the Borough, and copies of these suggestions were forwarded as a matter of routine to contractors about to carry out demolitions. Since the by-laws came into operation, the routine procedure has been followed, a copy of the by-laws being substituted for the " suggestions " previously in use. Fourteen contractors were communicated with during last year. Some difficulty was experienced by them in effectively preventing nuisance owing to the shortage of water due to the abnormally dry summer.

Children's Country Holidays.

In connection with the arrangements made by the Children's Country Holiday Fund, and the Fresh Air Fund, for sending children away for country holidays, we receive and answer many enquiries during the summer months relative to the existence of infectious diseases in the houses from which the children are drawn. This routine co-operation between the local authority and the organisations concerned helps to ensure that children who have been directly exposed to infection shall not be sent away until danger of the development of disease in the contact child is past.

Propaganda.

The propaganda work reported on in 1928 has been continued; a new feature will shortly be introduced. In the early part of the year 1930 the Council approved the production of a one reel film depicting their work in connection with the Schick test and immunisation against diphtheria. It is expected that the film will be available for exhibition by October, 1930.

Noise.

The noise nuisance in cities is by no means a new evil. "Staple Inn," wrote Dickens, "is one of those nooks the turning into which from the dashing street imparts to the relieved pedestrian the sensation of having put cotton wool in his ears and velvet soles on his boots."

To-day the volume of traffic down the main thoroughfares of London is vastly increased; in 1930 there are, fortunately or unfortunately, conditions new to Charles Dickens, which add to the complexity of life and incidentally increase its noisiness. Harley Street, a relatively quiet place, at any rate up to the present, is objecting to unnecessary noise: it prevents them getting on with their work.

Last year and now the possibility of legislative action to mitigate the nuisance caused by noise has been much discussed, and is being discussed, in administrative circles and in technical journals, engineering and medical—the "Lancet" has dealt with it: the importance of excessive noise and general interest taken in the possibility of it being reduced are also reflected in the morning and evening newspapers.

Additional evidence of the seriousness of the nuisance, if any were wanted, is the amount of attention that has been devoted to the matter not only here but also in Germany, Canada, and the United States of America. In New York City medical research has brought out fresh evidence on the deleterious effects of noise. The Medical Noise Abatement Sub-Committee, appointed by the Health Commissioner (Dr. Shirley W. Wynne), has found definite proof that noise causes considerable disturbance to the mechanism of the human body as evidenced by an increased pulse rate, increased blood pressure, and irregularities in the rhythm of the heart; these produce increase of pressure in the brain. This is by no means all the story: among other effects is interference with the metabolism of the body, the building up of the body from the intake of food is hindered.

These scientific findings have influenced the minds of technical men, the demand of the people that there shall be less noise has turned the mind of engineers and workers towards the production of less noisy machinery and vehicles; they are learning the needlessness of noise and, it may be, the costliness of noise. Administrative action has followed: *inter alia*, the nuisance arising from radio loud-speakers is being brought under control by local legislation. Henceforth, in New York City, no sound-producing apparatus will be allowed to disturb the quiet or repose of persons in its vicinity, and the use of loud-speakers or other amplifying devices is forbidden in any public street or place without a permit from the police commissioner, or in any case within 250 feet of a school, court-house, church, or hospital during the hours when these places are in use.

In these islands some local authorities in England and Wales have extensive powers designed to prevent nuisance from noise. At Edinburgh valuable progress has been made by the provisions of Section 34 of the Edinburgh Corporation Order Confirmation Act, 1930.

The section is as follows:—

34 (1) A noise shall be liable to be dealt with summarily in the manner provided in Part II of the Public Health (Scotland) Act, in the same way and to the same effect as in cases under Sub-Section (6) of Section 16 of that Act, and the Corporation shall have all

the powers and duties with reference to a noise nuisance which a local authority has with reference to a nuisance under the said Act.

(2) For the purpose of this section a noise nuisance shall be deemed to exist where any person makes or continues, or causes to be made or continued, any excessive or unreasonable or unnecessary noise, and where such noise: (a) is injurious or dangerous to health, and (b) is capable of being prevented or mitigated, having due regard to all the circumstances of the case:

Provided that if the noise is occasioned in the course of any trade, business, or occupation, it shall be a good defence that the best practical means of preventing or mitigating it having regard to the cost have been adopted.

(3) Nothing contained in this section shall apply to a railway company or their servants exercising statutory powers.

The powers available in Holborn are not very extensive.

In Holborn the by-laws made by the Council for the suppression of street cries are in force, and on 1st August, 1929, the more general legislation—Motor Cars (Excessive Noise) Regulations, 1929—came into operation. These regulations, however, cannot be regarded as dealing adequately with the problem, nor are they as comprehensive as the Edinburgh legislation. The Holborn Council, therefore, adopted a resolution asking the London County Council to consider the promotion of legislation for London on lines similar to those adopted in Edinburgh. During the preparation of this report a communication has been received from the Clerk to the London County Council to the effect that the County Council has decided to take no action to obtain by legislation further powers to deal with the noise nuisance. It is interesting to observe that in the report of the Local Government Committee of the London County Council it is admitted that there are noises not fully dealt with by the Motor Cars (Excessive Noise) Regulations or by-laws made by the London County Council or the Borough Councils, such for example as mechanical road-breaking or road-making appliances (*e.g.*, pneumatic drills), noise caused by motor horns especially when traffic is held up and noise caused by wireless loud-speakers. One newspaper comment on this decision was "Peace for the Deaf." **The fact remains that a large section of the Public complain of excessive noise; Holborn residents and workers are bringing their complaints to the Medical Officer of Health.** If further testimony were necessary of the seriousness of the evil, it is found in the ready response made by the persons responsible for the nuisance.

The progressive attitude of the Holborn Borough Council is exemplified by their proposal to make a new by-law dealing with nuisance caused by loud-speakers and gramophones. Complaint is frequently made of the annoyance caused by the playing of loud-speakers in shops for the sale of wireless instruments and accessories. It is the practice, in many instances, to place a loud-speaker in or about the entrance to the shop in order to attract the attention of the passers-by without regard to the disturbing effect the frequent playing has on other businesses or offices in the immediate vicinity. The Police Authorities have been asked to assist in mitigating the nuisance, but they are unable to render more than little assistance in this direction as the instruments are on private property.

The Holborn Town Clerk is taking the necessary steps to enable the Council to make the following by-law:—

" No person shall in any street or public place, or in any shop, business premises, or place which adjoins any street or public place, and to which the public are admitted, operate or cause to suffer to be operated, any wireless loud-speaker or gramophone in such a manner as to cause annoyance to, or disturbance of, occupants or inmates of any premises or passengers.

" Any person offending against the foregoing by-law shall be liable upon conviction to a penalty not exceeding forty shillings."

APPENDIX.

TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1929 AND TEN PREVIOUS YEARS.

Year	Population estimated to Middle of each Year.	Births.			Total Deaths Registered in the District		Transferable Deaths		Net Deaths belonging to the District.			
		Un-corrected Number	Net		Number	Rate	of Non-residents registered in the District	of Residents not registered in the District	Under 1 Year of Age		At all Ages	
			Number	Rate					Number	Rate per 1,000 Births	Number	Rate
1918	36,769	340	497	12.1	862	23.4	532	490	70	141	820	22.3
1919	38,156	397	539	13.6	920	24.1	618	322	52	96	624	16.4
1920	39,676	619	827	20.6	827	20.6	568	339	55	66	603	15.2
1921	43,520	483	648	14.8	859	19.7	622	319	51	79	556	12.8
1922	42,850	485	664	15.5	746	17.4	518	342	48	72	570	13.3
1923	43,376	423	593	13.7	718	16.6	491	300	47	79	526	12.1
1924	43,250	394	578	13.26	670	15.5	470	329	47	81	529	12.2
1925	43,315	364	527	12.16	725	16.7	513	330	33	63	542	12.5
1926	43,200	330	535	12.38	629	14.6	454	347	48	90	522	12.1
1927	42,209	320	505	11.96	728	17.2	531	3.3	19	38	530	12.5
1928	39,280	301	473	12.0	739	18.8	546	338	27	57	531	13.5
1929	38,380	256	392	10.21	766	19.9	545	377	29	74	598	15.6

In the above table the population, birth rate and death rate are as estimated by the Registrar-General, founded upon his estimates of the civilian population.

TABLE II.
Causes of, and Ages at, Death, 1929.

CAUSES OF DEATH.				NET DEATHS AT THE SUBJOINED AGES OF "RESIDENTS," whether occurring within or without the District.										Total Deaths whether of "Resi- dents" or "Non- Residents" in Insti- tutions in the District.
				All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and under 75 years.	75 and upwards.	
All causes	Certified	...	...	598	29	5	5	12	13	58	207	147	122	
	Uncertified	...	...	...	...	...	...	...	...	...	...	...	...
1.	Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	1
2.	Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...
3.	Measles	...	...	...	...	...	...	...	...	...	...	...	...	1
4.	Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
5.	Whooping Cough	...	...	7	2	4	1	...	...	...	...	...	...	3
6.	Diphtheria and Croup	...	...	2	...	...	1	1	...	...	...	...	...	2
7.	Influenza	...	...	44	1	...	...	...	...	1	20	9	13	6
8.	Encephalitis Lethargica	...	...	1	...	...	...	...	1	...	...	...	...	2
9.	Meningo-coccal Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	10
10.	Tuberculosis of Respiratory System	...	...	40	...	...	1	...	3	21	11	3	1	20
11.	Other Tuberculous Diseases	...	...	4	...	...	...	...	1	1	2	...	...	23
12.	Cancer, malignant disease	...	...	61	...	...	...	...	...	3	27	18	13	45
13.	Rheumatic Fever	...	...	3	...	...	...	1	1	...	1	...	...	6
14.	Diabetes	...	...	2	...	...	...	...	...	...	2	...	...	5
15.	Cerebral Hæmorrhage	...	...	34	...	...	...	...	...	1	14	14	5	18
16.	Heart Disease	...	...	100	...	...	...	2	2	6	35	31	24	24
17.	Arterio-sclerosis	...	...	38	...	...	...	...	...	...	3	16	19	2
18.	Bronchitis	...	...	57	2	...	...	...	...	...	15	18	22	6
19.	Pneumonia (all forms)	...	...	41	4	1	2	...	1	6	14	9	4	77
20.	Other Respiratory Diseases	...	...	4	...	...	...	1	...	1	1	1	...	9
21.	Ulcer of Stomach or Duodenum	...	...	7	...	...	...	...	...	1	3	1	2	5
22.	Diarrhœa, etc.	...	...	6	3	...	...	...	...	...	2	1	...	55
23.	Appendicitis and Typhlitis	...	...	5	...	...	...	1	...	...	4	...	...	8
24.	Cirrhosis of Liver	...	...	4	...	...	...	...	...	...	1	3	...	1
25.	Acute and Chronic Nephritis	...	...	23	1	...	...	...	...	2	9	7	4	24
26.	Puerperal Sepsis	...	...	...	...	...	...	...	...	...	...	...	...	1
27.	Other accidents and diseases of Preg- nancy and Parturition	...	...	1	...	...	...	...	...	1	...	...	...	1
28.	Congenital Debility and Malformation, Premature Birth	...	...	11	11	...	...	...	...	...	...	...	...	52
29.	Suicide	...	...	14	...	...	...	...	...	4	8	2	...	1
30.	Other Deaths from Violence	...	...	20	...	...	...	4	2	2	7	2	3	8
31.	Other Defined Diseases	...	...	69	5	...	...	2	2	8	28	12	12	146
32.	Causes ill-defined or unknown	...	...	...	...	...	...	...	...	...	...	...	...	...
				598	29	5	5	12	13	58	207	147	122	557

TABLE III.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1929.

Notifiable Disease.	Number of Cases Notified.								Total Cases Notified in each Locality (e.g. Parish or Ward) of the District.		Total Cases Removed to Hospitals.
	At all Ages.	At Ages—Years.							St. Giles and Bloomsbury.	Holborn.	
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards.			
Small-pox	43	..	4	25	4	7	3	...	6	37	42
Diphtheria (including Membranous Croup) ...	72	2	23	27	14	3	3	...	34	38	71
Erysipelas... ..	22	...	1	...	1	7	7	6	8	14	12
Scarlet Fever	130	4	37	66	15	7	1	...	42	88	128
Enteric Fever	5	...	...	1	2	1	1	...	3	2	5
Puerperal Fever	1	...	...	...	...	1	...	...	...	1	...
do. Pyrexia	5	...	...	...	1	4	...	...	1	4	...
Cerebro-spinal Fever ...	...	...	...	..	...	...	...	...	...	...	...
Ophthalmia Neonatorum	6	6	...	...	...	...	...	...	2	4	3
Dysentery	2	..	...	...	2	...	...	...	...	2	2
Malaria	1	...	...	...	...	1	...	...	1	...	1
Pneumonia—Primary ...	63	4	13	4	4	17	13	8	31	32	43
do. Influenzal ...	26	...	...	...	2	7	14	3	11	15	15
Tuberculosis—Pulmonary	76	...	1	2	14	36	16	7	34	42	53
do. Non-Pulmonary	12	...	1	4	5	1	1	...	7	5	11
Whooping Cough ...	153	17	84	52	...	...	...	...	71	82	63
Acute Poliomyelitis ...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	1	...	...	...	...	...	1	...	...	1	1
Rheumatism	25	...	3	21	1	...	..	...	9	16	2
	643	33	167	202	65	92	60	24	260	383	452

TABLE IV.

INFECTIOUS DISEASES IN HOLBORN FOR THE LAST ELEVEN YEARS.

	NOTIFICATIONS						DEATHS					
	Decennial Average, 1919-1928			Year 1929			Decennial Average, 1919-1928			Year 1929		
	Number	Rate per 1,000	London Rate	Number	Rate per 1,000	London Rate	Number	Rate per 1,000	London Rate	Number	Rate per 1,000	London Rate
Small-pox	0.3	0.01	0.00	43	1.12	0.43	0	0.00	0.00	0	0.00	0.00
Diphtheria	94	2.23	2.79	72	1.88	2.68	4	0.09	0.16	2	0.05	0.08
Erysipelas	19	0.45	0.46	22	0.57	0.49	...	...	0.02	...	...	0.03
Scarlet Fever	105	2.49	3.54	130	3.39	3.60	1	0.03	0.03	0	0.00	0.02
Enteric Fever	5	0.11	0.08	5	0.13	0.08	0.2	0.00	0.01	0	0.00	0.01
Cerebro-spinal Fever	1	0.02	0.02	0	0.00	0.03	...	...	...	...	...	0.02
Acute Poliomyelitis	1	0.02	0.01	0	0.00	0.01	...	...	...	0	0.00	0.00
Whooping Cough†	84	2.78	...	153	3.99	...	4	0.10	0.12	7	0.18	0.26
Measles‡ ... ..	...	...	...	...	...	...	5	0.12	0.17	0	0.00	0.05
Tuberculosis—Pulmonary	79	2.89	...	76	1.98	1.61	45	1.10	1.00	40	1.04	0.96
Ditto Non-Pulmonary	16	0.37	...	12	0.31	0.37	7	0.17	0.17	4	0.10	0.13
Puerperal Fever*	{ 2	5.96	3.63	{ 1 5 }	15.31	{ 4.46 10.84 }	1	2.52	1.37	0	0.00	1.88
Ditto Pyrexia												
Ophthalmia Neonatorum*	9	15.28	9.46	6	15.31	10.42	...	...	...	...	...	...
Diarrhoea (under 2 years)*+ ... ..	...	...	...	...	...	...	7	12.40	11.43	3	7.65	...

* Rates per 1,000 births.

† Notifiable in Holborn (not in London) since 1914.

‡ Not notifiable.

TABLE V.
INFORMATION REQUIRED BY THE LONDON COUNTY COUNCIL.

PREMISES.	Number in Borough at end of 1928.	Number of Inspections.	Number of Prosecutions.
Cowsheds	0	...	...
Milkshops	127	...	...
Registered houses let in lodgings ...	502	1037	...
Ice cream premises	42	157	...
Slaughter-houses	1	5	...
Offensive Trades	0	...	...
Restaurants and Eating Houses ...	248	202	...

HOUSING OF THE WORKING CLASSES—

Number of houses inspected :—

(a) On account of complaints or illness (Public Health Act) ... } 739

(b) House to house (Housing Consolidated Regulations, 1925) ... }

Number of notices served :—

(a) Under Public Health Act :—

(i.) Intimation 463

(ii.) Statutory 58

(b) Under Housing Act 0

Number of houses repaired or nuisances remedied under Public Health Act 436

Number of houses repaired under Section 3 of Housing Act :—

(a) By owners 0

(b) By local authority in default of owners 0

Number of houses closed on notice by owner that they could not be made fit 0

Number of houses for the working classes :—

(a) Erected during year 0

(b) In course of erection 1 block (15 tenements)

Number of representations by Medical Officer or other person 0

Number of houses included in such representations 0

Number of Closing Orders made 0

Number of Closing Orders determined (i.e., houses made fit) 0

Number of Demolition Orders 0

Number of houses demolished :—

(a) In pursuance of Orders 0

(b) Voluntarily 0

Total number of houses in the borough 3473

Number of houses occupied by the working classes 8571 tenements (Census, 1921)

(Census, 1921)

UNDERGROUND ROOMS—

Number illegally occupied, notices served 7

Number closed or illegal occupation discontinued 7

OVERCROWDING—

Number of cases of overcrowding found; notices served 6

Number of prosecutions 0

Number remedied 5

SMOKE NUISANCES—

Number of observations 260

Number of notices 4

Number of complaints 2

Number of summonses 0

CLEANSING AND DISINFECTION—

Number of adults cleansed 125

Number of children cleansed 0

Number of premises disinfected :—

(a) After infectious diseases 772

(b) For vermin 208

WATER SUPPLY TO TENEMENT HOUSES—

Number of premises supplied 16

Number of prosecutions 0

SANITARY OFFICERS—

Number of Sanitary Inspectors (whole-time) Male ... 3 Female 0

Number of Sanitary Inspectors (part-time) Male ... 0 Female 1

Number of Health Visitors whole-time ... 1 part-time 1

TABLE VI.

Factories, Workshops, Laundries, Workplaces and Homework.

1.—INSPECTION.

Including Inspections made by Sanitary Inspectors.

PREMISES.	Number of			
	Inspections.	Written Notices.		Prosecutions.
		Intimations.	Statutory.	
Factories	362	26	5	...
Workshops	515	38	3	...
Workplaces	2,762	47	4	...
Total	3,639	111	12	...

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
*NUISANCES UNDER THE PUBLIC HEALTH ACTS :				
Want of cleanliness	15	15	...	...
Want of ventilation	5	5	...	...
Overcrowding	2	2	...	...
Want of drainage of floors ... ..	...	...	...	...
Other nuisances	63	63	...	...
Sanitary accommodation {	insufficient	2	2	...
	unsuitable or defective	32	32	...
	not separate for sexes... ..	6	6	...
OFFENCES UNDER THE FACTORY AND WORKSHOP ACT :				
Illegal occupation of underground bakehouse (S. 101) ... ..	...	...	...	...
Breach of special sanitary requirements for bake-houses (SS. 97 to 100) ... ..	...	...	...	...
Other offences (excluding offences relating to out-work which are included in Part 3 of this Report) ... ..	...	...	...	...
Total	125	185	...	...

* Including those specified in Sections 2, 3, 7 and 8 of the Factory and Workshop Act as remediable under the Public Health Acts.

TABLE VI.—continued. 3.—HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.									OUTWORK IN UNWHOLE-SOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.		
	Lists received from Employers.						Notices served on occupiers as to keeping or sending lists.	Prosecutions.		In-stances.	Notices served.	Prose-cutions.	In-stances.	Orders made (S. 110).	Prose-cutions (Sections 109, 110)
	Sending twice in the year.			Sending once in the year.				Failing to keep or permit inspection of lists.	Failing to send lists.						
	Lists.	Outworkers.		Lists.	Outworkers.										
		Con-tractors.	Work-men.		Con-tractors.	Work-men.									
Wearing Apparel—															
(1) Making, &c. ...	114	277	265	1	...	3	114	...	...	...	...	...	...	...	...
(2) Cleaning and Washing ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Racquet and Tennis Balls ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Coathangers ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Paper Bags and Boxes ...	2	...	11	...	...	...	2	...	...	...	...	...	...	...	...
Total ...	116	277	276	1	...	3	116	...	...	...	...	...	...	...	...

TABLE VI.—*continued.*

4.--REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at the end of the year.	Number.
(1)	(2)
Bakehouses (including 18 factory bakehouses)	25
Other Workshops	613
Total number of workshops on Register	638

5.—OTHER MATTERS.

Class.	Number.
(1)	(2)
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (S. 133) ...	7
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (S. 5) ...	25
Notified by H.M. Inspector	25
Report (action being taken) sent to H.M. Inspector...	25
Other... ..	—
Underground Bakehouses (S. 101) :—	
Certificates granted during the year	—
In use at the end of the year	14

TABLE VII.

METEOROLOGY OF LONDON, 1929.

(Deduced from observations at Greenwich under the superintendence of the Astronomer Royal)

1928.	AIR TEMPERATURE.				BRIGHT SUNSHINE.			RAIN AND OTHER FORMS OF PRECIPITATION.	
	Mean of—		Mean of A. & B.	Difference from Average.*	Daily Mean.	Difference from Average.*	Per cent. of possible.	Total Fall.	Difference from Average.*
	A. Maximum.	B. Minimum.							
	°F	°F	°F	°F	hrs.	hrs.	%	m.m.	m.in.
January ...	38.9	31.0	34.9	- 3.6	0.98	- 0.26	12	22	- 21
February ...	37.9	26.3	32.1	- 7.7	1.90	- 0.14	19	10	- 30
March ...	55.4	32.7	44.1	+ 1.6	5.33	+ 1.93	45	1	- 43
April ...	54.7	36.2	45.5	- 2.1	4.38	- 0.64	32	29	- 8
May ...	65.5	43.7	54.6	+ 0.6	7.77	+ 1.30	50	46	+ 2
June ...	68.7	48.9	58.8	- 1.1	6.68	- 0.02	41	31	- 20
July ...	76.3	53.1	64.7	+ 1.2	8.12	+ 1.62	50	45	- 12
August ...	74.1	52.1	63.1	+ 0.5	6.02	+ 0.18	42	54	- 2
September ...	75.5	52.6	64.1	+ 6.1	6.51	+ 1.56	52	4	- 41
October ...	58.7	42.6	50.7	+ 0.5	3.37	+ 0.25	31	66	+ 1
November ...	51.5	39.0	45.3	+ 1.3	1.84	- 0.12	21	128	+ 70
December ...	48.1	38.5	43.3	+ 3.1	1.52	- 0.46	19	115	+ 58
Year... ..	58.8	41.4	50.1	+ 0.0	4.55	+ 0.50	37	551 or 21.69 ins.	- 45 or - 1.77 in.

*The averages used are obtained from observations extending over 35 years (1881-1915).

Ultra-Violet Rays.

The figures given in Table VIII have been supplied by the kindness of Professor Sir Leonard Hill, M.B., F.R.S.

The information on which the table was compiled was obtained by the use in a number of towns of Professor Hill's "test by fading" instrument. By this means the biologically active ultra-violet rays are measured by the fading of Webster standard solution of acetone and methylene blue. The solution is put into a quartz tube which is closed with a piece of rubber tubing and a glass stopper. The tube is held by the stopper and the rubber tube in a suitable clamp and placed in a vertical position with the pointed end upward, fastened to a bamboo pole, if necessary, to raise it above all obstructions. At the end of 24 hours—from 4 p.m. to 4 p.m.—the colour of the tube is compared with the colour of eight standard tubes, filled with fixed and unbleachable solution. The difference between the readings before and after exposure gives a measurement of the biologically active ultra-violet rays. Exposed to a constant source of ultra-violet rays the fading is proportional to the time of exposure. The degrees of the colour scale are equal and biologically standardised. One unit of fading is equal to two or four times the erythema (or skin reddening) dose, the sensitivity of the skin varying in individuals.

TABLE VIII.

SUNLIGHT (ULTRA-VIOLET RAYS), 1929—DAILY AVERAGE

Kindly supplied by Professor Sir Leonard Hill, M.B., F.R.S.

	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
London— Hampstead	0·5	0·7	2·2	2·5	4·2	4·4	5·5	5·0	3·7	1·3	0·7	0·5
Kingsway	0·3	0·5	1·6	1·8	3·1	2·3	3·8	1·9	1·8	0·8	0·4	0·3
Lowestoft	1·0	2·3	—	4·4	8·8	11·7	10·5	11·6	12·3	4·1	1·6	1·8
Ventnor	1·9	2·3	4·8	5·3	11·1	12·3	12·6	9·3	8·8	3·1	2·3	1·6
Hull	0·2	0·2	0·7	1·0	5·1	5·8	4·7	2·4	1·7	0·6	0·3	0·3

This table represents biologically active ultra-violet rays measured by the acetone blue fading method.

One degree on the scale equals 2·4 times the amount of ultra-violet required to produce a very moderate erythema of the white arm—arms differing in sensitiveness.

LEGAL PROCEEDINGS.

Food and Drugs (Adulteration) Act, 1928.

Date.	Name.	Address.	Offence.	Result.
1929 21st Jan.	LORD RAYLEIGH'S DAIRIES, LTD.	16, Caroline Street ...	Selling milk 6.6% abstracted fat	Dismissed, First Offenders Act, £3. 3s. costs
21st Jan. 18th Feb. 4th Mar.	BOUTALIS, LTD ...	20, Bury Street ...	Calomel ointment 51% deficient in mercurous chloride	Fine £5
30th Jan.			Sale of sausages con- taining 0.0164% sul- ph e preservative	Fine £3
9th Sept.			Selling milk 7.5% added water	Fine 20s., costs 10s. 6d
9th Sept.	JOHN GOWING ...	90, Theobalds Road	Selling vinegar 7% deficient in acetic acid	Fine 20s., costs 10s. 6d.
27th Nov. & 11th Dec.	DELICACIES, LTD. ...	122, Theobalds Road	Selling sausages con- taining 370 parts per million sulphur dioxide	Summons dismissed
27th Nov.	E. LISTER ...	54, Red Lion Street	Selling minced meat containing 110 parts per million sulphur dioxide	Fine £5

No legal proceedings were necessary for the abatement of nuisances or breaches of by-laws.





