

[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 1928.



London:

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Sheffield Street, Kingsway, W.C.2.

PUBLIC HEALTH DEPARTMENT,

TOWN HALL,

197, HIGH HOLBORN, W.C. 1.

MARCH, 1929.

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

LADIES AND GENTLEMEN,

Herewith I beg to present a Report upon the Health and Sanitary Conditions
of the Borough for the year 1928.

Believe me, Ladies and Gentlemen,

Yours obediently,

C. W. HUTT,

Medical Officer of Health.



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PUBLIC HEALTH COMMITTEE.

1927-28.

Chairman—

Councillor John H. Boraston, C.B.

Vice-Chairman—

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

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

Councillor Edmund Balding.
 „ Henry W. Ellis.
 „ Harold J. Jewell.
 „ Horace W. Langdon.
 „ Miss Marjorie R. Lovelock.
 „ Rev. Henry Ross.
 „ Charles Shortland.
 „ Sir William R. Smith, D.L., J.P., M.D.
 „ Mrs. Ethel M. Wilson.
 „ 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.

1927-28.

Chairman—

Alderman James W. Coade.

Vice-Chairman—

Councillor Horace W. Langdon.

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

Alderman H. Warren Coleman.
 „ Sir Robert W. Dibdin, J.P.
 Councillor Rev. Wilfred H. Davies, M.A.
 „ Miss Emily Dibdin.
 „ Ernest Hamlin.
 „ Roland H. Haxell.
 „ Alfred Humphreys.
 „ Raymond A. Miles.
 „ George D. Pooley.
 „ J. St. Laurence Stallwood.

1928-29.

Chairman—

Alderman James W. Coade.

Vice-Chairman—

Councillor Roland H. Haxell.

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

Alderman Harold Warren Coleman.
 Councillor Rev. Wilfred H. Davies, M.A.
 „ 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.

1927-28.

Chairman—

Councillor Albert A. Mussett.

Vice-Chairman—

Councillor George D. Pooley.

Ex-Officio—

His Worship The Mayor,

Councillor Albert J. Clark, J.P.

Councillor Edmund Balding.

" Richard Davies.

" Miss Emily Dibdin.

" Percy Hill.

" Miss Marjorie R. Lovelock.

" Lady Smith, J.P.

" Mrs. Ethel M. Wilson.

" George Witherby.

Mrs. Cecil J. Coade.

Mr. Thomas W. J. Coffin.

Mrs. H. Warren Coleman.

Mrs. Wilfred H. Davies.

Miss M. Wilmshurst.

1928-29.

Chairman—

Councillor George D. Pooley.

Vice-Chairman—

Councillor Robert P. Bristow.

Ex-Officio—

His Worship The Mayor,

Alderman Albert J. Clark, J.P.

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.

STAFF.

The following was the Staff during 1928.

*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.B., B.Ch., M.R.C.P., D.P.H.

Medical Officer of Tuberculosis Dispensary—

James Arthur Struthers, M.B., 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 Visitor—*M. Watson.*Chief Clerk and Committee Clerk—*Edwin Kent.*Assistant Clerks—*Frank Fitch.

Arthur Long.

Phyllis Bull.

Mary E. Shelton.

DENTAL CLINIC—(10, John Street).*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.

And Panel of Emergency Home Helps.

*Disinfector—*Henry Emms.*Assistant Disinfector—*E. E. Denny.*Deputy Disinfector—*J. Jefferson.

STATISTICS AND SOCIAL CONDITIONS.

Statistical Summary, 1928.

Area of Borough in acres	...	...	...	...	...	4051
Population—estimated to middle of year (as supplied by the Registrar-General) for birth and death rates						39,280		
Population—Census, 1921						43,192		
Number of inhabited houses (1921)						6,494		
Number of families or separate occupiers (1927)						9,682		
Rateable value 1st November, 1928						£1,640,107		
Rate of 1d. in the £ estimated to yield						£6,530		
Births	{	Total	M.	F.		}	473	
		Legitimate	436	232	204			
		Illegitimate	37	21	16			
Annual rate of births per 1,000 population						12.0		
Deaths						531		
Annual rate of deaths per 1,000 population						13.5		
Number of women dying in, or in consequence of, childbirth	{	from sepsis				1		
		„ other causes				—		
Deaths of infants under one year of age per 1,000 births						57		
Deaths from measles (all ages)						8		
„ „ whooping cough (all ages)						4		
„ „ diarrhoea (under two years of age)						6		
Zymotic death rate*						0.35		
Tuberculosis death-rate per 100,000						119		
Excess of registered births over deaths						—		
Excess of registered deaths over births						58		

* Excluding deaths from Epidemic diarrhoea.

Vital Statistics, 1928.

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	16.7	11.7	65
London	15.9	11.6	67
Holborn	12.0	13.5	57

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.

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 ('Phone: City 7200).

For Non-Infectious Cases—The Ambulances of the Metropolitan Asylums Board. (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. (Municipal.)

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

St. Giles' Buildings { Monday
(Short's Gardens) Thursday } at 2 p.m.

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.

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 48-55.

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 1928—39,280.

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 38, a death-rate of 10.8 per 1,000, considerably below the average death-rate for the whole of the Borough (13.5).

On the other hand the number of deaths of residents of Common Lodging Houses in the Borough, which contain 967 beds, was 49 which, calculated on the number of beds, was a rate of 50.6 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.

Registered Births and Birth-Rate.

The total number of births registered as occurring in the Borough was 301 (162 males and 139 females). Of these, 291 were legitimate and 10 illegitimate.

Corrected Births and Birth-Rate.

I received from the Registrar-General information of the births in outlying institutions in London of 156 legitimate infants and 28 illegitimate infants whose mothers were residents of the Borough. Twelve of the births occurring in the Borough, 11 legitimate and 1 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 1909-1928:—

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

In London the corrected birth-rate in 1928 was 15.9 per 1,000 in comparison with 16.1 for 1927.

Mortality.

The total number of deaths registered as occurring in the Borough was 739, of which 444 were males and 295 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	4	—	32	—
Children's Hospital... ..	3	1	—	258
National Hospital	1	2	—	102
London Homœopathic Hospital ...	1	13	—	78
Italian Hospital	3	8	—	41
St. Paul's Hospital... ..	3	1	23	—
Private	—	—	9	3
Total	15	25	64	482

There were 338 deaths of civil "residents" in various Workhouses, Infirmaries, Asylums, Hospitals, etc., outside the Borough, 48 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 1927 gives the total deaths for the Borough as 531.

Corrected Deaths and Death-Rates, 1928, compared with 1927.

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
1927	728	553	531	333	530	12·5	11·9

For details of causes of and ages at death, see Table II., page 124.

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	164	15.6	14.4
Second ,,	128	12.2	11.5
Third ,,	99	9.4	9.1
Fourth ,,	129	12.3	11.5
	520*	12.3*	11.6

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
1927 ...	19	40	19	38	59

Death-rate per 1,000 corrected births in 1928 and in ten preceding years.

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	Avg. 1918-27	1928
Holborn Borough	141	96	66	79	72	79	81	63	90	38	80.5	57
London ...	107	85	75	80	74	60	69	67	64	59	74.0	67

See also Table, page 106.

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 1928, are for the 52 weeks ended 29th December; the complete corrections for the year 1928 increase the number of deaths to 531 and the rate to 13.5 per 1,000. The corresponding rate for London was 11.6.

The corrections modify the Holborn rates as will be seen from the following figures:—

Year 1928.	Infantile Death-rate in Holborn per 1,000 Births	
	Registrar-General's Quarterly Report	Corrected
1st Quarter...	54	63
2nd „ ...	69	69
3rd „ ...	41	33
4th „ ...	55	64

Ten of the infant deaths (approximately one-third of the whole number) occurred before the child was four weeks old. Enquiry revealed varying ill-defined states of the mothers' health, which indicated that her offspring were likely to be poorly developed or lacking in vitality. Of these ten deaths, six occurred in comfortable artizan homes; in one of these cases, the child's mother, a primipara of 43 years had been twice married; for 26 years she had followed a strictly sedentary occupation and worked at her millinery table until 5 weeks before confinement. She had a history of complaints commonly associated with a sedentary occupation not counter-balanced by exercise and recreation. Although the remaining four occurred in poorer types of homes, there was no history of privation and want; in one case the mother had pyorrhoea; in another the mother has been known for some years to have been in a state of chronic poor health; one was a twin, the survivor made normal progress. Of the remaining 17 infant deaths, 2 were illegitimate children; in one of these the mother and baby remained in the Guardians institution until the death of the child at 7 weeks, the other avoided returning to the address where she had been befriended before entering the Guardians institution. In five other homes there was chronic poverty but without marked distress.

In one case where there was poverty and much domestic discord (death occurred at 9 weeks after operation for meningocele) the mother stated that she had taken abortifacients.

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 1927:—

Indoor Relief	1,096 persons
Outdoor Relief	352 cases
Outdoor Medical Relief	202 persons

Of the total number of 531 deaths, 378 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 now 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 50.

At the request of a number of occupiers in Upper Bedford Place, arrangements were made with the Contractor for the daily removal of house refuse from the houses in that thoroughfare. Notices requiring the refuse to be placed on the kerb in properly covered receptacles between the hours of 6 and 8 a.m. daily were served on the occupiers and the arrangement came into operation on Tuesday, the 17th January, 1928.

In October, 1927, a leaflet on the subject of the removal of house refuse was prepared and distributed throughout the Borough.

The following is a copy of the leaflet:—

THE METROPOLITAN BOROUGH OF HOLBORN.

REMOVAL OF HOUSE REFUSE.

To the occupiers of premises in Holborn.

If you want health, economy and efficiency:—

Don't provide more refuse than is absolutely necessary; burn as much as possible.

Don't put in your dust bin any liquids whatsoever; pour these down the drain.

Don't pack your dust bin tight; a tightly packed bin has to be knocked hard to empty it.

Don't keep the dustmen waiting; put the bin in a place easy for the dustmen to get it.

Wrap up wet refuse in paper; this is hygienic, prevents rust and makes emptying easier.

It is in your interest to make the collection and emptying of the bins as easy and speedy as possible.

In all streets where there is a daily morning collection, the refuse must be placed on the kerb, outside the houses, in small properly covered metal ashbins between 6 and 8 o'clock every morning (Sundays, Christmas Day, Good Friday and Bank Holidays excepted). The ashbin must have one or more suitable handles and cover, and not hold more than two cubic feet.

C. W. HUTT, M.D., D.P.H.,
Medical Officer of Health.

Town Hall,
High Holborn, W.C. 1.
October, 1927.

From time to time early morning inspections of the main streets are made to ensure that the removal of refuse is being efficiently carried out. The commoner breaches of the by-laws and regulations governing the daily removal of house refuse are, (i) the deposit of bins on the kerb in front of houses without proper covers, (ii) the deposit of refuse on the kerb in receptacles that, apart from the covers, do not comply with the by-laws. Such receptacles are of various types, including wooden and cardboard boxes, sacks, and at times paper parcels. The Inspectors concerned draw the attention of the occupiers of houses to these irregularities, and where necessary, notices of breach of the by-laws are served. It is often impracticable, however, to ascertain who deposits refuse on the kerb in cardboard boxes and paper parcels. Moreover, in many houses where wooden boxes are used proper sanitary bins are provided by the owner, but the occupiers use boxes for their own convenience.

House refuse removed from the Borough is taken first to the Contractor's depot where it is "forked" over for the extraction of paper, straw and other combustible matter, which is at once destroyed by burning. In the course of the "forking" parts of the refuse are salvaged, e.g., tin cans, and other metal articles, bottles, glass, rags and bones. The remaining refuse, including cinders directly from household refuse, is loaded into barges and conveyed to dumps on brickfields, for use in brickmaking. The "forking" at the Contractor's depot is carried out immediately on delivery there of the refuse and there is a regular daily barging so that undue accumulation of Holborn refuse or nuisances arising therefrom are avoided. The refuse taken to the brickfields remains for about three years before use; it is then sifted and separated into fine ash, breeze and hard core. The fine ash and breeze are used in connection with the brickmaking industry and the hard core is used for road making or for making up the land of the brick fields which, owing to its marshy nature shows frequent subsidence. The dumps are nearly a mile away from the nearest houses and it has not been found that they give rise to any nuisance.

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 21,715 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 1928.

	Mr. Bennett	Mr. Clark	Mr. Larard	Miss Charlesworth	Miss Stockwell	Total
Complaints received	37	30	35	...	...	102
Do. found to be justified ...	35	28	35	...	...	98
INSPECTION OF HOUSES—						
Dwelling-houses	64	157	50	...	...	271
Houses let in lodgings	306	269	198	108	...	781
Common lodging-houses	14	2	3	...	...	19
Schools ... ..	...	1	2	...	...	3
Drains tested by water ... ..	...	...	1	...	...	1
Re underground rooms	3	4	...	...	...	7
„ Rent (Restriction) Act	2	1	...	...	...	3
„ New Buildings	2	...	...	...	...	2
FACTORIES—						
Bakehouses	10	17	7	...	...	34
Food preparation (other than above)	2	...	52	...	...	54
Other	38	73	255	12	...	378
WORKSHOPS AND WORKPLACES—						
Food premises:						
Dairies and Milkshops	31	47	18	...	...	96
Ice Cream, Manufacture	5	15	184	...	...	204
Do. Storage or Sale	18	...	1	...	...	19
Slaughter-houses ... ..	...	2	...	...	...	2
Hotels and Restaurants	62	119	224	...	...	405
Butchers	267	14	406	...	...	687
Bakehouses	4	7	6	...	...	17
Fish shops	14	15	29	...	...	58
Fried Fish shops	191	9	9	...	...	209
Market Streets	335	70	542	...	...	947
Licensed Premises ... ..	...	1	1	...	...	2
Other food shops	226	73	119	...	...	418
Other workshops	94	143	214	93	...	544
Other workplaces	97	105	137	...	...	339
Outworkers' Registers	20	49	56	...	...	125
Stable and Stable yards	36	78	...	...	...	114
Rag and Bone shops	70	6	1	...	...	77
Outworkers' rooms† ... ..	...	23	...	...	...	23
Offices	11	19	14	1	...	45
MISCELLANEOUS—						
Black smoke	93	41	295	...	...	432
Dust, Special Inspections	20	79	7	...	...	106
Rats and Mice (Destruction) Act	82	203	91	...	...	376
Sale of Food and Drugs Act, sampling	210	206	191	...	...	607
Demolition of Buildings	17	7	11	...	...	35
Other Inspections	1	1	2	8	...	12
Periodical Inspections:						
Includes W.C. and yards, dust-bins, especially houses let in lodgings, and other suitable buildings	1,687	2,082	2,501	...	...	6,270
RE-INSPECTIONS—						
Houses	637	839	560	21	...	2,057
Factories	4	13	29	...	...	46
Workshops and Workplaces	66	245	73	5	...	389
Offices ... ..	...	2	...	...	...	3
Restaurants	9	22	16	...	...	47
Licensed premises ... ..	...	3	...	...	...	3
Miscellaneous	12	32	30	54	193	321
Inspections carried forward ..	4,760	5,097	6,335	302	193	16,687

† 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 Charlesworth	Miss Stockwell	Total
Brought forward	4,760	5,697	6,335	302	193	16,687
Visits <i>re</i> Infections Diseases ...	119	152	94	201	414	980
Do. on School Reports ... ..	...	1	1	...	...	2
Scabies ... ..	...	...	2	...	...	2
Vermin	1	1	..	...	2	4
OTHER VISITS—						
Police Courts	3	4	1	...	...	8
Various	247	516	284	2	1	1,050
MATERNITY—						
Visits:						
††Children under 1 year ... ..	...	..	...	169	297	466
Do. 1 to 5 years... ..	...	...	...	5	10	15
Expectant Mothers ... ..	...	...	...	40	64	104
Re-visits:						
Children under 1 year ... ..	...	...	...	431	640	1,071
Do. 1 to 5 years... ..	...	...	...	189	398	587
Expectant Mothers ... ..	...	...	...	18	140	158
Other Maternity Visits . . . . .	...	...	...	105	93	198
Attendances at Maternity Centres	...	...	..	196	187	383
Total	5,130	5,771	6,717	1,658	2,439	21,715

††See page 97.

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 1,273, viz. :—

Public Health (London) Act, 1891—

Intimation Notices	436
Statutory Notices	58

By-laws—

Houses let in Lodgings	750
General	1

London County Council (General Powers) Acts—

Verminous rooms	24
Rats and Mice (Destruction) Act, 1908	4

1,273

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

	Houses	Factories, Workshops and Workplace.
Water Supply—		
Provided	3	—
Cisterns cleansed, repaired, etc.	19	7

	Houses.	Factories, Workshops and Workplaces
Waterclosets—		
Cleansed	21	10
Water supplied, flushing cistern repaired, etc.	8	6
Repaired, new pans, etc.	84	21
Ventilation improved	1	6
„ to lobby provided or improved	—	9
Separate accommodation for sexes provided	—	8
Position or construction improved	—	6
Direct communication with workrooms remedied	—	2
Accommodation provided	1	3
Soil Pipes—		
Repaired, renewed and ventilated	1	—
Rainwater Pipes—		
Repaired or renewed	12	3
Drains—		
Repaired	8	1
Unstopped, cleansed, etc.	15	2
Sinks, etc.—		
Waste pipes repaired, renewed, etc.	21	1
Yards, Areas and Washhouses—		
Cleansed	14	5
Paved and paving repaired	26	2
Houses and Workshops, etc.—		
Cleansed	47	39
Dilapidations repaired and made good	61	3
Ventilation improved	2	—
Dampness—		
Roofs repaired	76	2
Gutters repaired	17	—
Other works to prevent dampness	7	3
Ashbins—		
Provided, repaired, etc.	42	4
Urinals—		
Repaired, cleansed, etc.	—	3
Various—		
Underground Rooms vacated	3	—
Smoke—Emission of black smoke abated	—	5
Accumulations of Refuse—Removed	33	12
Overcrowding abated	2	1
Other nuisances abated	15	22

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.	25	5
„ (b) and Section 37, Ashbins	4	—
„ (c) Drains and W.C.'s	17	1
„ (d) Accumulation of rubbish	9	2
„ (f) and Section 48. Water supply	3	—
„ 38 W.C.'s communicating with workrooms	—	3
„ „ W.C. dirty or defective	—	4
„ „ W.C. Absence of separate accommodation for sexes	—	2
„ „ Insufficient accommodation	—	1
„ „ Ventilation of W.C. or lobby	—	12
„ „ Black smoke	—	2

By-laws as to Houses let in Lodgings.

At the end of the year 515 houses were registered under these By-laws. Of these, 235 are in St. Giles and Bloomsbury and 280 in the Holborn District.

There were 784 inspections of these premises, excluding a very large number of periodical inspections and re-inspections. 235 notices were served for breaches of the By-laws, exclusive of 515 notices that were served for annual cleansing as required by the By-laws.

Chain versus Cord Sash-lines.

A frequently recurring trouble in connection with tenement houses is the broken sash-line. In this connection representations have been put forward that the substitution of chain lines in place of cord lines for sashes would be an advantage. As a result of enquiries made in the matter, it would seem that the general opinion of builders is in favour of the retention of cord lines, except perhaps for very heavy windows. The objections raised to the chains are (i) the cost—several times that of cord, without a correspondingly greater length of life, (ii) oxidation of metal chains, especially if not kept oiled, (iii) noise, and (iv) the necessity for special pullies.

The usual causes of short life in a sash cord are (i) poor quality cord, (ii) pulley not running freely or defective and cutting cord, (iii) nail fixing bead projecting into the frame and cutting cord. If good quality cord is used, pullies kept in good order and beads fitted with screws instead of nails, sash-lines should give a minimum of trouble. It has been found wise to advise owners of tenement houses to renew both sash-cords when one breaks and perhaps even all four cords to the window. One builder, who has a contract in the Borough to maintain windows and sash-cords in a number of boarding houses, states that he always substitutes cords for broken chains.

Rag and Bone Dealers.

During the year additional By-laws were 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. A copy of the new By-laws was sent to each rag and bone dealer in the Borough. No breach of the By-law was discovered during the year.

Rats and Mice (Destruction) Act, 1919.

During the year 263 premises were inspected under the above Act, the total inspections being 376. Four 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.

The following summary shows the condition found on inspection, the action taken and the results obtained.

WARD.	Number of premises inspected.	Number rat infested.	Action for Rat Repression.						RESULT.
			Traps.	Poisons.	Rat catchers.	Dogs.	Cats.	Proofing	
A.	12	9	—	—	—	—	—	9	Free 9
B.	26	14	1	—	1	—	—	13	Free 13 Numbers reduced ... 1
C.	24	8	4	3	1	—	1	4	Free 6 Rats occasionally seen 2
D.	31	24	3	1	1	2	2	21	Free 15 Rats occasionally seen 9
E.	20	7	1	2	2	—	—	3	Free 7
F.	51	15	1	7	2	—	—	9	Free 13 Numbers reduced ... 2
G.	25	8	—	3	—	—	—	8	Free 7 Numbers reduced ... 1
H.	49	16	2	2	8	—	2	3	Free 11 Rats occasionally seen 5
I.	25	11	2	2	5	1	3	1	Free 6 Rats occasionally seen 5
	263	112	14	20	20	3	8	71	Free 87 Numbers reduced ... 4 Rats only occasionally seen ... 21

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. A quarter of a gallon of the poison, making 1,000 baits, is used each time. 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.

During the year nuisances from the presence of rats were reported in one of the market streets; steps to deal with the matter were taken by the occupiers of various premises concerned, but the nuisances recurred. A suggestion was made that the rats entered the infested premises from under the footway. The co-operation of the Borough Surveyor was invited and as a result of action taken by him four disused drain connections found in front of vacant land in this market street, and some other places in the sewer where rats could get through, were bricked up. The relaying of the footway in the street also received attention and where any signs of rat runs were found these were broken down and filled with rough ground and broken glass.

Rat Week.

In the observation of Rat Week in the Borough we endeavoured as in previous years to secure during the six days, 5th to 10th 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 sewer men 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.

In the course of the inspections made in connection with Rat Week, infestations were found at 35 premises. In connection with this the following action was taken by the owners or occupiers of the premises:—

Professional rat catchers employed	=	7
Traps and poisons used	=	18
Rat proofing carried out	=	5
Dogs and cats used	=	4

Subsequent visits disclosed the results of this action as follows:—

No rats seen	=	23
Occasional rats but numbers considerably reduced	=	12

Rats from Disused Drains.

In the year 1921 the Public Health Committee had under consideration the question of nuisances arising from the presence of rats, where the access of the vermin to the premises concerned was found to result from failure to seal off disused drains. On the recommendation of the Committee, the Council, at its meeting on the 23rd November, 1921, decided to address communications to the Minister of Health, the Minister of Agriculture and Fisheries and the London County Council, urging that legislation should be introduced to provide for placing on owners or occupiers of property an obligation to notify the Local Sanitary Authority on ceasing to use any drain or similar sanitary fitting and for making it an offence to cease to use any such drain or other similar sanitary fitting without efficiently sealing it off.

Copies of this resolution were also sent to the various Metropolitan, City and Borough Councils.

A number of Local Authorities in London agreed with and supported the representations made by the Council, and clauses to deal with the matter were included in the London County Council (General Powers) Bill, 1923; points of difficulty arose, and the clauses were withdrawn. The matter was further considered by the London County Council and the various Metropolitan Local Authorities, and a suitable clause was agreed to and included in the London County Council (General Powers) Bill, 1926. The part of the Bill, however, dealing with the matter was withdrawn with a view to further evidence being obtained of the need for the provision.

Your Medical Officer of Health was asked to furnish some of the evidence required, and clauses dealing with the matter were again included in the London County Council (General Powers) Bill, 1928. The Bill having been read a first time, was referred to the Local Legislation Committee of the House of Commons, and your Medical Officer of Health was asked to give evidence before the Committee in support of the representations originally made by the Holborn Borough Council. Evidence was prepared giving a number of specific cases where rat infestation had occurred from disused unsealed drains. When the part of the Bill dealing

with the matter came before the Committee, after considerable legal argument and various suggestions for amending the wording of the clause, the Chairman intimated that the Committee did not want to hear any evidence in support of the proposal because the Committee were satisfied as to the necessity for the clause, a statement which, if I may be permitted to add as an officer of the Holborn Borough Council, caused me much personal satisfaction as a testimonial to the sagacity of the decision of the Public Health Committee and the Council.

Some amendment was made in the wording of the clause by the Local Legislation Committee of the House of Commons. The proposal was finally passed into law in the following form, when the London County Council (General Powers) Act, 1928, received the Royal assent on the 3rd August, 1928 :—

(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.

Inspection of Workshops, etc.

The routine inspection of factories, workshops and workplaces has been carried out during the year. 466 factories were inspected, 561 workshops and 3,566 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 29 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	19	3
Workshops	59	7
Workplaces	51	1
	129	11

Of the 616 workshops on the register at the end of the year

321 employed men only,
62 employed women only, and
233 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 149 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	17	—	1	18
Builders	13	—	—	13
Cabinet makers	5	—	—	5
Carpenters	10	—	—	10
Clock and watch makers	13	—	1	14
Dressmakers and ladies' tailors	—	23	24	47
Diamond mounters	10	—	3	13
Engravers	17	—	2	19
Glass blowers	9	—	2	11
Jewellers	44	—	11	55
Lamp shade makers	—	3	4	7
Leather goods makers	5	—	4	9
Metal workers	6	—	1	7
Picture framers	9	—	1	10
Tailors	30	4	66	100

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 439 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 439 factories include 53 different industries. In 197 cases men only were employed, in 12 women only, and in 192 both sexes.

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

Bookbinding	-	-	-	20
Engineering	-	-	-	45
Jewellers' work	-	-	-	15
Metal work	-	-	-	11
Printing	-	-	-	88

The following is a summary in tabular form of the work done by the Inspectors in factories, workshops and workplaces in the year 1928—

	Mr. Bennett.	Mr. Clark.	Mr. Larard.	Miss Charlesworth.	Total.
FACTORIES—					
Inspections ...	40	73	307	12	432
Re-inspections ...	4	13	29	—	46
WORKSHOPS—					
Inspections ...	94	143	214	93	544
Re-inspections ...	26	61	27	4	118
WORKPLACES—					
Inspections ...	97	105	137	—	339
Re-inspections ...	40	184	46	1	271
OFFICES—					
Inspections ...	11	19	14	1	45
Re-inspections ...	—	2	—	—	2
BAKEHOUSES—					
Inspections ...	14	24	13	—	51
Re-inspections ...	—	—	—	—	—
RESTAURANTS—					
Inspections ...	62	119	224	—	405
Re-inspections ...	9	22	16	—	47
LICENSED PREMISES—					
Inspections ...	—	1	1	—	2
Re-inspections ...	—	3	—	—	3
DEFECTS FOUND—					
Want of cleanliness ...	3	20	12	2	37
„ ventilation ...	—	4	1	—	5
Overcrowding ...	—	—	—	1	1
Want of drainage of floors ...	—	—	—	—	—
„ lavatory accommodation ...	—	—	—	—	—
Food improperly stored ...	—	—	—	—	—
Storage cistern defective ...	—	1	1	—	2
Accommodation for refuse ...	—	4	2	—	6
Accumulation of refuse ...	1	3	4	1	9
Sanitary accommodation	Insufficient ...	—	2	3	5
	Unsuitable ...	1	7	12	21
	Defective ...	2	5	8	16
	Not separate for sexes ...	—	4	1	5
	Stopped ...	—	—	—	—
	Foul ...	—	—	—	—
Direct communication with workroom ...	—	—	—	—	
Other nuisances ...	3	11	15	2	31
Total defects ...	10	61	59	8	138

Action taken,

Matters referred to H.M. Inspector :—

Nuisances remediable by H.M. Inspector	...	...	—
Failure to affix abstract	13

Matters referred by H.M. Inspector :—

Notified by H.M. Inspector	22
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Notices served.

	Mr. Bennett.	Mr. Clark.	Mr. Larard.	Miss Charlesworth.	Total.
Factories—					
Intimation	2	2	15	—	19
Statutory	1	—	2	—	3
Workshops—					
Intimation	9	25	17	8	59
Statutory	2	2	3	—	7
Workplaces—					
Intimation	—	14	9	—	23
Statutory	—	9	—	—	9
Offices—					
Intimation	—	1	—	—	1
Statutory	—	—	—	—	—
Restaurants—					
Intimation	3	8	10	—	21
Statutory	—	—	—	—	—
Licensed Premises—					
Intimation	—	1	1	—	2
Statutory	—	—	—	—	—
Legal Proceedings					
	—	—	—	—	—

Outworkers.

Lists received from Holborn Firms	...	...	115
Names and addresses received from other Authorities	...	...	498
Names and addresses sent to other Authorities	...	...	432
Notices served on Employers	...	...	—
Firms visited	...	...	115
Outworkers lists not kept	...	...	—
" " not sent	...	...	—
Infectious diseases in outworkers premises	...	...	—

Among the industries that came under observation during the year, the following may be mentioned :—

Brush Making.

Complaints were received of a smell arising from bristle steaming at brush-making works. This work is carried on in a factory employing about 170 persons of both sexes. The brushes made are mostly for use with paint or distemper; the bristles are subjected to superheated steam for six hours before being made up into brushes. In the better class paint brushes, the bristles are imbedded in a solution of indiarubber which, when vulcanised, holds them fast. The wooden handles are turned by machinery and finished on revolving bands of abrasive material giving a very smooth surface to the wood.

A considerable amount of dust is generated during the process of finishing the handles, but mechanical ventilation is provided and the workers appeared to be healthy.

Representations were made to the occupiers of the factory respecting the smell from the bristle steaming, and to prevent the nuisance the plant was removed to another part of the building and was reconstructed in such a manner that all steam is condensed and cooled before it is allowed to escape into the drain.

Ample W.C. and washing accommodation is provided for the workers, and the factory, although not of modern construction, is well lighted and ventilated.

Brassfounders.

Complaints were received respecting fumes from a brassfounder's works. These works are situated in a yard behind two tenement houses; small castings in brass, bronze and gun-metal are made.

In the case of alloys containing a high percentage of zinc owing to the comparatively low temperature at which the metal burns, a nuisance is likely to arise if the metal gets too hot. The trouble has largely been overcome by increasing the height of the chimney and by the exercise of more care to prevent overheating.

Coke is used for fuel; the furnace is constructed in the ground and it causes no nuisance. The building is old and surrounded by dwelling houses. The castings made are nearly all for articles wanted in a hurry, so that a centrally situated workshop is necessary.

Cellulose Enamels.

The use of cellulose enamels is growing largely in connection with the finishing of wooden and metal articles in particular. The enamel which consists of a solution of cellulose in amyl-acetate, or some allied solvent can be obtained in various colours and transparent. It gives a hard, heat-resisting surface particularly suitable for some goods. The method of application is usually by means of a spraying machine used in a specially constructed room, having a fan and shaft to carry off the smell arising from the amyl-acetate. This smell, though very pungent and having some effect on the throats of people unaccustomed to it, probably has no ill-effects on the workers under the conditions in which it is used.

In spite of the fact that the usual extract fan and shaft were provided, a series of complaints were received in respect of a firm of military drum makers who used this enamel. Since the complaints were lodged the firm have left the district for larger and more convenient premises.

Chocolate Making.

Opportunity was taken during the year to inspect a chocolate factory, where about 30 hands, mostly girls, are employed. The factory was found to be well constructed, lighted and ventilated, and to be provided with ample W.C. and washing accommodation. At this factory the process is carried through from the whole cocoa nib, which is ground on the premises, the husks being separated and sold to the manufacturers of cheap sweets.

The chocolate, after being thoroughly ground, is mixed with sugar, flavouring essences and water to form a thin paste, heated, and run into iron moulds to form bar chocolate or used for covering the sweetmeat centres which are made in another part of the building. This covering in the case of best class goods is done by picking the "centre" up with a fork and dipping it into the chocolate; for cheaper grades the centres are dipped by hand into the chocolate mixture.

Although hand work is usual in all but the highest class work, it does not seem desirable, as the worker does not necessarily keep her hands clean because facilities are provided for doing so.

Underground Workshops.

Underground rooms are often used for trade purposes, not only as store places, but as workshops. The construction of many basements often interferes considerably with their lighting and ventilation. As an example of this, reference can be made to a basement found during last year used by a hairworker. The room was overcrowded and practically unventilated. It could not have been made satisfactory without interfering with the shop front, and the use of the room as a workplace was therefore discontinued.

The use of such rooms as workshops can only be regarded as extremely unsatisfactory.

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 1928, 45 separate offices were inspected; in one case it was found necessary to serve notice 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.

The Health and Comfort of Workers.

During the building of a large block of offices in the Borough, opportunity was taken to communicate with the owners (a large Building Society) suggesting the use of glass permeable to ultra violet radiation of solar light. A reply was received that arrangements had already been made for the use of this glass, and in addition for the use of all possible hygienic and health preserving systems, *e.g.*,

sound absorbing coverings for walls and ceilings, special cork flooring on floors where there was likely to be much traffic, vacuum cleaning plant, etc. Such indications that the advantages of health promoting systems are being appreciated in commerce and industry and are happily increasing.

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 432 cases the inspections were recorded. Some of these observations were made in the early morning when smoke pollution is more prevalent. Generally the observations extended over periods of not less than one hour. No complaint was received. As the result of the inspections five intimation notices were served.

Much of the black smoke nuisance arises from careless or inefficient stoking. Stoking is usually considered an unskilled employment and the stoker commonly receives but little instruction how to carry out his work.

In order to ascertain to what extent facilities exist in London for the training of stokers and firemen, communications were addressed to the Education Authority (L.C.C.), Polytechnics, and organisations connected with mechanical engineering, asking if any classes for stokers were provided by them. From replies received it would appear that very few, if any, such classes have been organised. The Northampton Polytechnic Institute, St. John Street, E.C. 1, have provided a fuels department, although they have not actually held classes for stokers. This institute would be prepared to consider the organisation of such classes to be held in the evening or would undertake day instruction. The Education Officer of the London County Council replied that the question of providing such classes would be carefully considered if the number of students for training, the type of work with which stokers and firemen are connected, and the district in which the classes would be required, could be furnished. Other replies also indicate the willingness of the teaching bodies to organise special classes for stokers and firemen if they could be assured that the number of students likely to attend would be sufficient to justify the venture.

It might seem desirable that the controllers of large works, and even of smaller businesses where these workers are employed, should encourage their stokers and firemen to apply to the London County Council Technical Institutes or local Polytechnics for a course of training to qualify them for their work.

In the meantime, with a view to encouraging careful and efficient stoking, poster cards giving practical instruction suitable for hanging in boiler rooms, have been obtained during the past few years, and a number of employers exhibit them in their boiler rooms.

Smokeless Fuel.

The Public Health (Smoke Abatement) Act, 1926, although an advance on previous legislation for dealing with the smoke nuisance, is by itself inadequate to deal with the serious consequences to public health of atmospheric pollution, inasmuch as it deals solely with the emission of industrial smoke, whereas it is often the domestic fires which cause the trouble. In London on an average 37,000 tons of coal are burnt daily in domestic fires, contributing largely to the pall of smoke over the Metropolis.

Atmospheric impurities are undoubtedly responsible in a wide measure for pulmonary diseases and, indirectly, by reducing sunshine, for diseases peculiar to childhood (notably rickets) as well as for a general lowering of the vitality. This deplorable state of affairs cannot be remedied until practical steps on a large scale are taken to deal with the all-important problem of domestic smoke.

It is desirable that the Government and local authorities should not only encourage the wide adoption of existing smokeless fuels such as gas and electricity but should also, by educational methods, endeavour to secure the general use of solid smokeless fuels such as those derived from low temperature carbonization. The general use of smokeless fuel in the home fires as well as industrial furnaces would prove a valuable and effective measure of lessening smoke and fog in town atmospheres.

Common Lodging Houses Acts, 1851 and 1853.

Thirteen Common Lodging Houses are registered in the Borough for 967 lodgers, viz., 842 males and 125 females.

The Common Lodging House accommodation in Holborn is equal to 21 beds per 1,000 of the population. The death-rate amongst common lodging house residents is very high; in this Borough it was 50·6 per 1,000 in 1928.

HOUSING.

During the year 551 houses occupied by the working classes were inspected: this number consisted of 515 registered lodging houses and 36 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 1927, reference was made to a small housing scheme undertaken by the Council in Betterton Street. It was reported that a block of 15 flats, three on each floor, had been constructed and opened for occupation on the 7th July that year.

During 1928 opportunity occurred for the extension of the scheme and the Council acquired three houses adjoining the block already constructed. These houses were not suitable for reconstruction and the Council decided to demolish them and construct on the site a further block of 15 flats similar to those already occupied. The plans were prepared by the Borough Surveyor, Mr. J. E. Parr, A.M.Inst.C.E. and invitations were issued for tenders to carry out the work. The tender of Messrs. W. Lambert & Son, of Chiswick, was accepted and the work commenced at the latter part of the year. Unfortunately possession of the third of the three houses could not be obtained before the work of demolition and reconstruction was commenced, and some delay in completion must therefore be anticipated. It is, however, hoped that the flats will be ready for occupation about the middle of the year 1929.

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 1928, 81 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, 37 families have been accommodated; in 14 cases the applicants refused the accommodation offered, in three cases the applications were withdrawn and 17 were refused by the London County Council. The remaining 9 are still under consideration. In addition to the 37 families for whom houses were provided, as mentioned above, notification was received during the year that accommodation had been provided for 27 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 133 representing 52 per cent. of the applications submitted.

HOUSING CONDITIONS.

Statistics.

YEAR ENDED 31ST DECEMBER, 1928.

GENERAL.

(1)	Estimated population	...	39,280
(2)	General death rate	...	13.5
(3)	Death-rate from tuberculosis (all forms)	...	1.19
(4)	Infantile mortality rate	...	57
*(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 commenced)	
(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)	§625
(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	2
(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	307

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	307
(2) Number of dwelling-houses in which defects were remedied after service of formal notices:—	
(a) by owners	307
(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	2
(2) Number of dwelling-houses in respect of which Closing Orders were made	2
(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

FOOD.*Dairies, Cowsheds and Milk Shops.*

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 1928, the number of registered dairies and milk shops in the Borough was 129; 4 retail dairies or milk shops were newly registered and 4 were removed from the register on the closure of the businesses. In 10 cases alterations in the register became necessary owing to change of ownership.

In addition to my inspections the Sanitary Inspectors made 96 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.

In one such case last year, it was found that the itinerant vendor was not registered for the address given, but as this milk seller was not again observed selling milk in the Borough no further action could be taken.

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-five 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; four of the samples examined were found to contain tubercle bacilli.

The following table refers to the samples examined as mentioned above:—

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> .
1928			
July 13	Large milkshop... ..	1,440,000	0.000001 cc.
Aug 23	Large milkshop ... (same as above)	389,000	0.0001 cc.
Aug. 23	Large milkshop ...	249,000	0.00001 cc.
Aug. 28	Large milkshop ...	442,000	0.00001 cc.
Oct. 31	Small milkshop	380,000	0.1 cc.
Nov. 20	General shop	7,500	0.0001 cc.

It will be seen from the above table that the sample purchased in July was a dirty milk, the examination disclosing an unusually large number of organisms (1,440,000) per c.c. and an exceptionally small minimal volume containing *Bacillus coli*. Information was obtained as to the farm from which this milk was obtained, and a communication was addressed to the County Medical Officer of Health concerned. A reply was received from him that as the result of an inspection it was found that the farm was in good and clean condition, all the milking done with all possible precautions. A mixed sample of milk from the farm taken by the local Medical Officer of Health disclosed only 15,000 bacteria organisms per c.c. on agar after 48 hours at 37°C., and there were no *B. coli* in 0.01 c.c. after three days' incubation. This sample of mixed milk as taken locally would fall within the Grade A milk standard. Some improvement occurred, however, as a further sample from the same retailer in the Borough taken in August showed the presence of 389,000 organisms per c.c., and the minimal volume containing *B. coli* was .0001 c.c.

Further information with regard to the samples of milk giving evidence of *tuberculous* infection follows :—

Sample H.

This sample was purchased at the depot of a large dairy; two guinea pigs were inoculated. One killed after three weeks showed evidence of tuberculous infection of spleen, lungs and liver; the second pig died five weeks after inoculation, post mortem showing generalised tuberculosis of a miliary type, affecting particularly lymphatic system, serus membranes, liver and spleen. Information was obtained from the retail company that the milk was part of consignments from various farms received at their bottling depot, where it was mixed, pasteurised and cooled. Evidence was not obtainable therefore as to the particular farm from which the sample of milk came. Communications were, however, sent to the Medical Officers of Health of the counties in which the farms were situated.

A communication was also sent to the Medical Officer of Health of the Metropolitan district in which the mixing and pasteurising depot of the retail firm is situated. A reply was received that on inspection the pasteurising plant was found to be satisfactory, up-to-date and well kept. A sample of milk taken at the mixing depot did not show any evidence of tubercle.

Sample S.

This sample was purchased in the street from a roundsman employed by a dairyman in the borough. A guinea-pig killed after a period of six weeks showed a caseating mass in an enlarged spleen thus affording evidence of tuberculosis.

Sample T.

This sample was purchased at a small general shop. Two guinea-pigs were inoculated; one killed after three weeks showed all organs to be healthy; the second killed after six weeks showed tubercles on a slightly enlarged spleen and enlarged glands in the mesentery, evidence of tuberculous infection being thus afforded.

Sample V.

This sample was purchased at a milk shop. Two guinea-pigs were inoculated; one killed after three weeks showed enlargement of liver, but no definite signs of tuberculosis were detected. The second pig killed after six weeks showed enlarged liver and spleen with well marked tubercles. The animal was emaciated; evidence of tuberculosis infection was thus afforded.

Sample A1.

This sample was purchased at a restaurant. Two guinea-pigs were inoculated, one killed at three weeks showed slightly enlarged spleen with no direct evidence of tuberculous infection. The second killed at six weeks showed enlarged spleen with tubercles and enlarged mediastinal and mesentric glands, giving evidence of tuberculous infection.

Information given by the retailers showed that the four samples S. T. V. and A1 were all obtained from one and the same firm of wholesale dealers. Communications were addressed to the firm concerned with a view to ascertaining the names and addresses of the

Public Health (Milk and Cream) Regulations, 1912-17.

These regulations ceased to be operative after the 31st December, 1927, having been revoked by the Public Health (Preservatives, etc., in Food) Regulations as from the 1st January, 1928. It may, however, be recorded that during the year 1928, 114 samples of milk were examined and 14 samples of cream. No preservative was discovered in any sample.

Condensed Milk.

The Public Health (Condensed Milk) Regulations, 1923, came into operation on the 1st November, 1923.

During the year 1928, 12 samples of condensed milk, viz., five full cream, and seven skimmed sweetened, were examined by the Borough Analyst under the Regulations.

All the samples complied with the requirements of the Regulations as to labelling.

All the samples were examined for standard of composition and all were found to be equal to or above the standard required.

The following table gives the percentages of the milk fat and milk solids found:—

	Milk fat per cent.	Milk solids (including fat) per cent.
Full cream sweetened	11.4	33.8
" "	10.5	34.6
" "	10.0	32.4
" "	9.3	32.4
" "	9.9	35.9
Skimmed	2.8	30.1
" "	0.4	29.6
" "	0.6	29.9
" "	0.6	26.3
" "	0.2	30.4
" "	0.5	32.5
" "	0.6	30.2

Public Health (Dried Milk) Regulations, 1923.

These Regulations came into operation on the 1st day of May, 1924, and are generally similar to the Regulations with regard to condensed milk.

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

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 a serious menace.

Bakehouses.

At the end of the year 1928 there were 23 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 53 inspections of bakehouses.

Sale of Fish.

During the past year special detailed inspections were made of all the fish shops and fish stalls in the Borough. 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 fried 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.

In addition to the above there is 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.

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 209 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 933 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 Surveyor respecting 109 applications from street traders for licences to sell various articles of food as follows:—

Coffee stalls	6
Confectionery	10
Eels and shell fish	5
Fish—wet and dry	5
Fruit	29
Fruit and vegetables	8
Groceries	3
Ice cream	16
Lemons	2
Meat	5
Pies	2
Poultry, eggs and provisions	6
Soda and milk	1
Vegetables	11

The places at which the food sold from the above stalls is stored were:—in the Borough 62, outside the Borough 27; in 17 the information was to the effect that there was no storage place, the whole of the stock being sold out each day.

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 quantity of ice cream manufactured in the area known as the "Italian Colony." In connection with the registration of such premises in the Borough the following memorandum on the manufacture, storage and sale of ice cream was prepared by the Medical Officer of Health and a copy is furnished to every applicant for registration.

The Manufacture, Storage and Sale of Ice Cream.

Place.

Ice cream should be made and stored in a room or rooms used exclusively for such purpose.

The room should be in a good state of repair, and provided with proper windows and doors. Shelves, rafters, etc., should be kept free from dust.

All the walls should be rendered with cement or other impervious material and kept clean by washing them.

The freezing process should be done in a room or yard well away from dust bins and sanitary conveniences. After the freezing, the room or yard should be washed down with plenty of water. The drain cover should be kept clean.

Apparatus.

The ice cream or "mix" should be prepared and boiled in heavily tinned, monel metal or enamelled metal receptacles.

The ice cream should be stored in heavily tinned, monel metal or enamelled metal receptacles provided with a metal cover. The covers should have a raised perforated ridge to allow for cooling and evaporation. Always place the receptacles either empty or full on shelves, never on the ground.

All pans, whisks, spoons and spatulas should be scalded, thoroughly washed in hot water and soda and rinsed immediately after use. Never rest the spoons or spatulas on the ground, rest them in a clean pail.

The containers for freezing should be scalded and washed in the same way before use. Don't forget to scald and wash the inside of the lids of the containers.

Don't touch the cream with the fingers, use a clean spoon, whisk, ladle, etc., or some other suitable appliance.

Keep the lid of the freezer on as much as possible so that freezing salt, small pieces of ice, dust, dirt, or germs cannot get into the ice cream.

Materials.

All ingredients and utensils should be stored in the room and not on landings, passages, or in yards.

Keep the milk covered and cool it until required for use.

Person.

The hands, especially the finger nails, should be kept clean; a scrubbing brush should be used; linen sleeves should be put on before commencing the making of the ice cream.

General.

Have plenty of hot water and soda ready.

Cleanliness of place, person and apparatus is of supreme importance.

During the year there were 44 premises in the Borough where ice cream was manufactured, and in addition to my inspections 223 inspections of these premises were made, and five notices were served.

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

Premises on which 20 gallons made daily	2
" " 10 " " "	4
" " 8 " " "	1
" " 6 " " "	2
" " 4 " " "	6
" " 2 " " "	8

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

	Mr. Bennett's District.	Mr. Clark's District.	Mr. Larard's District.
Restaurants	3	3	2
Confectioners	1	3	2
Other	1	5	1

During the summer of 1928 nine samples of ice cream were purchased and submitted to bacteriological examination.

The result of the bacteriological examination is shown in the following table:—

Date.	Where purchased.	Organisms per cc. on Agar at 37° for 24 hours.	Streptococci present in 1 cc.	Coliform organisms Minimal volume showing presence.	B. Enteritidis sporogenes in 2 c.c.
13/7/28	Barrow ...	605,000	Positive ...	0.01 cc	Absent.
"	Barrow ...	6,620,000	Positive ...	0.1 cc.	Present.
"	Barrow ...	1,970,000	Positive ...	0.0001 cc.	Present.
17/7/28	Dairy ...	587,000	Positive ...	0.001 cc.	Present
"	Barrow ...	355,000	Positive ..	0.1 cc.	Absent
"	Barrow ...	740,000	Positive ...	0.001 cc.	Present.
31/8/28	Barrow ...	88,000	Positive ..	0.1 cc.	Present.
"	Barrow ...	80,000,000	Positive ...	0.0001 cc.	Present.
"	Restaurant ..	820,000	Positive ...	0.01 cc.	Present.

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 six cases the ice cream was made at premises in the Borough all of which are kept under regular supervision. In three cases the ice cream was made outside the Borough.

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	...	...	...	...	...	25
Provision dealers' stalls	...	...	...	...	...	3
Offal shops	...	...	...	...	...	3
Cooked meats	...	...	...	...	...	10
Wholesale (bacon; sausage)	...	...	...	...	...	3

All the butchers' shops and meat stalls in the Borough are regularly inspected to ensure compliance with the regulations; during the year 687 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 cases 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.

The practice of handling meat by customers before purchase has generally ceased in the Borough. In the shops where "pieces" are sold, a notice is exhibited urging customers not to handle meat before purchase, and in most of these shops 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.

It is satisfactory to record that it has not been necessary in any case to serve notice for 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	244
Slaughter-houses	1
Tripe, offal and other meat shops	33
Fried fish shops	11
Fish shops	44
Ice cream (Manufacture)	44
Poulterers	4

During the year 2,501 inspections of food premises and market streets were made and 31 notices served for sanitary defects found.

Sanitary Accommodation for Customers at Restaurants, etc.

The question arises from time to time of the necessity for the provision in restaurants of sanitary accommodation for customers of both sexes. Many of the larger and better equipped restaurants provide suitable accommodation, a much appreciated boon, particularly in Central London, where such restaurants are largely used by strangers to the Metropolis. There is something to be said in favour of such provision being required in all restaurants, or at least in all the larger establishments, although everyone recognises that in crowded areas where space is valuable it is not always easy to spare the superficial area. At times the nearness of public sanitary conveniences renders provision in a restaurant less imperative. Under various local Acts relating to provincial towns sanitary accommodation must be provided for customers.

During the year while a large restaurant in the Borough was being remodelled the proprietors, at our instance, took the opportunity to include the provision of sanitary accommodation for customers. In another case where the female staff complained that the W.C. provided for them was used by male customers, the proprietors provided accommodation for customers.

Unsound Food.

The following unsound food was condemned during the year 1928 :—

Commodity.	Quantity.	Condition.	Result of Action taken.
FISH—			
Brill	6 stone	Stale and offensive smell...	Surrendered
Skate	2 ,	Do.	Do.
FRUIT :—			
Pears	1 ton 5 cwts...	Rotten	Do.
VEGETABLES :—			
Tomatoes	1 ton	Rotten	Do.
Potatoes	4 cwts.	Decomposed and diseased	Do.
MEAT, ETC. :—			
Bacon	1 ton 5½ cwts...	Diseased (pyaemic abscess) and decomposed ...	Do.

Food Poisoning.

About the middle of the year 1928 a number of references appeared in the public press to cases of illness in central London thought to be due to food poisoning. In some cases the residences of the persons affected were closely adjacent to the Borough. In July information was received of some suspicious illness at a hostel in the Borough. On enquiry it was found that about two weeks previous to the receipt of the information three or four residents at the hostel had been ill, the symptoms giving rise to a suspicion of slight food poisoning. The information was received very late, too late to enable specimens to be taken of faeces or blood, or for samples of any suspected food to be examined. When the information was

received the outbreak was already ended; there was no reason to anticipate its continuance, nor did any further cases occur. The position, although fortunately unassociated with any serious developments, directed attention to the importance of early information of all such cases being furnished to Medical Officers of Health. With this object in view, and particularly having regard to the public concern in food poisoning cases aroused by the press references above referred to, a circular letter was sent to all medical practitioners practising in the Borough drawing attention to the importance of the matter and expressing the hope that should they be called in to attend any case of illness in the Borough due, or suspected to be due, to food poisoning, they would notify such case to the Medical Officer of Health at the earliest possible stage.

The Public Health (Preservatives, etc., in Food) Regulations, 1925.

The Public Health (Preservatives, etc., in Food) Amendment Regulations, 1926.

The above regulations came into operation on the 1st January, 1927, except that in the case of the following operation of the regulations was postponed to the under-mentioned dates:—

- (1) Bacon, ham, egg yolk and articles of food containing preservative necessarily introduced by the use in their preparation of preserved margarine 1st July, 1927.
- (2) Butter, cream and articles of food containing preservative necessarily introduced by the use in their preparation of preserved bacon, preserved ham, preserved egg yolk or preserved cream ... 1st January, 1928.
- (3) Articles of food containing preservative necessarily introduced by the use in their preparation of preserved butter 1st July, 1928.

In the year 1928 only five articles of food were found on analysis to contain preservative contrary to the provisions of the regulations, namely, four sausages containing sulphur dioxide (reference to these is made on page 49) and one sample of butter containing boric acid (see page 48).

Sale of Food and Drugs Acts.

The following observations refer to samples purchased and analysed during the year:—

Apples.

Six samples of imported apples, including Jonathans, Sturmer Pippins and Newtown Pippins were examined for the presence of arsenic. In one sample no arsenic was found; in the other five arsenic was present in the following quantities:—

1/900 grain per lb.	...	...	...	...	Sturmer Pippin.
1/840 .. ..	...	...	...	...	Newtown Pippin.
1/520 .. ..	...	...	...	...	Jonathan.
1/320 .. ..	...	...	...	...	Newtown Pippin.
1/210 .. ..	...	...	...	...	Jonathan.

It has been laid down that no action is necessary where the quantity of arsenic is less than 1/100 grain per lb. It will be seen that in all the five samples on which arsenic was found, the quantity was considerably less than 1/100 of a grain.

Butter.

Forty-three samples of butter were examined; one was found to contain a small excess of water. Communications were addressed to the vendor respecting the matter and to a wholesale dealer from whom the retailer obtained the butter. It was ascertained that the butter was imported French butter, and communications were therefore sent to the importers from whom satisfactory assurances were received that they were doing everything possible to keep their goods up to the required standard, and were very particular on the question of moisture in butter with their French shippers, having refused to do business with some who would not give the necessary guarantee. One sample only of butter was found to contain a small quantity of preservative, namely, boric acid. In this case letters of warning were addressed to the dealer by whom butter was consigned to the local vendor. An assurance was received from the wholesalers that it was their practice to buy only butter entirely free from preservative, and that they would take every precaution possible to ensure that no fault could be found with any delivery of butter in future. Legal proceedings were not considered necessary in either of the above cases.

Calomel Ointment.

Five samples of calomel ointment were examined, one being reported as 51 per cent. deficient in mercurous chloride. Proceedings were instituted against the vendor, who was convicted and fined £5.

In the "Pharmaceutical Journal" for January 12th, 1929, attention was drawn by the Medical Officer of Health to the examination at intervals during the past few years of groups of samples of calomel ointment, with the almost invariable result that one or more samples in each of such groups had been found deficient in mercurous chloride: it is hoped that the attention of pharmacists having been directed to the matter in this way, the compounding of this ointment will in future be carried out in such manner as to ensure strict compliance with the British Pharmacopœia.

Glycerine of Borax.

Two samples of glycerine of borax were purchased and analysed, one being reported as 61.5 per cent. deficient in borax. Proceedings were instituted against the vendor of this sample, who was convicted and fined £5.

Macaroni

Three samples of macaroni were submitted to the Borough Analyst for examination, in consequence of a complaint that consumers of soups made with the macaroni had suffered from illness (diarrhœa), the macaroni being the suspected cause. The Borough Analyst reported that the samples gave no evidence of containing arsenic or any other chemical substance likely to give rise to diarrhœa.

Milk.

One hundred and fourteen samples of milk were purchased and analysed, three being reported as not genuine, the fat having been extracted to the extent of 24.3, 15.0 and 6.6 per cent. respectively. Proceedings were instituted against the vendors in all three cases. All the summonses were dismissed under the Probation of Offenders Act, the defendants being ordered to pay 42s., 63s. and 63s. costs respectively.

Sausages.

Thirty-two samples of sausages were examined, four of which were reported to contain preservative (sulphur dioxide) contrary to the Public Health (Preservatives, etc., in Food) Regulations.

In one case where there was failure to disclose the presence of preservative on the label, the amount present was very small (40 parts per million), and the summons against the vendor was withdrawn on payment by the defendant of one guinea costs.

In two cases letters of warning were addressed to the vendors, legal proceedings being considered unnecessary. These were cases where the samples sold to the Inspectors were parts of packages packed and labelled by the makers, the label on the original packets disclosing the presence of preservative. The local vendor in breaking the package for the retail sale omitted to add a preservative declaration to the part of the package sold to the Inspector.

In the fourth case the sample contained 164 parts per million sulphur dioxide; prosecution was instituted for sale of the sausages without disclosure of the presence of preservative. The vendor was convicted and fined £3, and £1. 1s. costs.

In addition to the foregoing, one informal sample of sausages was reported as not genuine. This was a cooked sausage; further samples subsequently taken from the same vendor were found to be genuine.

Tinned Vegetables.

A very thorough sampling of tinned green vegetables was made, all the brands sold in the Borough being examined. These included 10 brands of asparagus, 7 of beans, 24 of peas, and one of spinach. Of these one sample only was found to have been sold contrary to the provisions of the Public Health (Preservatives, etc., in Food) Regulations, 1925, namely, a sample of beans found to contain copper equal to 1.715 grains per lb. of copper sulphate. Proceedings were instituted under the Regulations, the summons, however, was dismissed under the Probation of Offenders Act, the defendant being ordered to pay 42s. costs.

Possible Contamination of Food by the use of Block Ice.

During the year a complaint was received alleging that ice to be used in a restaurant was drawn across the (dirty) pavement. On investigation it was found that during the summer months ice is delivered daily to the larger restaurants; in the course of delivery the ice is dropped from the van to sacks on the roadway and dragged across the footway to the restaurant stores.

At the restaurant complained of, refrigerators were used for storage, ice being used only after the edibles are taken out of their refrigerators. Ice came into actual contact with the food in the servery, from which the food was distributed and where butter was kept in a bowl of iced water, and in the cocktail bar where broken ice was put into the cocktail from a bowl on the bar. In both cases the ice was washed before use and the ice and receptacles appeared to be perfectly clean. Arrangements were made for ice being delivered to this establishment in future to be conveyed by trolley from the van to the restaurant store.

On inspections at the popular tea shops it was found that ice was used to cool water for drinking purposes, and also came into direct contact with butter.

In all cases the staffs had been instructed to wash all ice before it was used: there is probably, however, a tendency to omit the washing if there is no visible dirt on the ice.

Milk.

The following table shows the fat content of the 114 samples of milk:—

Percentage of Fat.	Number of Samples.			
	Shops.	Restaurants.	Streets.	Total.
Less than 3.0	2	—	1	3
3.0	1	1	1	3
3.1	4	1	—	5
3.2	8	2	—	10
3.3	8	1	2	11
3.4	9	4	1	14
3.5	10	—	2	12
3.6	12	2	—	14
3.7	9	1	1	11
3.8	12	—	1	13
3.9	5	—	1	6
4.0	1	—	—	1
4.1	3	—	—	3
4.2	2	—	—	2
4.4	1	—	—	1
4.5	—	—	1	1
4.8	1	—	—	1
4.9	1	—	—	1
5.0	1	—	—	1
8.7	1	—	—	1
	91	12	11	114
Average	3.65	3.36	3.49	3.60

Ten per cent. of the samples contained 4 per cent. or more fat. Milk with this fat content does not appear to be uncommon.

In 12 cases where the fat content subsequently proved to be four per cent., from observations made at the time of purchasing, the samples showed that in 6 instances the milk was stirred with a hand measure before serving. In one case the milk was served from the hand can of a roundsman and was probably well mixed. In one case the sample was from a newly filled counter pan. In four cases served from counter pans the agent could not say whether or not the milk was stirred or plunged before sale. It is probable that even distribution of milk fat is not secured by casual mixing with hand measures; the use of efficient plungers would secure this end. On the other hand, where there is reason to believe milk is properly plunged, an analysis has shown the presence of over four per cent. of fat.

Of the 12 samples referred to above eleven were purchased at dairies or milk shops, and one from a street vendor.

The following table shows the average composition of milk samples purchased during each month of 1928.

	Number of Samples examined.	Total Solids. Percent. average.	Solids Non-fat. Per cent. average.	Fat. Per cent. average.
January	3	12.48	9.18	3.3
February	4	12.47	8.97	3.5
March	10	12.22	8.92	3.3
April	9	12.34	8.94	3.4
May	10	12.24	8.94	3.3
June	11	12.31	9.01	3.3
July	3	12.57	8.97	3.6
August	10	12.46	9.06	3.4
September	11	12.53	9.03	3.5
October	12	13.05	8.95	4.1
November	15	13.23	9.13	4.1
December	16	12.58	8.98	3.6
Whole year	114	12.54	9.01	3.5
Legal Minimum		11.50	8.50	3.00

Articles Analysed.

FORMAL SAMPLES.

ARTICLE.	Number Purchased	Result of Analysis		Proceedings taken.	Convictions.	Fines and Costs.
		Genuine.	Adulterated.			
Acid Tablets (Sweets) ...	2	2	...	...	...	...
Almonds, ground ...	2	2	...	...	...	...
Ale ...	5	5	...	...	...	...
Ammon. Tincture of Quinine	1	1	...	...	...	...
Asparagus, tinned ...	8	8	...	...	...	...
Apples ...	6	6	...	...	...	...
Bacon ...	6	6	...	...	...	...
Beans, tinned ...	4	3	1	1	—	42/- costs
Bicarbonate of soda ...	4	4	...	...	...	...
Boracic ointment ...	3	3	...	...	...	...
Borax ...	5	5	...	...	...	...
Brandy ...	3	3	...	...	...	...
Brawn ...	7	7	...	...	...	...
Bread ...	5	5	...	...	...	...
Bread and butter ...	7	7	...	...	...	...
Butter ...	43	41	2	...	...	...
Cake ...	9	9	...	...	...	...
Calomel ointment ...	5	4	1	1	1	£5 fine
Camphorated oil ...	2	2	...	...	...	...
Candied peel ...	4	4	...	...	...	...
Cheese ...	3	3	...	...	...	...
Christmas pudding ...	6	6	...	...	...	...
Chutney ...	2	2	...	...	...	...
Cyder ...	2	2	...	...	...	...
Cinnamon, ground ...	2	2	...	...	...	...
Coffee extract ...	3	3	...	...	...	...
Coffee and chicory extract...	4	4	...	...	...	...
Compound liquorice powder	4	4	...	...	...	...
Corn syrup ...	3	3	...	...	...	...
Cream ...	14	14	...	...	...	...
Cream, potted ...	1	1	...	...	...	...
Crystallised fruit ...	4	4	...	...	...	...
Custard powder ...	2	2	...	...	...	...
Dripping ...	10	10	...	...	...	...
Egg substitute ...	4	4	...	...	...	...
Fish fillet ...	3	3	...	...	...	...
Fish fried ...	1	1	...	...	...	...
Fish paste ...	5	5	...	...	...	...
Flour, self raising ...	3	3	...	...	...	...
Fruit salad ...	1	1	...	...	...	...
Fruit syrup ...	1	1	...	...	...	...
Gall and opium ointment ...	1	1	...	...	...	...
Gin ...	2	2	...	...	...	...
Ginger beer ...	2	2	...	...	...	...
Glycerine ...	3	3	...	...	...	...
Glycerine and borax ...	2	1	1	1	1	£5 fine
Grapes ...	1	1	...	...	...	...
Grape juice ...	2	2	...	...	...	...
Haddock ...	2	2	...	...	...	...
Ice cream ...	6	6	...	...	...	...
Jam ...	4	4	...	...	...	...
Jam Sandwich ...	2	2	...	...	...	...
Kippers ...	3	3	...	...	...	...
Lard ...	2	2	...	...	...	...
Lemonade ...	2	2	...	...	...	...
Lemonade powder ...	3	3	...	...	...	...
Lemon squash ...	3	3	...	...	...	...
Lime juice ...	3	3	...	...	...	...
Liniment of iodine...	3	3	...	...	...	...
Liniment of turpentine	9	9	...	...	...	...
Margarine ...	11	11	...	...	...	...
Marmalade ...	5	5	...	...	...	...
Meat paste ...	2	2	...	...	...	...
Meat pie ...	4	4	...	...	...	...

ARTICLE.	Number Purchased.	Result of Analysis.		Proceedings taken	Convictions.	Fines and Costs.
		Genuine.	Adulterated.			
Meat, minced	4	4	...	...	...	...
Mince-meat	7	7	...	...	...	...
Milk	114	111	3	3	...	Costs, £8 8s.
Milk, condensed	12	12	...	...	...	...
Milk, dried	6	6	...	...	...	...
Mineral water	7	7	...	...	...	...
Olive oil	5	5	...	...	...	...
Orange and quinine wine	3	3	...	...	...	...
Orange squash	1	1	...	...	...	...
Paregoric	2	2	...	...	...	...
Pearl barley... ..	2	2	...	...	...	...
Pears, dried	1	1	...	...	...	...
Peas, tinned	24	24	...	...	...	...
Pepper	4	4	...	...	...	...
Peroxide of hydrogen	2	2	...	...	...	...
Pickles	6	6	...	...	...	...
Prescriptions (panel)	3	3	...	...	...	...
Preserved ginger	2	2	...	...	...	...
Sauces	3	3	...	...	...	...
Sausages	32	28	4	2	1	Fine, £3. Costs, 21s.
Sausage roll... ..	2	2	..	..	..	..
Spinach, tinned	1	1	...	...	...	...
Sponge cake	7	7	...	...	...	...
Suet, shredded	7	7	...	...	...	...
Sultanas	3	3	...	...	...	...
Sugar	1	1	...	...	...	...
Sweet spirits of nitre	3	3	...	...	...	...
Table jelly	2	2	...	...	...	...
Tea	5	5	...	...	...	...
Treacle	2	2	...	...	...	...
Tripe... ..	1	1	...	...	...	...
Vinegar	8	8	...	...	...	...
Whisky	1	1	...	...	...	...
White precipitate ointment	2	2	...	...	...	...
Wine... ..	3	3	...	...	...	...
Zinc ointment	3	3	...	...	...	...
TOTAL	577	565	12	8	3	Fines, £10 Costs, £11 11s.

INFORMAL SAMPLES.

ARTICLE.	Number Taken.	Result of Analysis.	
		Genuine.	Adulterated.
Cream pastry	3	3	...
Jam	1	1	...
Lemonade	3	3	...
Lemon squash... ..	1	1	...
Macaroni	3	3	...
Raisin Wine	1	1	...
Sausages	6	5	1
	18	17	1

Food and Drugs (Adulteration) Act, 1928.

This Act which received the Royal assent on the 3rd August, 1928, and came into operation on the 1st January 1929, codifies the law relating to the sale of food and drugs.

Since the passing of the principal Act in 1875 (Sale of Food and Drugs Act, 1875) numerous amending and supplementary measures have been passed and the bringing together of these into one Act will be of great advantage to local authorities charged with the administration of the law and also to the producers and sellers of food and drugs.

The Act consolidates the law relating to the adulteration of food and drugs and deals with the following matters:—

- Restrictions of mixing food and drugs with other ingredients.
- Sale of articles not of the nature, quality and substance demanded.
- Sale of margarine, margarine cheese and milk blended butter.
- Regulations as to constituents of milk, butter, cream, cheese, etc.
- Limitation of moisture in butter.
- Restrictions of importation of agricultural produce.
- The appointment of analysts.
- Powers of sampling and procedure connected with taking samples.
- Inspection of butter and other similar factories, legal proceedings, etc.

The local authorities for the purposes of the Act are in the County of London, the Metropolitan Borough Councils.

The following Acts were repealed by the new measure:—

- The Sale of Food and Drugs Act, 1875 (except sections dealing with the examination of tea by the Customs and the title section).
- The Sale of Food and Drugs Act, Amendment Act, 1879.
- The Margarine Act, 1887.
- The Sale of Food and Drugs Act, 1899.
- The Butter and Margarine Act, 1907.
- The Sale of Food and Drugs Act, 1927.

Parts of the following Acts were also repealed:—

- Milk and Dairies Consolidation Act, 1915. (Section and schedule relating to the taking of samples and the warranty defence.)
- The Licensing Act, 1921. (Section relating to the strength of spirits.)

The Merchandise Marks Act, 1926.

This Act provides that every local authority authorised to appoint an Analyst for the purposes of the Sale of Food and Drugs Acts, may, so far as relates to any goods being food stuffs to which an Order in Council under the Act applies, execute any of the provisions of the Act other than those relating to the importation of goods.

During the year an Order in Council was issued under the Act known as the Merchandise Marks (Imported Goods) No. 3 Order, 1928, providing for the

marking with an indication of origin of imported honey (including blends or mixtures) and imported fresh apples.

The Act of 1926 gives power to an officer of the local authority authorised in that behalf by the authority to enter premises and take samples of goods which appear to be imported food stuffs to which an order applies.

The male Sanitary Inspectors were appointed officers under the Act.

The following is a brief summary of the requirements of the Order:--

Apples.

The part of the Order dealing with apples came into force on the 14th November, 1928. The marking is to be one of the following:—

- (i) " Foreign " if the apples were produced in a foreign country, or
- (ii) " Empire " if the apples were produced in a part of His Majesty's Dominions outside the United Kingdom, or
- (iii) A definite indication of the country in which the goods were produced.

Imported fresh apples sold in small quantities (under 14 lbs.) need not have on the bag or package any indication of place of origin, but when exposed for sale (wholesale or retail) they must have a label indicating the place of origin.

There are 55 shops in the Borough where apples are sold and 38 street traders licensed for the sale of fruit.

As soon as the Order relating to apples came into force a communication was sent to all such traders (shopkeepers and stall-holders) drawing attention to the requirements of the Order.

Up to the end of 1928, the male Sanitary Inspectors made 180 inspections of fruit shops and stalls to see that the requirements of the Order were being properly observed, and it was then reported that generally throughout the Borough all imported apples exposed for sale were marked as required. One breach of the Order was reported in the case of a licensed street trader to whom a letter of warning was sent; the breach was at once abated.

Honey.

The Order came into force on the 14th January, 1929, and a communication to the vendors of honey directing attention to the requirements of the Order was issued early in that month.

Honey entirely of British origin need not be marked. Imported honey and blends or mixtures of honeys of which imported honey forms part are to be marked with one of the following:—

- (i) " Empire " in the case of honey derived entirely from countries within the Empire,
- (ii) " Foreign " in the case of honey derived entirely from foreign countries.
- (iii) A definite indication of all the countries of origin of the honeys forming a blend or mixture, or
- (iv) " Blended imported " to be applicable to any blend or mixture of honey even though it contains honey produced in the United Kingdom.

Towards the end of the year a further Order in Council was made under the same Act known as the Merchandise Marks (Imported Goods) No. 5 Order, 1928. This Order provided for the marking of imported goods of the following classes or descriptions, with an indication of origin, namely:—

- (i) currants, sultanas and raisins,
- (ii) eggs in shell,
- (iii) dried eggs, and
- (iv) oat products.

The following is a brief summary of the requirements in respect of each of these classes of articles:—

Currants, Sultanas and Raisins.

On and after the 21st June, 1929, the outer container of imported currants, sultanas and raisins exposed for sale wholesale or sold wholesale or retail in quantities exceeding 14 lbs. must be marked on the container or on a label attached thereto with an indication of origin.

If exposed for sale by retail, *unpacked* currants, sultanas and raisins must be marked by means of a show ticket visible to intending purchasers, bearing the indication of origin.

If exposed for sale in packages made up on the retailer's premises, currants, sultanas and raisins are not required to bear an indication of origin.

Other prepacked packages exposed for sale, such as cartons packed before coming into retailer's possession, are to be marked by means of printing on, or printed label affixed to, each package bearing the indication of origin.

Currants, sultanas and raisins are not required to bear an indication of origin *on sale* when sold in quantities not exceeding 14 lbs.

Eggs in Shell.

Preserved Eggs. On and after 1st March, 1929, it will not be lawful to sell or expose for sale any egg which has been subjected to any process of preservation, other than cold or chemical storage, unless the egg is marked conspicuously and legibly on the shell with the word "PRESERVED."

Imported Eggs. On and after 21st April, 1929, it will not be lawful to expose for sale or sell by wholesale or retail, any imported egg in shell unless it is conspicuously and durably marked in ink on the shell with an indication of origin.

**British Eggs.* It will not be lawful to sell any British egg which has been kept in *cold storage* unless it is conspicuously and legibly marked on the shell with the word "CHILLED" or "COLD STORAGE" or to sell any British egg which has been kept in *chemical storage* unless it is conspicuously and legibly marked on the shell with the word "STERILISED."

Dried Eggs. On and after 21st March, the container of *imported* dried eggs, exposed for sale or sold, is to be marked with an indication of origin on the container itself, or on a label attached thereto. The requirement does not apply to packages made up on the premises of a retailer.

*This requirement becomes operative in consequence of an Order in Council under Section IV (2) of the Agricultural Produce (Grading and Marking) Act, see page 58.

****Registration of Storage Premises.** On and after 21st April, 1929, it will be unlawful to use premises by way of trade or for the purpose of gain for the cold storage or chemical storage of eggs, unless the premises are registered for the purpose. In London application for registration should be made to the Council of the Borough in which the premises are situated.

Oat Products (e.g., Oatmeal, Rolled Oats, Oat Flour and Groats).

On and after 21st June, 1929, the outer container of imported oat products exposed for sale wholesale or sold wholesale or retail in quantities exceeding 14 lbs. must be marked on the container or on a label securely attached thereto with an indication of origin in letters not less than a half-inch in height.

Exposure for Retail Sale.

(i) When *not* prepacked, the marking is to be by a show ticket clearly visible to purchasers.

(ii) When prepacked in packages made up before importation, the marking is to be on the package or on a label securely attached thereto.

(iii) When prepacked after importation, marking to be by either of the methods (i) or (ii).

Imported oat products are not required to bear an indication of origin *on sale* if quantities of 14 lbs. or less.

Blends or Mixtures.

Requirements for marking extends to blends or mixtures containing imported oats, the indication of origin in such cases to be:—

(a) "Empire" for oat products derived entirely within the Empire.

"Foreign" for oat products derived from foreign countries.

(b) All countries of origin forming the blend.

(c) The words "Blended Imported."

Agricultural Produce (Grading and Marking) Act, 1928.

This Act provides for the grading and marking of agricultural produce and gives power to the Minister of Agriculture and Fisheries by regulations to prescribe "designations" and "marks" to indicate the quality of such produce. The Act contains special provisions respecting the marking of preserved eggs.

The existing requirements for the marking of eggs under the Sale of Food Order, 1921, provide that where imported eggs are sold as "fresh" or "new laid" the eggs are also to be marked "imported" or the country of origin is to be disclosed.

The new legislation prohibits the sale or exposure for sale of any egg which has been subjected to any process of preservation unless the egg is marked in the manner prescribed, but eggs preserved by cold storage or chemical storage are

**Registration is required by the Agricultural Produce (Grading and Marking) Act, see page 58.

exempt. Eggs preserved by immersion in lime water, water-glass or oil, would, however, come within the operation of the section.

The Act also provides for premises used for cold or chemical storage of eggs to be registered with the Local Authority.

The Act is to be enforced by the Local Authorities.

In exercise of the powers conferred on him, by the Act, the Minister of Agriculture and Fisheries has issued regulations for the grading and marking of eggs (The Agricultural Produce (Grading and Marking) (Eggs) Regulations, 1928).

The regulations provide for hens' eggs to be designated:—

- “Special,” minimum weight 2½ ozs.
- “Standard,” minimum weight 2 ozs.
- “Pullet Standard,” minimum weight 1¾ ozs.

and for ducks' eggs to be designated:—

- “Special Duck,” minimum weight 2½ ozs.
- “Standard Duck,” minimum weight 2½ ozs.
- “Ducklet Standard,” minimum weight 2½ ozs.

The regulations also provide that after the 28th day of February, 1929, preserved eggs shall be conspicuously and legibly marked on the shell with the word “preserved.” By an Order in Council under Section II. of the Merchandise Marks Act, 1926, any British egg which has been kept in cold or chemical storage is to be marked in the former case with the word “chilled” or with the words “cold stored,” and in the latter case with the word “sterilised.”

The regulations also prescribe the method of registration of premises used for the purpose of cold storage or chemical storage of eggs. On the new legislation coming into operation an epitome of the requirements was prepared and distributed to all the purveyors of eggs in the Borough.

Sale of Chlorodyne.

From time to time attention is directed to the danger arising from the uncontrolled sale of chlorodyne, several preparations of which are on the market and easily obtainable.

In a previous Annual Report (1923) reference was made to samples of the preparation purchased from retail chemists in the Borough, the first sample, 1 oz., was found to contain morphine equal to about 0.67 grains of anhydrous morphine, and the second, a 2 oz. sample, contained morphine equivalent to 1.32 grains of anhydrous morphine. The Inspectors purchasing these samples were not asked to sign the poison book, nor was such book mentioned by either vendor. A poisonous dose of chlorodyne can evidently be easily obtained, and several deaths have in fact been reported from various coroner's courts as due to this cause.

Attention has recently again been directed to the matter by a case in a coroner's court in which the driver of a motor omnibus caused the death of two pedestrians owing to a temporary feeling of dizziness while he was at the wheel. The driver confessed to having taken 28 drops of chlorodyne on an empty stomach to cure a cold, and he lost control of his vehicle while under the influence of the drug. As morphia in the form of chlorodyne can be bought easily and taken in sufficiently large doses by the general public as to endanger the lives of others, it would seem time that drastic regulations were made for its use. At the present time the regulations under the Dangerous Drugs Acts do not apply to the sale of this drug.

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.

	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	Yearly average 18-1927
Pneumonia (all forms)	59,666	38,949	37,149	34,708	40,930	33,413	38,970	36,990	32,339	37,242	39,035
Pulmonary Tuberculosis	45,338	35,984	32,791	33,505	33,919	32,097	32,690	32,382	30,108	31,060	33,988
Measles	9,787	3,534	7,190	2,241	5,694	5,316	4,834	5,337	3,483	3,622	5,103
Whooping Cough	9,898	2,605	4,401	4,576	6,370	4,162	3,983	6,058	4,118	3,681	4,985
Diphtheria	4,803	4,888	5,648	4,772	4,075	2,722	2,501	2,774	2,994	2,732	3,790
Scarlet Fever	1,020	1,221	1,430	1,305	1,382	993	888	988	677	579	1,048
Enteric Fever	950	577	537	613	465	450	496	388	367	367	521

The total number of notifications relating to Holborn residents received during the year was 495 in comparison with 400 in the year 1927.

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

In addition to the above there were received 195 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 195 notifications so received were as follows:—

Diphtheria	...	...	...	...	...	...	...	...	...	65
Scarlet Fever	...	...	...	...	...	...	...	...	...	21
Puerperal Fever	...	...	...	...	...	...	...	...	...	1
Pneumonia	...	...	...	...	...	...	...	...	...	2
Erysipelas	...	...	...	...	...	...	...	...	...	1
Cerebro-spinal Meningitis	...	...	...	...	...	...	...	...	...	2
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	4
Tuberculosis	...	...	...	...	...	...	...	...	...	89
Enteric Fever	...	...	...	...	...	...	...	...	...	10
										195

Smallpox.

Early in the year, a poster was put up in the Borough calling attention to the advisability of vaccination and revaccination if the precaution had not been taken within the last five years.

One case of smallpox was notified (10/2/29, a male 19 years of age, inmate of the Metropolitan Asylums Board Hostel, Little Gray's Inn Lane). The Medical Officer of the Hostel asked the Medical Officer of Health to see the patient and the smallpox specialist of the London County Council was also consulted. Owing to the scantiness and very unusual character of the rash diagnosis was one of extreme difficulty; the patient was removed to the South Wharf of the Metropolitan Asylums Board for observation where, after development of the rash, the diagnosis of smallpox was confirmed. Arrangements were made for the vaccination or revaccination of the staff and inmates of the hostel, 126 vaccinations being carried out. To keep the contacts under observation the hostel was visited daily until the end of the incubation period, and information of the places of destination of inmates leaving the hostel and of the work places of regular residents was sent to the Medical Officers of Health of the districts concerned. It was evident in this case that the disease had been contracted while the man was an in-patient at the Holborn and Finsbury Hospital. Information was sent to the Medical Officers of Health of Metropolitan Boroughs and surrounding authorities respecting a patient discharged from the Holborn and Finsbury Hospital stated to have had "spots on his face." Eventually this man was discovered in the Hackney Casual Ward, found to be suffering from smallpox, and removed to the M.A.B. hospital. Infection in four cases, including the one notified in Holborn, was traceable to this man.

In the early part of June, information was received that a male, aged 65, removed from a metropolitan casual ward suffering from smallpox, had been an inmate of a common lodging house in the Borough. On enquiry it was found that the man, a street newspaper seller, had resided at the common lodging house up

to three days before his removal to the smallpox hospital; 31 out of 47 remaining residents of the common lodging house were vaccinated. Information of the destination of inmates leaving the common lodging house up to the end of the incubation period was forwarded to the Medical Officers of Health of the districts concerned. The common lodging house was visited daily in order to keep the residents under observation. No secondary case occurred.

During the greater part of the year, smallpox was more or less prevalent in London and the surrounding districts. In addition to cases notified in the County of London a considerable number notified in areas outside the County were of persons who worked in the Metropolitan area. Information of such cases giving particulars of contacts were distributed by the Medical Officers of Health of the London County Council to Metropolitan Medical Officers of Health.

Three hundred and fifty-seven information circulars respecting such cases were received under this arrangement; in 22 cases contacts living or working in Holborn were disclosed in the information supplied. These were visited at their homes or places of employment, were kept under observation and vaccination or revaccination was advised where such had not been done within the previous five years.

Information of 14 passengers or staff arriving on vessels on which smallpox had occurred during the voyage, or had come from infected ports, was received and where practicable visits were made for keeping such contacts under observation. In ten cases the addresses given in this Borough were at hotels or boarding houses, two were business offices and two dwelling houses. In five cases the names could not be traced at the addresses given. In three cases the travellers had left the addresses given before the visits could be paid, no information being available as to their destinations. Two cases were seen and found to be in good health and in four cases the travellers who were advised to be revaccinated declined to take this course as they were Christian Scientists.

Vaccination.

The following table kindly supplied by the Vaccination Officer of the Holborn Union on the 15th February, 1929, gives information respecting vaccination in the Borough of Holborn:—

	Total Number of Births	Vaccinated	Died before Vaccination	Cons. Objectors	Insusceptible	Postponed by Medical Certificate	Removed. No information as to Vaccination	Temporarily unaccounted for
HOLBORN SUB-DISTRICT:								
12 months ended 30th June, 1928	192	81	15	33	0	21	23	19
ST. GILES AND BLOOMSBURY SUB-DISTRICT:								
12 months ended 30th June, 1928	117	53	12	16	0	13	15	10
	309	134 43%	27	49	0	34	38	29

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.

Diphtheria.

Notifications relating to 57 cases of diphtheria occurring in residents in the Borough were received. All were removed to hospital. Eleven were found not to be suffering from diphtheria, and two cases notified from hospital staffs were notified as "carriers" only.

Of the 57 cases of diphtheria:—

1 was under 1 year.

12 were 1 to 5 years.

19 ,, 5 ,, 15 ,,

15 ,, 15 ,, 25 ,,

9 ,, 25 ,, 45 ,,

1 was 45 ,, 65 ,,

Two deaths occurred.

Twelve "secondary" cases were notified. A "secondary" case is one occurring in the same household as the primary case.

Eight of the 12 "secondary" cases were nurses or maids at hospitals in the Borough; from the same hospitals 25 in-patients were notified as suffering from diphtheria, none of these was resident in the Borough. Seven of these were notified as carriers only.

Two "return" cases in the same family were notified 9 days after the return home of the primary case from hospital.

A second attack of diphtheria in a child, aged 12, the previous one being six years before, occurred during the year.

In London 12,241 cases were notified giving rise to 388 deaths.

We endeavour to co-operate with the Medical Superintendents of the Metropolitan Asylums Board Fever Hospitals; 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 notifications were received from two hospitals in the Borough of 37 cases of diphtheria. Of the 37 cases, six were reported as "nasal" cases and seven as harbouring diphtheria bacilli. Twenty-five of the cases were in-patients. The remaining 12 were nurses (8) or maids (4) on the staffs of the hospitals; of these 10 were clinical diphtheria, and two harboured diphtheria bacilli.

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 and subsequently the children themselves are often attacked.

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.

Diphtheria Contacts.

BACTERIOLOGICAL EXAMINATION OF NOSE AND THROAT SWABS.

Total Contacts swabbed	...	...	...	...	...	33
Negative	...	...	...	...	...	26
Positive	...	...	...	...	...	7 (21 per cent.)

	Contacts swabbed.	Positive Results.			Contacts positive.
		Nose and Throat.	Nose only.	Throat only.	
First Examination	33	1	3	3	7
Second	6	—	2	—	2
Third	1	—	—	—	—

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. One virulence test was made in 1928; the bacillus was found to be avirulent.

Diphtheria antitoxin was available free of charge on application by medical practitioners. In seven cases doses were supplied of 8,000 units each and in two others 10,000 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, 1922-1928.

AGES OF PERSONS SCHICK-TESTED WITH RESULT OF TEST.

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			15 and above years			
	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read										
Total for 7 years, 1922-28.	78			224			155			127			99			73			58			51			42			55			45			29			24			29			5			84			= 1178
RESULT OF SCHICK TEST.	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read	Pos.	Neg.	Not read										
Total for 7 years.	72	6		213	8	3	147	8		109	17	1	71	26	2	47	24	2	39	19	37	14	26	16	23	32	22	23	15	14	11	13	9	20	3	2	34	46	4	878 Pos. 288 Neg. 12 Not read.									

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TABLE II.
 AGES OF PERSONS IMMUNISED.

Age.	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	15 and above years	
Total for 7 years	79	214	131	95	60	37	46	36	20	22	17	13	8	5	2	16	= 801

TABLE III.
HOLBORN MUNICIPAL INFANT WELFARE CENTRE.
 SCHICK TEST AND DIPHTHERIA IMMUNISATION.
Seven years, 1922-28.

A TOTAL TESTED.		B RESULT OF TEST.						C IMMUNISATION OF POSITIVES.																																	
		Negative.		Positive.		Not read.		D Found NEGATIVE to Re Schick Test after						E Found POSITIVE to Re Schick Test after				F Found POSITIVE to Re Schick Test after 3ccm T.A.T. or T.A.F.				G TOTAL Re Schick Tested		H																	
								1 ccm T.A.T.		2 ccm T.A.T.		3 ccm T.A.T. or T.A.F.		4 ccm T.A.T.		5 ccm T.A.T.		6 ccm T.A.T.		8 ccm T.A.T.				Further doses of T.A.F.		3 ccm T.A.T.		Given further inoculation but not yet Retested.		No further inoculation given.		Given 3 ccm T.A.T. or T.A.F. Not Retested.	Given 1 ccm not yet Re-tested.	Failed to complete 3 inoculatns.		Inoculatns. not begun.		Inoculatns. still in progress.			
Chil- dren	Ad- ults	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A			C	A	C	A				
1182	83	242	46	931	34	9	3	17	0	16	1	496	8	21	0	8	1	9	0	1	0	3	0	2	0	24	1	9	2	603	13	166	0	16	0	75	5	73	10	1	0
1,265	+++	288		965	+++			17		17		504		21		9		9		1		3		2		25		11		619	++	166+		16		80		83	§		1

* These columns refer to 81 cases—70 were Schick positive on retesting after 3 ccm T.A.T. 11 were Schick positive on retesting after T.A.F.
 † 51 of these removed from the Borough.
 § 15 of these have removed from the Borough.
 †† These retests include those made up to 3rd April, 1929.
 ††† 21 of these positives in 1927 were given T.A.F. instead of T.A.T. (see page 69).
 †††† Includes 87 children who were considered positive without being tested.
 NOTE.—Columns C D E F give details of the total 619 given in Column G.
 Columns G H give details of the total 965 positives given in Column B.

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 619 cases re-tested, of whom 81 were found to be Schick positive after immunisation with either 3 c.cms. of T.A.T. or one inoculation with T.A.F.

TABLE V.

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 Toxin Antitoxin.)
	619 (284 335)	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	17 (5 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	143 (65 78)	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

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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 Toxin Antitoxin.)
3 1/2/12	27 (13 14)	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	73 (35 38)	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
4 1/2/12	4 (0 4)	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	42 (17 25)	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	39 (18 21)	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	17 (8 9)	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 Toxin Antitoxin.)
9/12	13 (9 4)	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	13 (5 8)	1	4 F.	† Negative after further inoculation ; 8 c.cm. in all
11/12	7 (3 4)	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	84 (41 43)	15	(a) 1, F (b) 2, M. (c) 2, 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 Given further inoculation ; not re-tested 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	61 (27 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
	619 (284 335)	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-Schicking have been further inoculated, and 45 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 619 persons retested, 284 were males and 335 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.T. 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 (two of these were negative to the retest). The use of T.A.F. has been discontinued for the time being.

Retesting.

Retesting is unpopular with parents, and the need for it does not help to increase their confidence in immunisation. Of 619 that have been retested 70 were found to be still Schick positive after three inoculations and eleven after T.A.F. The facts relating to these are given in Table V.

Diphtheria in Children Treated with Immunising Injections.

Up to the end of the year 1928 eight cases of diphtheria occurred in children who had been found positive on Schick test and treated with three immunising injections.

Diphtheria was also notified as having occurred in five 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. Two 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 fifth was notified as suffering from scarlet fever and diphtheria, but was later diagnosed as suffering from scarlet fever only.

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

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

The above table shows that only two 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 following table gives particulars of the eight cases of diphtheria:—

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. In London during five years 1923-27, of the total deaths from diphtheria, 59 per cent. occurred under five years of age.

If the immunisation could be completed at one visit the energy spent in looking up those failing to attend could be used in getting new recruits, and the parents would be spared much trouble.

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.

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.

Anti-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 six years 1922-27. 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

The figures for England and Wales and London are taken from the Registrar-General's Statistical Reviews for the years 1922-27.

Scarlet Fever.

There were 111 notifications of scarlet fever. All but 3 were removed to hospital.

Eleven cases were returned as *not* suffering from scarlet fever; four were found to be suffering from erythema, two from measles, one from cervical adenitis, one from catarrhal sore throat, and one impetigo of face and scalp.

Seventeen notifications of "secondary" cases were received, one being a nurse at a hospital in the Borough; from two hospitals in the Borough 11 in-patients were notified as so suffering. None was resident in Holborn.

Two of the cases notified were "return" cases 7: the patients causing the return cases were examined and readmitted to hospital.

There was no death from this disease.

15,297 cases of scarlet fever were notified in London with 81 deaths.

Typhoid Fever and Paratyphoid Fever.

Ten cases were notified during the year. In London 580 cases were notified, giving rise to 51 deaths.

During July and August, 1928, there was an outbreak of paratyphoid fever in London and some adjoining districts. Two hundred and sixty-two cases were notified in London during the nine weeks July and August. Of these 76 were typhoid fever, 183 paratyphoid B. and 3 continued fever. During the period of this outbreak three cases of paratyphoid fever were notified in the Borough. From enquiries made and the histories of these three cases, there appeared to be no ground to suppose that any of the three arose from the source of infection common to the London outbreak.

To warn the public as to the possibility that the occurrence of diarrhoea might signify the onset of paratyphoid fever a special poster was exhibited in the Borough.

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

Case.	Age.	Sex.	Occupation.	Date of Notification.	Notified as.	Nature of Laboratory Examination.	Final Diagnosis.	Contracted in Borough.	Probable Source of Disease.
L.H.W.	51	M.	Medical practitioner	16th Jan., 1928	Paratyphoid ...	Agglutination tests ...	Typhoid ...	Yes	—
E.P. ...	22	F.	Hospital nurse	20th Jan., 1928	Typhoid ...	Nil	Typhoid...	Yes	Nursed cases of typhoid at hospital
J.P.R.	33	M.	Civil servant ...	25th March ...	Enteric ...	Agglutination tests ...	Typhoid...	No	Sporadic cases of paratyphoid B in Belfast
S.E. ...	40	F.	Hospital nurse	9th April ...	Typhoid ...	Agglutination tests ...	Typhoid...	Yes	Nursing typhoid patient
Z.S. ...	20	M.	Not ascertained	2nd June ...	Typhoid ...	Agglutination and bacteriological examinations negative	? Typhoid	Yes	—
S.M. ...	35	F.	Hospital nurse	13th June ...	Typhoid ...	Agglutination tests ...	Typhoid...	Yes	Had nursed case of typhoid at hospital
F.E.C.	71	M.	American visitor	3rd August ...	Paratyphoid B	Organisms isolated ..	Paratyphoid B	No	Had been travelling in Home Counties during outbreak of paratyphoid B
A.C. ...	3	F.	Attended school	9th August ...	Paratyphoid B	—	Paratyphoid B	No	—
U.W. ...	26	F.	Not ascertained	11th August ...	Paratyphoid B	Agglutination tests ...	Paratyphoid B	No	Contracted in France
C.J. ...	54	F.	Nil	22nd Sept. ...	Paratyphoid ...	Agglutination tests ..	Paratyphoid B	No	Probably contracted in Paris (mussels)

There was reason to believe that the outbreak of paratyphoid fever in London referred to above was associated with the consumption of cream, and in view of the many statements which appeared in the Press that the outbreak would not have occurred if the Public Health (Preservatives, etc., in Food) Regulations prohibiting boric acid in cream had not been in operation, it is interesting to note the results of experiments made by Dr. Robert Donaldson of the Pathological Department of Guy's Hospital. Two different samples of cream were dealt with, a week or 10 days elapsing between the submission of the samples. The samples were collected in sterilised bottles directly the cream came from the pasteurising plant. Boric acid was added to the cream in varying amounts so that the cream contained 0.25 per cent. boric acid (the amount previously in use as a preservative), 0.33 per cent. and so on up to cream containing 4 per cent. boric acid, far more than would ever have been permitted by any Local Authority. These various samples containing different amounts of boric acid were inoculated with *Bacillus paratyphosus B*—the organism responsible for the summer outbreak.

In one set of creams the boric acid was added before the organisms, and in another set organisms were added first and the boric acid later. An uncountable number of colonies of *B. paratyphosus B* grew on every plate, or in other words boric acid even in a concentration of 4 per cent. entirely failed to inhibit the growth of the infecting organisms. In fact the colonies of paratyphoid B obtained from 1/1000 of a c.c. of the 4 per cent. boric acid cream were for all practical purposes uncountable.

The fact that the boric acid was added before infecting the cream seemed to make no difference. Moreover, similar results were met whether the infected cream containing boric acid was incubated at 37°C. or was left at room temperature for 24 hours. The organism *B. paratyphoid B* used as an index of the inhibitory effect of boric acid was not present in the cream when it was received in the laboratory. When *B. paratyphosus B* gained access to the cream (by deliberate implantation) even 4 per cent. of boric acid failed to prevent its growth.

These experiments furnish a complete answer to those who maintain that if boric acid, as previously allowed in cream, had not been prohibited the summer outbreak of paratyphoid fever would not have occurred.

Typhus Fever.

No case of typhus fever was notified during the year in the Borough.
Two cases were notified in London.

Cerebro-Spinal Fever.

One case of cerebro-spinal fever was notified, namely, a male infant, aged 8 months.

This child was one of twins. In consequence of persistent crying after food the child was taken as an out-patient to a hospital for children where cerebro-spinal meningitis was diagnosed. The cerebro-spinal fluid was found to be under increased tension and to contain many pus cells and a few Gram-negative intracellular cocci, cultures showing organism to be meningo-coccus.

The total protein present was 0.08 %, an excess of globulin; no reduction of Fehling's solution occurred; 67 % of the cells present were polymorphs, 33 % lymphocytes.

The child died under anaesthesia (general) for lumbar puncture.

Seventy cases were notified in London.

Bacillary Dysentery.

Two cases of bacillary dysentery, both fatal, were notified.

(1) A male, aged 21 years, became ill about the middle of July and was finally admitted to the hospital on the 28th July and notified as suffering from bacillary dysentery. He died

on August 16th. The patient's blood agglutinated Sonne's dysentery bacillus and Flexner's dysentery bacillus slightly; the Sonne bacilli were grown from the blood. No information as to the source of infection could be obtained; the patient had not been out of England or absent from home on any holiday, and no other member of the family, all of whom partook of the same food, had symptoms of any illness.

(2) A female, aged 8 months, treated in hospital. The illness commenced during the second week in November; death took place on the 24th November, 1928. The father had served overseas in the War (France only) but had not at any time suffered from dysentery.

Malaria.

One case of malaria was notified, a male, age 28 years; the disease was contracted in Nigeria.

Encephalitis Lethargica.

No case of encephalitis lethargica was notified in the Borough during the year.

One hundred cases were notified in London.

The following table gives information up to the end of 1928 respecting the 11 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.
6/2/20	P.P.	8 years	Died 28/2/20
7/2/20	W.W.	47 years	Died 7/2/20
13/1/20	B.R.	32 years	Died 13/1/20
26/4/22	W.H.	14 years	Died 19/4/22
4/4/24	A.K.	28 years	Died 28/3/24
16/5/24	G.C.	36 years	Returned to Italy
20/6/24	R.V.M.	40 years	Gone to Australia. Complete recovery reported
9/7/24	F.H.	7 years	Complete recovery
26/9/24	B.V.	53 years	Died 21/9/24
4/5/25	C.S.	28 years	Right leg partially paralysed, but walking improving; right arm tremulous
29/5/26	H.P.	33 years	Died 30/5/26

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 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. Two such cases reside in the Borough, both of whom are visited.

In the first case (P.L.) the illness commenced in 1920 and was reported to have started with "sleepy sickness," and at the end of 1928 the following report was made by the visitor:—"Slow in speaking but quite intelligent. Left arm paralysed and muscles left

hand wasted, circulation poor, chilblains. Stated to be better tempered; insists on going to 'pictures' frequently. Attends National Hospital, Queen Square, for massage of arm.

The second case (W.P.) also commenced in 1920. The visitor reports that:—"This patient can do nothing for himself. Right arm paralysed; does not walk; mouth open, but tongue not out. The patient attends hospital monthly."

Information respecting two other non-notified cases was also furnished by the Medical Officer of Health of the London County Council, but these patients are still of school age, and according to the arrangements in force are supervised by the L.C.C.

Acute Poliomyelitis.

No case of acute poliomyelitis or polioencephalitis was notified.

Fifty-four cases were notified in London.

From the coming into operation of the Poliomyelitis Order, 1912, to the end of 1928, 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 and still O.P. at Hospital. Health satisfactory.
26/1/16	A.C.	4 "	"	Died 26/1/16.
27/1/16	T.B.	4 "	"	Now 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.
17/9/20	E.H.	1½ "	"	Recovered—no crippling, "thinness" of leg only.
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 Orthopedic 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.

Fifty-nine cases of pneumonia were notified during the year. Ten of these were influenzal pneumonia. Fifty deaths were recorded from all forms of pneumonia.

The 49 cases of primary pneumonia were notified at the following ages:—Under 1 year, 2; from 1 to 5 years, 7; from 5 to 15 years, 4; from 15 to 25 years, 4; from 25 to 45 years, 12; from 45 to 65 years, 15; and 65 years and upwards, 5. Twenty were treated at home; 12 were removed to voluntary hospitals; and 15 to Poor Law Infirmaries. Nine of the patients were nursed by the Metropolitan Nursing Association under the arrangements made by the Council, in all 266 visits being paid to these patients.

Of the 49 cases of primary pneumonia, 22 resided in tenement lodging houses, 11 in separate private dwelling houses or model dwellings, 3 in hotels, and 2 in common lodging houses, 7 in boarding houses, 2 were office caretakers, 1 was homeless and 1 was an office address only.

The cleanliness of the houses was reported to be satisfactory in 28 cases, but only fairly so in 10; and in one case as unsatisfactory. The economic conditions of the families concerned were found to be good in 15 cases, fair in 11, poor in 13; 8 cases were nursed in a separate room.

In a number of cases the disease was not ascribed to any special cause, but the following was given in 29 instances:—

Following bronchitis	6
Following cold	14
Following pleurisy	1
Following catarrh	1
Following measles	3
Following exposure to bad weather	2
Chronic Bright's Disease	1
After an accident—fractured ribs	1

Influenza.

There were only 3 deaths from influenza in comparison with 20 in 1927, 8 in 1926, 9 in 1925, and 11 in 1924.

A spirited criticism of the preventive measures advised against influenza appeared recently in a well-known monthly. There is all the more need for pursuing research to discover a suitable vaccine which can be used to prevent influenza; it is satisfactory to learn that investigations in this direction are still proceeding; research workers should be helped forward in every way possible in the endeavour to combat this widespread and frequently recurring disease.

Anthrax.

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

Chicken-pox.

During the year information of 81 cases was received from school teachers and others. Cases of chicken-pox are visited when small-pox is prevalent. In the past year it was necessary to visit 74 such cases.

Mumps.

Information was received from school teachers and others of only 2 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	
268	Bacilli not found	84	Bacilli not found	4	Negative	4
	Diphtheria bacilli found		Bacilli found		Positive	0
	Vincent's organisms found					
	235		68			
	33		16			
	12					

Disinfections.

During the year 446 rooms and 4,346 articles of bedding, clothing, etc., were disinfected after various infectious diseases, inclusive of tuberculosis.

Thirty rooms and 306 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. Ninety-two books and 85 toys were disinfected; also an ambulance belonging to the L.C.C. after use for the conveyance of an infected person.

Six hundred verminous blankets used at a common lodging house were disinfested, the cost being defrayed by the owner.

The disinfections also included a telephone box, nine lockers, and five hospital wards.

Cleansing of Persons Act.

During the year 143 persons (138 men and 5 women) infested with vermin had their bodies and 2,051 articles of clothing disinfected, free of charge, at our cleansing station (Goldsmith Street).

Seventy verminous rooms were disinfected.

In connection with the fumigation of verminous rooms, it is now our practice to repeat the fumigation at the end of a week, by which time it is expected that any eggs will have hatched out; a single fumigation of any

badly infested room cannot be regarded as satisfactory. In 59 cases last year this course was adopted.

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.

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 12 children in 8 homes reported to be verminous. All the homes were visited as soon as practicable after receipt of each report. In seven homes, the rooms occupied by the family and the beds and bedding were found to be clean. In one of these an old verminous mattress had been destroyed before the Health Visitor's call, new bedding being in use at the date of the visit. In one case where the bedding was found to be verminous, arrangements were made for its removal to the Council's disinfecting station for disinfection.

Three children in the same family were reported to be suffering with scabies. Disinfection of the home and bedding was carried out; the children recovered and so far there has been no recurrence of the disease.

Extermination of Vermin.

With a view to encouraging active steps for the extermination of vermin, arrangements were made 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 13 gallons of the solution in small quantities were sold to 35 purchasers.

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 1928 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	—	—	1	2
5	2	—	1	—	—	—	—	—
10	1	1	2	—	—	—	—	—
15	—	5	1	—	2	1	—	—
20	5	3	1	—	2	3	1	—
25	8	4	1	2	3	1	—	—
35	20	6	—	—	6	3	—	—
45	13	3	1	—	9	3	1	—
55	6	—	—	1	8	—	—	1
65	2	—	—	—	—	—	—	—
	57	22	8	4	30	11	3	3

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; the knowledge of the local Public Health Staff of the patients 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, 1928 309

Number of these patients residing in common lodging houses 20

The average number of cases notified annually during the past ten years 101

The number notified in the year 1928 105

Of the 105 cases notified in 1928, the number who attended the Dispensary 39

Total number of new cases examined at the Dispensary for the first time in 1928, including the above 39, and all contacts 187

Total attendances at the Dispensary in 1928 924

Supervision of home conditions; visits paid by—

Tuberculosis Officer 46

Dispensary Nurse 1,189

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 1st January, 1928, to the 29th December, 1928, 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 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.			Under 5.	5 to 10.	10 to 15.				Total Primary Notifications.
Pulmonary Males	2	1	...	5	8	20	13	6	2	57	75	...	...	...	...	23	28
„ Females	1	5	3	4	6	3	...	...	22	30	...	...	...	...	5	17
Non-pulmonary Males	...	1	1	2	1	1	1	...	1	...	...	8	9	...	...	...	...	...	3
„ Females	...	1	...	...	...	...	2	...	...	1	...	4	5	...	...	...	...	...	5

Supplemental Return.

New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the period from the 1st January, 1928, to the 29th December, 1928, otherwise than by notification on Form A or Form B under the Public Health (Tuberculosis) Regulations, 1912.

Age-periods.	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 Cases.
Pulmonary Males	1	...	...	...	...	1	2	2	2	...	8
„ Females	1	...	...	2	1	...	...	...	4
Non-pulmonary Males
„ Females	2	...	...	...	...	...	...	...	...	...	2

Five of the 14 were ascertained from the death returns and nine were transfers from other areas.

Tuberculosis Notifications.

Excluding duplicates the total number of notifications received on Forms A or B during the year 1928 was 91; 14 other cases were brought to my knowledge

(making 105 new cases in the year). These were:—Private cases 27, hospital cases 41, Poor Law cases 23, from death returns 5, transfer from other districts 9.

Correction of Tuberculosis Register during the year 1928.

Number of cases on Register, 31st December, 1927 ...	292
New cases registered, 1st January to 31st December, 1928	105
	397
Removed from the Register during the same period for following reasons:—	
Removed from Borough	37
Recovered	1
Died	48
Not suffering from tuberculosis (Notification withdrawn.)	1
Not traced	1
	88
Number on Register, 31st December, 1928	309

Of the 105 cases entered on the Register in 1928, 91 were pulmonary tuberculosis and 14 non-pulmonary tuberculosis. Sixty-nine of the cases were removed for treatment to hospital, infirmary or sanatorium.

Sleeping Conditions.

In 82 of the 105 new cases of tuberculosis in 1928 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 82 cases above referred to:—

Patient slept in—	
Separate bed room	18
Separate bed in living room	3
Separate bed in room shared with—	
1 adult	3
2 adults	4
2 children	1
2 adults and 1 child	4
1 adult and 1 child	1
2 adults and 2 children	1
1 adult and 3 children	1

Shared bed with—

No others in room.	1 adult (H. or W.)	...	...	22
	1 adult (not H. or W.)	...	...	4
	1 child	...	...	2
	2 children	...	...	1
	2 adults and 1 child	...	...	1

Shared bed with—

1 adult	...	Other persons in bedroom	1 child	...	...	5
1 adult	...		1 adult	...	...	1
1 adult	...		2 adults	...	...	1
1 adult	...		2 children	...	...	3
1 adult	...		2 adults, 1 child	...	...	1
1 adult and 1 child	...		2 children	...	...	1
2 children	...		2 children	...	...	1
2 adults	...		2 children	...	...	2
2 children	...		3 children	...	...	1

82

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	...	...	12
"B."—Fair. Separate bed, but not separate bedroom	...	...	58
"C."—Bad. Dirty environment, dirty ill-kept home, no separate bed, bad management as to food and clothing	...	...	12

82

The following summary gives the position at the end of 1928, of the 105 new cases respecting which information was received during the year:—

Dead	...	...	...	...	...	26
Cases removed to Hospital or Infirmary and still in-patients at the end of year	...	...	...	...	...	26
Out-patients at Hospitals	...	...	...	...	...	2
In-patients in Sanatoria at end of year	...	...	...	...	...	8
Not traced—Incorrect addresses	...	...	...	...	...	3
Removed from Borough	...	...	...	...	...	17
Dispensary Treatment or supervision	...	...	...	...	...	2
Home Treatment—Private or Panel Doctor	...	...	...	...	...	18
Convalescent Home	...	...	...	...	...	1
Away in country	...	...	...	...	...	1
Diagnosed not tuberculous	...	...	...	...	...	1

105

Thirty-nine of the 105 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	23
Out-patients at other Hospitals or Dispensaries	5
Dead before notification or died before attendance at Dispensary	24
Treatment at home by private doctor	2
Not traced	3
Removed from Borough	8
Not tuberculosis—notification withdrawn	1
	<hr/>
	66
	<hr/>

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 eight cases were notified only at death, eleven within one month of death, four within three months and five within six months of death. Twenty-five 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.

The Regulations also require notification of the admission and discharge of patients to poor law institutions and sanatoria.

Institutional Treatment.

During the year notifications were received of 86 admissions to institutions. These admissions represent 69 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 86 admissions were to the following institutions:—

Poor Law Institutions	29
Institutions of the Metropolitan Asylums Board	31
Other Institutions	26

Fourteen of these admissions were transfers from one institution to another or re-admissions.

Visits to Homes, etc.

During 1928 the Tuberculosis Officer made 46 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 1,189 visits.

Contacts.

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

One hundred and ten contacts, viz., 54 adults and 56 children under fifteen years of age, responded to this invitation and were examined for the first time during the year 1928. Of these one adult was found to be definitely suffering from tuberculosis, eight adults and one child were doubtfully so suffering. One hundred 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 41, a death rate of 1.04 per thousand in comparison with 1.21 for 1927. There were also six deaths from other forms of tuberculosis, a rate of 0.15 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.

	All Ages											Males.	Females.	Total.
	0-	1-	5-	10-	15-	20-	25-	35-	45-	55-	65-			
Number of patients who died at home	2	5	1	...	6	2	8
Number of patients who died in hospitals, etc.	...	3	...	...	3	6	5	6	8	8	...	27	12	39
	...	3	...	...	3	6	5	8	13	9	...	33	14	47

(Memo. 37/T.: Table I.)

Tuberculosis Dispensary.

The following is the Report of the Tuberculosis Officer, J. A. Struthers, M.B., B.Ch., M.R.C.P., D.P.H., for the year 1928:—

Return showing the work of the Dispensary during the year 1928.

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 ...	19	16	2	0	4	3	2	0	23	19	4	0
(b) Doubtfully tuberculous ...	—	—	—	—	—	—	—	—	7	8	0	0
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	7	3	4	2
B.—CONTACTS examined during the year:—												
(a) Definitely tuberculous ..	0	1	0	0	—	—	—	—	0	1	—	—
(b) Doubtfully tuberculous ...	—	—	—	—	—	—	—	—	1	7	—	1
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	9	36	33	22
C.—CASES written off the Dispensary Register as												
(a) Cured	5	5	2	0	—	—	1	—	5	5	3	0
(b) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)	—	—	—	—	—	—	—	—	26	56	39	25
D.—NUMBER OF PERSONS on Dispensary Register on December 31st:—												
(a) Diagnosis completed ...	66	57	4	2	9	14	7	3	75	71	11	5
(b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	2	—	—	—

1. Number of persons on Dispensary Register on January 1st, 1927	180	9. Number of patients to whom Dental Treatment was given, at or in connection with the Dispensary	7
2. Number of patients transferred from other areas and of "lost sight of" cases returned	10	10. Number of consultations with medical practitioners:—	
3. Number of patients transferred to other areas and cases "lost sight of"	42	(a) At Homes of Applicants	16
4. Died during the year	13	(b) Otherwise	88
5. Number of observation cases under A (b) and B (b) above in which period of observation exceeded 2 months	0	11. Number of other visits by Tuberculosis Officers to Homes	46
6. Number of attendances at the Dispensary (including contacts)	924	12. Number of visits by Nurses or Health Visitors to Homes for Dispensary purposes	1114
7. Number of attendances of non-pulmonary cases at Orthopædic Out-stations for treatment or supervision	—	13. Number of	
8. Number of attendances, at General Hospitals or other Institutions approved for the purpose, of patients for		(a) Specimens of sputum, &c., examined	156
(a) "Light" treatment	155	(b) X-ray examinations made in connection with Dispensary work	28
(b) Other special forms of treatment	12	14. Number of Insured Persons on Dispensary Register on the 31st December	82
		15. Number of Insured Persons under Domiciliary Treatment on the 31st December	18
		16. Number of reports received during the year in respect of Insured Persons:—	
		(a) Form G.P. 17	10
		(b) Form G.P. 36	12

Pulmonary Tuberculosis.

Annual Return showing in summary form the condition of all Patients whose case records were in the possession of the Dispensary at the end of 1928, 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.					
			Class T. B. plus.					Class T. B. plus.					Class T. B. plus.					Class T. B. plus.					
			Class T. B. minus.					Class T. B. minus.					Class T. B. minus.					Class T. B. minus.					
			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.	4	3		3																
			F.	3	3		3																
		Children	M.																				
			F.																				
Disease not arrested.	Adults	M.	6	9	6	1	16	2	2	1		3	9	4	2		6	5	9	3		12	
		F.	5	14	7	2	23	4						5				5	5	3	1	9	
	Children	M.	1						1			1	1						1				
		F.		1			1												1				
CONDITION NOT ASCERTAINED DURING THE YEAR.																							
LOST SIGHT OF OR OTHERWISE REMOVED FROM DISPENSARY REGISTER.			34	27	17	5	49	5	4	4	2	10							5	1	1		2
DEAD.	Adults	M.	1	1	4	7	12		1	4		5	5	7	2	6	15				2		2
		F.	1		3	2	5			4		4		1	1		2						
	Children	M.													1		1						
		F.																					
Totals	...	...	...	71	62	37	17	116	11	8	13	2	23	20	12	6	6	24	17	15	9	1	25

Condition at the time of the last record made during the year to which the Return relates.				Previous to 1926.					1926.					1927.					1928.				
				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																			
			F.		1																		
		Children	M.	1	1	1	1	4															
			F.																				
	Disease arrested.	Adults	M.	1																			
			F.																				
		Children	M.							1	1												
			F.				2	2															
	Disease not arrested.	Adults	M.	2		1		3					1	1		2	1	1	1			3	
			F.	3	2	2	1	8	1	1		2			1	1	2	1				3	
		Children	M.								1	1			1	2	3	1		1		2	
			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	1	1			2		
DEAD.	Adults	M.																					
		F.						1			1												
	Children	M.																					
		F.		1			1			1	1												
TOTALS ...				17	9	8	12	46	3	2		6	11	1	2	1	4	8	5	3	2	10	

The number of new cases this year is about the same as last (77 as compared with 81); but the number of contacts examined has increased from 61 to 100. It is noteworthy that only one of these contacts was found to be suffering from tuberculosis.

The number of deaths is less, viz., 13 as against 23.

The number of consultations has increased. Close co-operation continues to be maintained with the local medical practitioners and with University College Hospital.

Consideration continues to be given to the important questions of food and cooking; the Dispensary Nurse gives special attention to these questions on her visits to the homes of patients.

An innovation this year is the detailed enquiry instituted by the London County Council into the precise nature of the patients' employments. To facilitate this, use is made of the "Dictionary of Occupational Terms" compiled by the Ministry of Labour, and all patients are now classified according to the headings used in that book. It is a pleasure to record again the valuable help received from the Tuberculosis Care Committee, in many ways, in assisting the patients and their dependents.

Tuberculosis Care Committee.

The Holborn Tuberculosis Care Committee constituted by the scheme prepared in the year 1922 took over the work of the Interim Care Committee on the 1st April, 1923. The Committee includes the following representation:—

Holborn Borough Council	... ..	Councillor Miss M. R. Lovelock (to Nov., 1928). Councillor Miss F. M. Graves (from Nov., 1928). 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.
Insurance Committee for the County of London.		Miss S. Double.
Northern London War Pensions Committee		Councillor R. H. Haxell (from Sept., 1928). Mr. G. H. Neal (from Jan., 1929).
British Red Cross Emergency Help Fund		Mrs. Paige.
Other social workers (co-opted)	... ..	Mrs. E. C. Bedford. Miss H. M. Mathieson. Miss O. Lazarus. Cav. R. Terroni.

The duties of the Committee were defined to include enquiries as to the economic position of the family of a patient suffering from tuberculosis as soon as the patient comes within the purview of the Tuberculosis Dispensary Scheme with a view to rendering such advice and assistance as the circumstances of the case dictate; assistance in the provision, where necessary, of clothing as required by the institution to which the patient is sent, and any arrangements for the family to be properly looked after during the absence of father or mother; the securing of auxiliaries for domiciliary treatment which cannot be provided without charitable assistance; recommendations to the London County Council as to the amount of payment, if any, to be made towards institutional treatment and the collection of agreed amounts; advising the Borough Council whether the patients recommended for extra nourishment are in a position to pay for the same and, if not, the extent to which assistance should be given; advising the Borough Council as to the contributions, if any, to be made by patients in respect to the provision of dentures under any arrangement made by the Council for dental treatment.

The Annual Report of the Committee is as follows:—

The Committee has met 11 times during the year. The average attendance of members at each meeting has been 7.9.

Sixty-six cases have been considered—36 new and 30 old cases.

Forty-three cases—37 adults and 6 children—were referred to the Committee for assessment. Twenty-three were recommended for free treatment and 20 were assessed to pay contributions, varying from 2s. 0d. to 20s. 0d. per week, towards the cost of treatment and maintenance; 7 cases were re-considered later, owing to changes in circumstances, and the assessments reduced. Of these cases 7 were rejected for treatment by the L.C.C., and one refused to accept treatment.

Contributions towards the cost of treatment and maintenance amounting to £191. 18s. 3d. were collected on behalf of the L.C.C. in 29 cases—22 adults and 7 children. Six of these were still under treatment at the close of the year. Two cases were referred to the Official Collector owing to non-payment of contributions.

Ten quarterly reports, on 4 children, were received from the L.C.C. and the information contained therein conveyed to the parents.

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

As in previous years, the Committee is much indebted to the United Services Fund and British Legion, the B.R.C.S. Emergency Help Fund, and the Charity Organisation Society for advice and assistance in various cases.

Two patients were referred to the Borough Council for assistance to obtain dentures. In one case the Borough Council agreed to bear the full cost; in the other case part of the cost was covered by the Hospital Saving Association and the Borough Council agreed to advance the balance, the patient repaying by instalments.

Thirteen families have removed from the district during the year. Seven of these received preferential treatment under the L.C.C. Housing Scheme; five were accommodated on the Watling Estate, and two on the Downham Estate. Two families were referred to the Care Committees of other Boroughs on their removal, but unfortunately there is no care Committee operating at Burnt Oak. One family that had removed to the Watling Estate was referred to, and received assistance from the National Association for the Prevention of Tuberculosis. One family, tenants of the L.C.C., obtained better accommodation within the Borough.

Twenty-three patients known to the Committee have died during the year. Of these, 8 died in L.C.C. Institutions, 6 in the Guardians' Hospital, 4 in other Hospitals or Homes, and 5 in their own homes.

Convalescence has been arranged in 7 cases—3 through the Invalid Children's Aid Association, and 4 through Stafford's Charity. Three of the latter were relatives who had been in close attendance on patients in an advanced stage of tuberculosis. One child was sent away through the L.C.C. Contact Scheme.

A vacancy was obtained at St. Michael's Home, Axbridge, for a patient who had no home or relatives, and was discharged unfit for work after a year's treatment under the Tuberculosis Scheme of the L.C.C.

It is pleasing to be able to report that our efforts have attained some measure of success in at least one case. A young man, aged 24, was discharged from the Royal Navy on account of tuberculosis after 9 years' service. He was awarded a gratuity of £21. Following representations made, the Admiralty awarded a special pension of £18. 5s. 0d. per annum from the charitable funds of the Greenwich Hospital; subsequently, on further consideration, this was replaced by a temporary disablement pension of £86. 5s. 0d. per annum. On completion of sanatorium treatment, through the Royal Naval Benevolent Trust, a course of instruction was provided for the man at the Royal Naval School of Motoring. The family was living under unsatisfactory conditions in Holborn, but as a result of a request to the London County Council, housing accommodation was provided for this man and his family on the Watling Estate.

We were less successful in the case of a Petty Officer, discharged with tuberculosis from the Navy after 15 years' service. He had been stationed in South Africa for two years, and just arrived home in time to see his mother and die. He had made a regular allotment to his widowed mother, who is in receipt of the Old Age Pension and has no other child. The man had an excellent service record, and was a Physical Instructor. His father had also been a Petty Officer in the Navy. The Admiralty refused to accept any liability in this case, and all efforts to obtain a pension or allowance for the mother failed.

The half-yearly meetings of the Standing Conference of City and Metropolitan Borough Tuberculosis Care Committees were held in June and November, and there was also a special meeting in March. The Committee was represented at all the meetings.

Early in January the Ministry of Health held a Public enquiry into the (Holborn and St. Pancras) Town Planning Scheme, No. 5. In connection with that it was unanimously resolved:—

“ That this Committee wishes to associate itself with efforts to preserve the Foundling Hospital Site as an Open Space.”

The fate of this site is still unknown, so hope is not yet abandoned. There is still no adequate accommodation for the Open Air Education of children residing in the Borough. The nearest L.C.C. Open Air School is Holly Court, Highgate, which is too remote to be of any practical use, and, in any case, does not receive children under 8 years of age. Two such children returned to their homes this year after prolonged convalescence; they were recommended for open air classes, but there was no provision for them.

In view of the fact that it is impossible for the L.C.C. to find accommodation for all tuberculous cases recommended to them for Institutional Treatment, and of the fact that patients who are able to be up and about for at least part of the day seldom remain long in the Holborn Hospital, the following resolution was sent to the Holborn Guardians:—

“ At a meeting of the Holborn Tuberculosis Care Committee held on Thursday, September 20th, it was resolved to write to your Management Committee to ask whether, in view of the desirability in the public interest of removing any possible objection by tuberculous patients to their acceptance of treatment in the Holborn and Finsbury Hospital, your Committee would give sympathetic consideration to the following suggestions:—

1. More adequate provision of indoor occupation and recreation.
2. Increased facilities for outdoor exercise.
3. Further opportunities for visits from friends.”

The Committee has to record several changes in membership during the year. At the beginning of the year the Invalid Children's Aid Association appointed Miss Butler to succeed Miss Fildes who had been obliged to give up her work in Holborn owing to ill-health. In September Councillor R. H. Haxell was appointed representative of the Northern London War Pension Committee in succession to the late Councillor Richard Davies. In November Miss F. M. Graves was elected by the Borough Council as one of their representatives. Owing to the amalgamation of the Holborn, City and Finsbury Branch of the B.R.C.S. Emergency Help Fund with the St. Pancras and Islington Branch, Mrs. Paige was transferred to the Southwark Branch as from 1st January, 1929; she was therefore obliged to sever her connection with this Committee at the end of the year. To all the retiring members the Committee extend sincere thanks for their services.

Home Nursing for Tuberculous Patients.

With the sanction of the Minister of Health arrangements were made 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 seven such cases were nursed, a total of 336 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.

In the year 1928 six new patients were treated.

Scaling and gum treatment was given in three cases. Extractions with general anaesthetic in ten 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 1928:—

Summary of Work carried out at Dental Clinic, 10, John Street, Holborn, on Tuesday Evenings, during 1928.

Number of sessions held	...	...	...	...	...	...	46
Number of patients' attendances	...	...	...	...	...	...	363
Number of fillings	...	...	...	...	...	...	25
Number of scalings	...	...	...	...	...	...	10
Number of extraction cases	}	Without anaesthetic	...	...	...	...	2
		With local anaesthetic	...	...	...	...	36
		With gas	...	...	...	...	51
		Number of teeth extracted	...	...	...	...	277
Number of dentures (including repairs)	...	...	...	...	...	40	
Number of dressings	...	...	...	...	...	11	
Number for advice	...	...	...	...	...	69	
Number of denture visits	...	...	...	...	...	126	
Number of new patients	...	...	...	...	...	89	

Cancer.

During the year 1928 66 deaths were recorded as due to Cancer in comparison with 50 in the previous year. The deaths in 1928 were equal to a rate of 1.68 per thousand, the corresponding rate in 1927 being 1.18 per thousand. In the year 1908 the death rate from Cancer in the Borough was only 0.93, the decennial average rate was 1.19 for the ten years, 1908-1917, and 1.38 for the ten years, 1918-1927.

It will be seen that the death rate from Cancer in the Borough in 1928 was, unfortunately, higher than in the previous year, being 1.68 per thousand in comparison with 1.18 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 decennial average for the ten years, 1908-1917, was 1.19, the corresponding rate for the ten years, 1918-1927, was 1.38. 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 301 births were registered as occurring in the Borough. During the same period 301 notifications of births occurring in the Borough were received. Of these, 293 were from doctors and midwives, 8 from parents.

The mothers were attended at their confinement by:—

Private Doctors	...	...	...	...	...	90
Private Midwives	...	...	...	...	...	47
Out-patient Midwifery Departments of General Hospitals and Institutions:—						
Externs and others	...	...	...	...	...	48
Midwives.—University College Hospital	...	...	...	...	...	27
Middlesex Hospital	...	...	...	...	...	18
Other Institutions	...	...	...	...	...	34
Training Institution for Midwives, Myddelton Square	...	...	...	...	...	37
						<hr/> 301 <hr/>

Twenty-two notifications related to stillbirths, and two notified the births of twins.

Number of Births.

The number of births transferred to the Borough from outlying institutions was	...	...	...	...	...	184
The number of births transferred from the Borough to other districts was	...	...	...	...	...	12
The number of net births belonging to the Borough was	...	...	...	...	...	473

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 413 mothers in relation to their confinement:—

Living in	Confined at Home.		In Hospital.	
	No.	Percentage of Total Births.	No.	Percentage of Total Births
One roomed homes ...	72	15	67	14
Two " " ...	142	30	65	14
Three " " ...	23	5	20	4
Four " " ...	16	3	8	2

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 ...	105	161	266
Children under 1 year of age	477	1,153	1,630
Children 1 to 2 years of age...	6	341	347
Children over 2 years of age...	10	311	321
Enquiries <i>re</i> stillbirths ...			21
" <i>re</i> ophthalmia			
neonatorum			10
Other visits ...			205

Four hundred and three visits related to infants who came under further observation in their own homes or at Infant Welfare Centres; of this number 227 were recorded as attending a Centre, *i.e.*, 55 per cent.

Thus more than one-half of those visited attended an Infant Welfare Centre and of these nearly four-fifths attended the Council's Centres.

Attendances at Infant Welfare Centres.

The Centres attended were the following:—

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

227 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	51	51	51	40	52	51
Total attendance—						
Children	489	...	1591	...	103	1405
Mothers	133	167	272	563	183	256
Average weekly attendances—						
Children	9	...	31	...	2	28
Mothers	3	3	5	14	3	5

ST. GILES' CENTRE, SHORT'S GARDENS.

The attendances at this Branch Centre during the year 1928, 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	51
Total attendances—			
Children	—	79	544
Mothers	139	—	67
Average weekly attendances—			
Children	—	2	11
Mothers	3	—	1

The total number of attendances made by the Health Visitors at the Centres in 1928 was 416.

At the Holborn Centre, No. 10, John Street, 5,162 attendances were made by a number of mothers, including 57 expectant mothers, and 524 children, of whom 282 were under one year, 94 between one and two years old, and 148 aged 2-5 years on the date of their first attendance.

At the St. Giles' Centre, Short's Gardens, 827 attendances were made by 19 mothers and 120 children, of whom 81 were under one year, 10 from one to two years and 29 between two and five years.

For some years, both in the home and at the Centres, we have made use of simple leaflets 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.

In addition to the health talk, assistance is given in the cutting out of garments; 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, model garments, which are revised from time to time, are always on view at the Centre.

Miss Mary Carter and Miss Edith Joyce have given us valuable assistance during the year by making children's garments for busy mothers from material supplied by the mothers.

Four hundred and fifty-four hanks of wool of a special quality obtained from Wales were sold at cost price to the value of £21. 15s. 1d.

The maternity bags have been used during the year by six mothers.

Maternity outfits are placed on sale at the Centre at cost price, 6s. 2d., four 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 those least well equipped, and therefore most in need of the outfit.

Ante-Natal Hygiene.

The scheme for the voluntary notification of pregnancy, to which reference was made in the Annual Report for 1927, came into operation at the beginning of 1928. During the year forty voluntary notifications were received. It is probable that as the benefits arising from early notification become more apparent greater advantage will be taken of the scheme.

All these patients are visited and all possible help afforded.

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 446 mothers, about whom information was obtained, 280 (66 per cent.) were found to have attended Ante-Natal Centres or received ante-natal care as under:—

Number of enquiries made	446
CENTRE ATTENDED—	
Holborn Centre, 10, John Street	34
Royal Free Hospital	29
Middlesex Hospital	27
Charing Cross Hospital	44
University College Hospital	41
Myddelton Square Institution	16
St. Bartholomew's Hospital	9
City of London Hospital	15
Queen Charlotte's Hospital	8
Other Centres	16
Ante-natal care from private doctors	27
Ante-natal care from midwives	14
	280

The following is a summary of the numbers of expectant mothers attending the Ante-Natal Clinic, 10, John Street, found to have defects either due to or especially of concern in view of their pregnancy, during the year 1928:—

No. of women attending Ante-Natal Clinic	57
No. of ante-natal cases (five not pregnant)	52
No. of attendances made by ante-natal cases	118
Mothers expectant for first time	13
Defects especially connected with pregnancy—	
Deformed pelvis	2
Threatened miscarriage	3
Excessive vomiting	1
Edema	12
Varicose Veins	18
Excessive vaginal discharge	2
Albuminuria (slight)	1
Retroverted gravid uterus	1
Other defects	1
Other defects—	
Pulmonary Tuberculosis	1
Heart disease	3
Anæmia	2
Respiratory diseases	1
Constipation	18
Dental caries	18
Sleeplessness	2
Dyspepsia	11
Pyorrhœa	5
Other defects	2
No. referred to Maternity Hospitals	13
Normal	10
Abnormal	3
No. referred to Dental Clinic	10
No. of urine tests made	65

The urine of one woman showed a cloud of albumin. Dietetic advice was afforded and arrangements made for her confinement to take place in a hospital. In one other case there was a faint trace only.

Of the five others who attended the Ante-Natal Clinic for examination three were found not to be pregnant; two attended for examination as to cause of sterility.

Post-Natal Consultations.

From the beginning of April, 1928, all mothers visited, on receipt of a notification of birth, were asked whether they had been medically examined at the end of the puerperium. All were advised to attend our Centres for post-natal examination, unless they had already been so examined, or had been asked to attend the hospital for that purpose.

Fifteen mothers attended the post-natal consultation at the Centre, 10, John Street. In seven of these no abnormalities were found. In the remaining eight the defects found included:—Retroversion of uterus, two (one referred to hospital);

vulvitis, one, referred to hospital; vulvitis and vaginitis, one, referred to hospital; discharge from cervix, one, refused treatment; laceration of cervix, one, referred to hospital; prolonged lochia, one, treatment afforded; menorrhagia, one, referred to hospital. In one case a Wasserman test was made with a negative result.

Maternal and Infant Consultations.

The following summary refers to maternal and infant consultations at 10, John Street and the Short's Garden's Centres during the year 1928:—

Reasons for Attendance.	John Street.	Short's Gardens.
MOTHERS—		
(Healthy)	—	5
Difficulty with breast feeding	39	8
Generative organs	17	1
Dental caries	37	—
Heart disease	4	—
Debility	34	3
Anæmia	12	—
Respiratory disease	7	1
Digestive disorders	10	—
Rheumatism	3	—
Other disorders	17	1
CHILDREN—		
(Healthy)	176	70
Congenital syphilis	1	1
Alimentary disorders	72	11
Rickets	22	7
Debility	7	9
Respiratory diseases	53	9
Hernia, umbilical	16	—
do. inguinal	2	—
Phimosis	22	—
Diseases of skin	17	4
Disease of eye	9	1
Disease of ear	13	3
Disease of nose and throat	16	—
Dental caries	22	—
Other diseases	26	5

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 1928 were referred to other departments or organisations for assistance as follows:—

Referred to.	Mothers.	Children.
Dental Clinic	45	15
Minor Ailments Clinic	56	154
Hospitals	25	37
Metropolitan Nursing Association	22	5
Assisted Milk	16	16
Convalescent Homes	4	14
Ante-natal Clinic	3	—
Massage Clinic	—	1
Tuberculosis Dispensary	—	1
Relieving Officer	2	—
Cleansing Station	—	1
Private Doctor	2	3
	<hr/>	<hr/>
	175	246
	<hr/>	<hr/>

Breast Massage.

The following summary gives particulars of mothers referred for breast massage in 1928:—

Number referred to Metropolitan Nursing Association ... 24

Results—

Lactation completely restored	8
Breast secretion re-established, but small bottle feeds required in addition to breast feeding	6
Massage unsuccessful	10

Diarrhœa.

During the year the cases of diarrhœa occurring in children attending the Council's Centres were as follows:—

	10, John Street.	Short's Gardens.
1. Simple diarrhœa	26 cases	3 cases.
2. Ordinary summer diarrhœa	none	none.

Stillbirths

During 1928 there were 22 stillbirths; of these five occurred in the private practice of doctors, one in the extern and sixteen in patients confined in institutions.

In the case of these 22 stillbirths one was above the standard for enquiry, and in three cases no information was obtainable, the mothers (unmarried) having left the area. Of the remaining 18 stillbirths difficult labour was responsible for ten of these, of which five were reported due to abnormal presentation; two were due to craniotomy; placenta prævia occurred in one, abnormality of the foetus in two, delivery three days after operation for appendicitis, one; prematurity, one; in five cases no useful information was available.

Illegitimate Children.

The births of 37 illegitimate children were registered; two of these were above the standard for enquiry; it was found that five of these lived with both their parents who had a permanent home together; two with their mothers who worked to support them; four with their mothers who remained in their parents home; four were boarded out with foster mothers; two died in early infancy; four were stillborn; fourteen 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.

A number of nursing and expectant mothers and young children were treated at the Council's Dental Clinic held at 10, John Street. The number of new patients during the year was 60, viz., 27 women and 33 children; the number of attendances 286 (women 183, children 103).

Assistance with Dentures, etc.

Ordinary extractions were made in 8 cases (all children); extractions with local anæsthetic were made in 14 cases (all women), and with general anæsthetic in 61 cases, including 33 children. Scalings were carried out in 8 cases (all women). Small fillings were provided in 42 cases, including 25 children. Dentures were provided for 18 patients, 13 were required to pay the whole cost, 3 contributed towards the cost, and in the remaining 2 cases where the patients were very poor the dentures were provided free. In 3 cases dentures were repaired and dressings were given in 8 cases. In the provision of dentures the cost is based on the charge approved for the time being for dentists on the Ministry of Pensions Panel.

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.

Early in the year a communication was received from the Minister of Health suggesting that, with a view to reducing the expenditure on the supply of milk, the Council should reconsider the procedure adopted in dealing with applications for milk at less than cost price so as to secure strict observations of the following conditions:—

(1) Milk to be supplied by the Council solely on medical grounds and not to be supplied to applicants who are already in receipt of Poor Law relief; applicants whose circumstances are such that they can only be dealt with adequately through the machinery of the Poor Law to be referred to the Guardians.

(2) Every applicant for milk to be seen in the first instance by the Medical Officer of Health or the Medical Officer of the Maternity and Child Welfare Centre and no applicant to be considered unless the Medical Officer furnishes the certificate that a supply is essential on grounds of health.

(3) The scale of income to be revised to bring it into accord with the fall in the index figure of the cost of living since the existing scale was framed.

(4) The Council to be satisfied that they are obtaining supplies of milk at prices which bear adequate relation to the quantities of milk distributed by them.

Prior to the receipt of this communication, it had been the practice of the Maternity and Child Welfare Committee to make enquiries to ascertain whether applicants for assistance were in receipt of Poor Law relief, also to refer to the Guardians of the Poor applicants whose circumstances were such that they could be dealt with adequately only through the machinery of the Poor Law. On receipt of the communication the Committee gave instructions for the conditions as set out by the Minister of Health to be strictly complied with.

A revision of the scale of income was also considered and the scale revised to bring it into closer accord with the cost of living figure. The revised scale was approved by the Minister of Health and came into operation in the middle of the year.

All applications for milk free or at less than cost price are carefully investigated and are considered by an Assistance Sub-Committee of the Maternity and Child Welfare Committee, meeting fortnightly for the purpose. Where grants are made the cases are revised by the Sub-Committee at intervals not exceeding one month.

During the year 252 applicants received free or assisted milk under the scheme. This number included 140 who were receiving such assistance at the end of 1927. Grants were made in 112 new cases. At the end of the year 1928, 87 cases were receiving assistance, viz. :—

	Mothers.	Children.	Total.
Free milk	25	56	81
Half price milk	2	2	4
Prepared milk	—	2	2
	—	—	—
	27	60	87
	—	—	—

The following table shows 112 new cases assisted in 1928 :—

	Milk.		Prepared Milk.	
	Free.	Part Cost.	Free.	Part Cost.
Expectant Mothers ...	23	1	—	—
Nursing Mothers ...	13	5	—	—
Children	46	5	15	4

Home Help.

The Council's Home Help attended 24 cases during the year in comparison with 21 in the year 1927. In 13 of these the whole-time officer attended entirely and in 6 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 5 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 5 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 5s. 0d. 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.

Two applicants for convalescent home treatment for mothers and their babies were granted in comparison with 4 in the previous year. One application was subsequently withdrawn as the baby died before admission to convalescent home could be arranged. In the case sent away a contribution towards cost was required.

Five applications were granted for convalescent home treatment for children. In 1 case the application was subsequently withdrawn because the parents could not pay towards the cost. Four children were sent away in comparison with 6 in 1927. All of these were sent to the Hopedene Convalescent Home at Barnet, by the kind co-operation of Sister Hope of the West London Mission, Kingsway. In 1 case the child was sent away free, and in 3, contributions were required towards the cost.

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, 1929, 292 infants and children under 5 attended the consultations, 57 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.

Post Office Co-operation.

In July, 1928, a communication was received from the Ministry of Health (Circular 911) intimating that the Postmaster-General had issued instructions to postmasters of Crown Post Offices, to exhibit on their official notice boards a list of the names and addresses of infant welfare centres and ante-natal clinics if requested by the Maternity and Child Welfare Authority to do so, and that in the case of offices where the postal work was performed under contract the sub-postmasters were being requested by the Postmaster-General to co-operate. The addresses of the two municipal centres in the Borough were printed on glazed cards of the prescribed size, and copies were at once sent to all the post offices in the Borough with a request for their exhibition. This valuable means of publicity will be of much service.

Summer Outing.

The Summer Outing was held in the grounds of Oxhey Grange, Bushey, the residence of Mr. and Mrs. Penrose, to whom we are grateful. The party consisted of 40 mothers, most of whom carried infants in arms, and 39 other children, nearly all of whom were below school age. The cost of the fares of some of the mothers was defrayed in part by private subscriptions.

Deaths of Children 1 to 5 Years, 1928.

Twenty-three children between the ages 1 to 5 years died from the following causes:—

Cause of Death.	Ages.								Total.		
	1-2		2-3		3-4		4-5		1-5		Both Sexes
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Diphtheria ... ..	...	...	...	...	1	...	...	...	1	...	1
Measles ... ..	...	2	...	1	1	2	...	...	1	5	6
Whooping Cough	3	1	...	...	...	..	...	...	3	1	4
Tuberculosis (non-pulmonary) ... ..	...	2	1	...	...	...	...	...	1	2	3
Pneumonia	1	2	2	...	1	...	...	...	4	2	6
Respiratory ... ..	...	...	...	...	...	...	...	1	...	1	1
Appendicitis ... ..	...	...	...	1	...	...	...	...	...	1	1
Other Causes ... ..	...	...	...	...	...	..	1	...	1	...	1
Totals	4	7	3	2	3	2	1	1	11	12	23
Totals—Both Sexes	11		5		5		2		23		

Deaths of Infants under One Year of Age, 1928.

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 Weeks		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	
Measles .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Meningococcal Meningitis .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Pneumonia (all forms) .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
{ Diarrhoea .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	1	2	1	...	...	...	...	...	...	2	4
{ Enteritis .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	1	1	...	...	...	3	6
{ Nephritis .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	6
{ Congenital Malformations .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Premature Births	4	2	...	1	...	...	...	...	4	3	7	1	2	...	...	...	1	...	...	...	5	11	
{ Atrophy, Debility, Marasmus .. .. .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Other causes	1	1	...	...	1	...	...	...	2	1	3	...	...	1	...	...	...	...	...	...	3	4	
Totals	5	3	0	1	1	0	0	0	6	4	10	2	3	4	3	2	2	1	0	15	12	27	
Total both sexes	8		1		1		0		10			5		7		4		1		27			

Net births registered during the calendar year.				Net deaths registered during the calendar year.			
	Males	Females	Both sexes		Males	Females	Both sexes
Legitimate Infants	232	204	436	Legitimate Infants	15	10	25
Illegitimate Infants	21	16	37	Illegitimate Infants	0	2	2

INFECTIOUS DISEASES AMONG MOTHERS AND CHILDREN.

Puerperal Fever and Puerperal Pyrexia.

Four cases of puerperal fever occurred in 1928 : two patients died.

Notification was also received of seven cases of puerperal pyrexia.

PUERPERAL FEVER—FOUR CASES.

No.	Initials	Date of Notification	Primipara or Multipara	Ante-natal Care	Birth occurred in		Onset subsequent to	Recovery	Remarks
					Patient's Home	Institution			
1	L.P.	5-2-28	P.	—	—	Nursing home	Curetting after incomplete abortion ; two months' gestation	Recovered	—
2	F.S.	24-5-28	M.	None	Home	—	Difficult labor ; craniotomy	Recovered	District nurses sent in under Council's arrangements
3	M.R.	28-10-28	P.	None	—	Institution	Self-induced abortion	Patient died	Death classified as "suicide" in Registrar-General's Returns
4	N.C.	24-12-28	P.	Private doctor	Home and later	Institution	Prolonged first stage of labor ; persistent occipito-posterior presentation	Patient died	—

PUERPERAL PYREXIA—SEVEN CASES.

No.	Initials	Date of Notification	Primipara or Multipara	Ante-natal Care	Birth occurred in		Cause of Pyrexia	Recovery	Remarks
					Patient's Home	Institution			
1	B.F.	4-3-28	P.	None	---	Institution	No reason assigned (Abortion of two male fetuses of about 23 weeks' gestation)	Recovered	---
2	D.H.	12-4-28	P.	Attended ante-natal clinic of hospital	---	Institution	Mild degree of post-partum haemorrhage; small perineal tear, sutured	Recovered	---
3	E.L.	4-6-28	P.	As in-patient of Guardians Institution	---	Institution	1. Toxaemia of pregnancy (albuminuria) 2. Sloughing of torn perineum following instrumental delivery	Recovered	---
4	A.H.	9-9-28	M.	Attended hospital clinic	Home	---	No reason assigned (No abnormalities of confinement)	Recovered	Dental caries; treatment since begun
5	R.W.	8-10-28	M.	do.	---	Institution	No reason assigned (No abnormalities due to confinement)	Recovered	Dental caries; has since begun treatment
6	M.W.	10-10-28	M.	Private doctor	Home	---	Pelvic inflammation	Recovered	---
7	C.F.	27-10-28	M.	do.	do.	---	Old pelvic inflammatory lesion	Recovered	---

EIGHT 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	27 days ...	4 days	Doctor M. and C. W. Centre	Very slight (both eyes)	Home ...	Out-Patient, Royal London Ophthalmic Hospital, District Nurses	Cured	Extern Department, Hospital
2	21 days ...	21 days	Doctor M. and C. W. Centre.	Very slight (both eyes)	Home ...	Minor Ailments Clinic, District Nurses	Cured	Intern Midwifery Department, Hospital
3	4 days ...	3 days	Doctor (Private Practice)	Moderate (both eyes)	Home, later St. Margaret's Hospital	Private Doctor—later In-patient, St. Margaret's Hospital	Cured	Midwife
4	12 days ...	7 days	Doctor (Hospital)	Slight (one eye) ...	Home ...	Doctor in charge of case, and Out-patient, Royal London Ophthalmic Hospital, District Nurses	Cured	Midwife
5	7 days ...	4 days	Doctor (Private Practice)	Moderate (one eye)	Home ...	Doctor in charge of case, and Out-patient, Royal London Ophthalmic Hospital, District Nurses	Cured	Midwife

During the year 10 cases of ophthalmia neonatorum were brought to our notice, 8 of which were notified in pursuance of the Public Health (Ophthalmia Neonatorum) Regulations, 1926 and 1928; 4 of the notifications were from doctors in private practice; 1 from the Medical Officer of a hospital, and 3 from the Medical Officer of the Council's Maternity and Child Welfare Centre.

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.

6	10 days ...	9 days	Doctor (Private Practice)	Slight (one eye) ...	Home ...	Doctor in charge of case	Cured ...	...	Doctor
7	23 days ...	10 days	Doctor M. and C. W. Centre	Very slight (both eyes)	Home ...	Doctor, Minor Ailments Clinic, District Nurses	Cured ...	...	Intern Midwifery Department
9	10 days ...	3 days	Doctor (Private Practice)	Very slight (one eye)	Home ...	Doctor in charge of case	Cured ...	...	Midwife.

TWO CASES NOT NOTIFIED IN ACCORDANCE WITH THE PUBLIC HEALTH (OPHTHALMIA NEONATORUM)

REGULATIONS, 1926 and 1928.

Case Number.	Age when Information received.	Age at Onset.	Information.	Type of Disease on Health Visitor's first visit.	Where treated.	Medical Attendance and Nursing.	Result.	Birth notified by.
8	11 days ...	7 days	London County Council	Severe (both eyes)	Home and St. Margaret's Hospital	Doctor (Private Practice) and later In-patient St. Margaret's Hospital	Cured	Midwife ...
10	12 days ...	7 days	London County Council	Slight (one eye)	Home	Doctor and Midwife ...	Cured	Midwife ...

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. Three or four 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 136 persons suffering from whooping cough. Of these, 104 were notified by doctors; in 9 others the information was derived from the schools; 3 from Health Visitors; 20 from the M.A.B.

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

Age.

Twenty-three were children under 1 year, eighty-three were aged 1 to 5, and thirty 5 to 16 years.

*Contacts**

(136 enquiries.)

Forty-one had no contacts; 95 had contacts. The number of contacts was 384, of whom 266 were susceptible, 118 already having suffered from an attack.

No. of cases ...	29	16	13	9	7	4	1	2	2	1	3	5	2	1
and														
No. of contacts ...	1	2	3	4	5	6	7	8	9	10	11	12	15	16
No. of cases ...	30	17	10	6	3	4	1	1	2	3	2	2		
and														
No. of susceptible contacts	1	2	3	4	5	6	7	8	9	10	11	12		

Spread of Infection in Family.

The 136 cases occurred in 106 families. In 85 families 1 case occurred; in 14 families 2 cases occurred, and in 5 families 3 cases occurred; and in 2 families there were three cases.

*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.

Removal.

Seventy-nine children were removed to hospital, approximately 59 per cent. So far this is the highest percentage of removals for this Borough. All these were admitted to hospitals of the M.A.B.

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 as to the dangers of leaving children exposed to the risk of infection from whooping cough as is so often the case at present.

Measles.

The notification of measles was discontinued at the end of 1919 but during 1928 I received information of 436 cases of measles. Of these, 203 were notified by school teachers, and 100 by medical practitioners; information of 21 was given by hospital authorities, 89 by the Health Visitor, 21 by parents, and in 2 cases the first information was from the death returns.

Age. Seventeen were under 1 year, 244 were between 1 and 5 years, 163 were between 5 and 16 years, and 12 were over 16.

Contacts. One hundred and twenty-eight had no contacts; 308 had contacts. The number of contacts was 1,029 of whom 406 were susceptible, 623 having already suffered from an attack.

No. of cases and contacts	...	93	66	45	34	24	13	5	10	5	1	3	2	1	1	1	2	2
No. of contacts	...	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
No. of cases and susceptible contacts	...	108	53	27	15	3	2	1	1	1								
No. of susceptible contacts		1	2	3	4	5	6	7	8	9								

Spread in Family. The 436 cases occurred in 395 families. In 361 families 1 case occurred, in 29 families 2 cases occurred, in 3 families 3 cases, and in 2 families 4 cases occurred.

Removals. One hundred and thirty-two patients (30.3 per cent.) were removed to a M.A.B. Hospital.

Home Nursing. Fifteen cases of measles were nursed by the Metropolitan Nursing Association under the arrangements made by the Council.

Measles Control in Schools.

The special arrangements of the London County Council for securing through the school organisation earlier information of measles was continued, the scheme being applied during the year to 11 schools in the Borough.

German Measles.

During the year information was received of seven cases of German measles. One was an adult; six were children under 5 years, one being under one year. The number of contacts was twenty-two, eleven of whom were susceptible; two of the seven patients had no contacts. No second case of the disease occurred in any family. One case (adult) was removed to the London Fever Hospital.

Epidemic Diarrhœa.

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, Diarrhœa and Enteritis, was 6, all of whom were under 1 year. The deaths were equal to a rate of 12.6 per 1,000 births in comparison with 10.2 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 diarrhœa is more likely to occur.

Spread of Infection.

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."

Nursing Arrangements.

The services of the nurses were used as follows in 1928:—

Deficient Lactation	23 Cases	262 Visits.
Complications after Pregnancy	5 ..	139 ..
Measles	15 ..	149 ..
Whooping Cough	4 ..	53 ..
Ophthalmia Neonatorum ...	6 ..	75 ..
Pneumonia	9 ..	266 ..
Influenza	1 Case	11 ..
Tuberculosis	7 Cases	326 ..
Puerperal Fever or Pyrexia ...	2 ..	43 ..
	—	—
Total	72 Cases	1,324 Visits.
	—	—

Health and Baby Week, 1928.

The observation of Health and Baby Week during the first week in October in 1928 was again limited to co-operation with the School Organisation and a special session for mothers attending the Maternity and Child Welfare Centres.

Co-operation with Schools.—The School Organisation in the Borough co-operated as in previous years by arranging for health lessons to be given and for a series of health questions to be submitted to the children during health week. The questions were prepared in the Public Health Department. The best three sets of answers in each school department were selected by the head teacher for examination in the Public Health office, two prizes being awarded to each school, one for boys and one for girls. The Mayor and Mayoress kindly entertained to tea the prize winners and the children whose essays were selected from the various schools.

It is satisfactory to record that all the Elementary schools in the Borough took part in this movement, which has now become a useful and well established annual custom in Holborn.

The following is a copy of the questions submitted to the children in the schools:—

SECTION A.

(All five questions to be answered.)

(Put the number of each question before the answer.)

1. Mention some ways in which air becomes unsuitable for breathing; explain the need for the proper ventilation of houses, and describe some simple means for ventilating them.
2. Why is it important to remove household refuse from houses, yards and streets as soon as possible? Describe the right ways of dealing with such refuse in the home, and state what the local Health Department does to help householders in this matter.
3. Give reasons for protecting food from dirty handling, dust and flies. Why is it necessary to be especially careful about this in hot weather?
4. What steps should be taken by a mother of children attending school if one of them develops measles, and give the reasons for her being asked to take these steps. What harm may result from neglecting this disease?
5. Why is it important that all sinks and waterclosets should be kept very clean? What are the best means of keeping them clean?

SECTION B.

(Answer question 6 or 7.)

(Put the number of question answered before the answer.)

6. Name three or four different foods which are very nourishing for children, and say why they are nourishing; or
7. What is meant by a "mixed diet"? Why is this necessary to maintain health?

On Thursday, October 11th, a special address to mothers attending the Maternity Centres was given at the Centre, No. 10, John Street, Dr. N. R. Beattie, Deputy Medical Officer of Health, Willesden, speaking on "The Mind of Your Child."

MINOR AILMENTS CLINIC.

Arrangements were continued at the Municipal Child Welfare Centre, 10, John Street, for the treatment of minor ailments in children up to 5 years of age. The Clinic opened on the 12th April, 1925; it is held every Tuesday and Friday afternoon to deal with such minor ailments as ringworm, impetigo, scabies, intertrigo, sores, cuts, grazes, burns, blepharitis, conjunctivitis, ear discharge, etc. The Clinic is under the supervision of the Medical Officer of the Maternity and Child Welfare Centre and a qualified nurse is in attendance.

During the year 1928, 251 patients were treated at the Clinic in comparison with 208 in the year 1927; the attendances were 529 in 1928 and 388 in 1927.

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, 1928.

Age Group.	Number examined.	Clothing and Boots.			Nutritio			Cleanliness of Head.			Cleanliness of Body.			Condition of Teeth.			Vision		
		Good.	Fair.	Poor.	Good.	Average.	Below normal.	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	342	143	196	3	61	261	20	317	24	1	337	4	1	191	128	23	...	...	...
Girls	326	157	164	5	62	247	17	282	40	4	322	3	1	172	113	41	...	...	...
Age 8—																			
Boys	302	122	172	8	48	228	26	269	30	3	296	6	...	168	108	26	213	28	52
Girls	262	115	140	7	48	190	24	197	53	12	257	5	...	167	77	18	192	22	0
Age 12—																			
Boys	194	40	145	9	33	149	12	184	10	...	193	...	1	145	46	3	144	11	38
Girls	182	40	138	4	39	132	11	132	45	5	177	5	...	131	47	4	131	14	35
Age 14—																			
Boys	198	46	145	7	50	137	11	178	20	...	197	1	...	155	41	2	147	8	42
Girls	178	52	123	3	48	121	9	142	34	2	177	1	...	141	35	2	127	22	27
Total	1,984	715	1,223	46	389	1,465	130	1,701	256	27	1,956	25	3	1,270	595	119	954	105	234
Holborn %	...	56.0	61.7	2.3	19.6	73.8	6.6	85.7	12.9	1.4	98.6	1.3	0.2	64.0	30.0	6.0	73.8	8.1	18.1
London %	...	58.5	40.5	1.0	20.0	75.2	4.8	94.2	5.3	0.5	97.0	2.9	0.1	64.4	28.3	7.3	56.1	25.4	18.6

Medical Routine Examination of Elementary School Children in Holborn in 1928.

Defect.	Boys.								Girls.							
	Entrants		Age 8		Age 12		Age 14		Entrants		Age 8		Age 12		Age 14	
Number Examined ...	342		302		194		198		326		262		182		178	
	Cases	+	Cases	+	Cases	+	Cases	+	Cases	+	Cases	+	Cases	+	Cases	+
Malnutrition ...	—	—	1	—	—	—	—	—	2	1	—	—	—	—	—	—
Skin Disease ...	3	3	—	—	—	—	—	—	—	—	1	1	—	—	—	—
Enlarged Tonsils ...	12	4	14	7	4	2	1	1	11	6	11	9	4	2	—	—
Adenoids ...	4	3	7	7	3	3	—	—	8	8	3	3	2	2	—	—
Tonsils and Adenoids .	31	27	8	7	1	1	1	1	30	26	15	15	3	3	4	4
Other Nose and Throat	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
Enlarged Glands ...	—	—	1	1	—	—	—	—	1	—	—	—	—	—	—	—
External Eye Disease...	14	12	11	10	2	2	1	—	13	10	6	6	3	2	4	3
Vision ...	—	—	—	37	—	25	—	28	—	—	—	35	—	23	—	27
Otorrhœa ...	2	2	6	4	—	—	1	1	5	3	4	3	1	1	—	—
Other Ear Disease ...	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
Hearing ...	—	—	1	1	1	1	—	—	1	1	1	—	1	1	—	—
Stammering and Speech	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
Heart ...	1	—	2	—	3	—	2	—	2	—	4	—	1	—	1	—
Anæmia ...	2	2	3	2	1	1	—	—	2	2	1	—	1	1	2	—
Lungs ...	3	2	4	2	—	—	1	1	3	—	4	—	2	1	—	—
Nervous Disorders ...	—	—	1	1	—	—	—	—	2	—	—	—	1	—	—	—
Phthisis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other T.B. Disease ...	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Rickets... ..	1	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
Spinal Defects ...	—	—	1	—	—	—	—	—	—	—	1	—	1	1	—	—
Other Deformities ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Defects ...	1	—	2	2	—	—	—	—	—	—	1	—	1	1	—	—
Teeth	—	111	—	101	—	40	—	37	—	129	—	76	—	44	—	34
Number of Children for treatment ...	141		142		67		64		158		118		68		70	

Defects, however slight, are included under "Cases." Those severe enough to require treatment are shown under +.

Deaths of Children, 5-15 years, 1928.

Eight children (one boy and seven girls) from 5 to 15 years of age died during 1928. One death, male, 5 years, was from diphtheria; two deaths, ages 6 and 13 years, were from pneumonia; one, age 6 years, was due to measles; one, age 5 years, to rheumatic fever, and three, ages 6, 10, and 12 years, to other diseases.

SANITARY ADMINISTRATION.*Public Mortuary.*

The Public Mortuary provided by the Council is situated in Goldsmith Street. During the year 32 bodies were deposited. There were 25 post mortem examinations made, and 9 inquests held. The inquests are held in the Court Room at the Town Hall. On 4 occasions bodies awaiting burial were removed to the mortuary on account of inadequate accommodation in the homes; 28 bodies were brought in by order of the Coroner.

Inquests.

During the year 28 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, 3; Accidents, 8; Suicide, 10; Misadventure, 7.

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, 1920-1923.

Three applications were received during the year for certificates under the above Acts that a house was not in all respects reasonably fit for human habitation or otherwise not in a reasonable state of repair. In all cases certificates were 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. In accordance with this requirement three informations of nuisances were received from the Relieving Officers during the year, dealing with the dirty condition of rooms, overcrowding and offensive smells arising from the improper keeping of cats and dogs. Steps were at once taken to secure the abatement of the nuisances referred to.

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.

Demolition of Old Buildings.

The London County Council (General Powers) Act, 1927, gives power to the London County Council to make by-laws in relation to the demolition of old buildings within the County, exclusive of the City of London and the places known as the Inner and Middle Temple.

Pending the making of the by-laws a series of suggestions for the prevention of nuisances arising from such demolitions was prepared for use in Holborn.

The following is a copy of the suggestions referred to:—

1. Provide and fix proper fans at first floor level and other floors if necessary.
2. Board up window openings from which sashes and glass have been removed.
3. Pull down internal partitions storey by storey before taking down external walls of the respective storeys.
4. Provide canvas or other suitable screens where necessary to prevent nuisance from dust.
5. Before and during the process of demolition and during subsequent removal all dust and material should be freely sprayed with a hose and rose jet.

6. So far as practicable any process connected with the demolition likely to cause nuisance from dust should not be carried out during ordinary business hours, particularly if the building to be demolished is in a main thoroughfare.

7. On completion of demolition all necessary steps should be taken effectually to seal off all drains so as to prevent any nuisance from rats.

In connection with the power now conferred on the London County Council to make these by-laws, it may be of interest to recall that as long ago as the year 1915 the Holborn Council asked the Local Government Board to sanction the making of a by-law to control the demolition of old buildings with a view to the prevention of nuisances from dust. The Board was unable to assent to the proposal and suggested that proceedings should be taken for the abatement of any such nuisance under Section 2 of the Public Health (London) Act, 1891. Subsequently proceedings were so taken, the summons being dismissed by the Magistrate at the Police Court on the ground that the nuisance did not arise within Section 2 of the before-mentioned Act.

By-laws dealing with the subject have been drafted by the London County Council, and submitted to the Borough Councils for their observations. A communication has been received (March, 1929) stating that the London County Council is taking steps to ascertain whether, subject to the consideration of any objections which they may receive if and when the by-laws have been made, the Minister of Health would be prepared to confirm the by-laws.

Nuisance from Pigeons.

The London County Council (General Powers) Act, 1927, gave power to Local Authorities in London to take steps for the purpose of abating or mitigating or preventing or minimising any nuisance, annoyance or damage caused, or which might be caused, by the congregation at any place in the County of London of house doves or pigeons having, or believed by the Local Authority to have, no owner. The Act gave power to Local Authorities to seize, destroy and sell or otherwise dispose of such doves or pigeons in excess of such number as the Authority might consider reasonable.

In Holborn, pigeons have, from time to time, given rise to nuisance. It was found that a large number of such pigeons lived on and around the British Museum buildings, and H.M. Office of Works expressed willingness to co-operate with the Council in dealing with the matter. Nuisances from similar sources were also found to exist on certain churches and in connection with some other buildings in the Holborn area.

Arrangements were made with a contractor to undertake the work of reducing the number of ownerless pigeons in the Borough by one-half. The arrangement included provision for all the pigeons caught in the Borough to be brought to the Council's depot and killed in the presence of a member of the Public Health staff. No ringed birds were trapped. There is considerable difficulty in trapping pigeons on the public highway in central London areas. To facilitate the work in Holborn sanction was given by H.M. Office of Works for the Contractor employed by the Council to operate in the enclosed forecourt of the British Museum. The Authorities of two of the churches principally affected also extended their co-operation by giving permission for the Contractor not only to use the churchyards, but to enter the towers of the churches where trapping could be more effectively accomplished. In addition to the actual catching and killing

of live birds, a considerable number of eggs found by the Contractor at various nesting places in the Borough were brought in and surrendered. Advice was given respecting the fixing of wire netting on the openings to belfries so as to prevent pigeons entering the church towers for nesting purposes. In addition, we were informed, at one of the churches a man employed by the Church Authorities successfully trapped a considerable number of pigeons. As a result of the action taken the number of pigeons frequenting public buildings in the Borough was materially reduced. In order that the birds should be kept down to a reasonable number the Contractor is returning to the Borough at intervals for further periods of work.

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.

Arrangements were continued with the co-operation of the Library Committee for distribution of two bookmarks, one for adults and one for children. On the front information was given as to health and education facilities afforded by the Council, on the back of the bookmark for adults information was contained respecting the arrangements for the prevention of diphtheria by immunisation; the back of the children's bookmark contained hints to boys and girls as to how to keep healthy.

In the early part of 1928, arrangements were made with the approval of the Education Authority and the Head Teachers for a copy of the children's bookmark to be distributed to children attending elementary schools in the Borough. Some of the Sunday schools also co-operated by arranging for the bookmarks to be used in connection with their school lending libraries.

Leaflets on health subjects were issued, as in previous years, for distribution by means of "Please take one" boxes in the public conveniences for men and women.

The London County Council (General Powers) Act, 1926, gives power to Metropolitan Local Authorities to arrange for the publication of information of questions relating to health or disease and for the delivery of lectures and the display of pictures in which such questions are dealt with. This power should be of much use in the dissemination of knowledge of health subjects.

In the Borough of Holborn we have, from time to time, made use of pictorial propaganda to the limited extent permissible before the passing of this Act. It is all to the good that essential health requirements should be presented in pictorial

form in order that such teaching may be absorbed and made part of the belief and life, not only of children but of young children and even adults.

Noise.

To the tired worker solitude in pastoral scenes on the moor or mountain side or by the sea brings the peace and repose that comes from quietude. This is an age of noise; we have grown up without noticing its gradual increase. In industrial pursuits the harmful effects of excessive noise on the hearing and the part it plays in producing fatigue are well known: in so far as they are unavoidable, they represent one of the costs of industrial civilisation. Are the noises of the city highway, in any serious measure, harmful to health? Many street noises are unrhythmic, discordant, varied in quality, pitch and intensity and, above all, unpredictable. The sudden unexpected screech of the hooter, the rattling of the heavy omnibus, of the laden lorry, the unexpected explosion of the exhaust of the motor vehicle overstimulate and call up unnecessarily the sense of hearing and exhaust the brain; the noisiness of London means an enormous drain of energy even from those who are not acutely conscious of the noise as a nuisance, but who, nevertheless, all the while are unconsciously putting up a resistance to it. These noises harm the passers-by whose brains are not concentrated on work; the office worker must perforce take steps to combat the insufferable nuisance. The windows must be kept closed, with all the consequent disadvantages of discomfort ensuing on inadequate ventilation. This precaution does not always suffice in the case of professional men grappling with vital and intricate problems; the disturbance of intensive concentration causes irritation and the consequence is fatigue. Thousands of people work late at night and right through the night hours, sleeping as best they can during the daytime when noises and sounds prevent the unbroken sleep which is needed to give the body perfect rest so that it can store up energy for the working hours.

For the sick and convalescent in hospitals and nursing homes, quiet is imperative at all times: for these sufferers zones of silence must be enforced. Legislation already exists to deal with certain objectionable noises; soon it will be extended to motor traffic. A responsible Conference has recommended the making of a regulation* under the Motor Car Acts to deal with extensive and avoidable noise from motor vehicles which are badly constructed, badly loaded or in faulty condition. The Conference agreed that the excessive use of horns and their nerve racking noise constituted a legitimate grievance. Other remedies worthy of consideration are the placing of white lines across the opening of side roads into main roads to obviate hooting, the limitation of weight and bulk of goods carried by road, the control of the speed and hours of work of lorries, the prohibition of the sale of motor cycles without effective silencers, the prohibition of the use of pneumatic drills at night in proximity to occupied dwelling houses. Much is to be said in favour of the total prohibition of such drills on the ground of the injury to health caused to the workmen using them. A comprehensive measure would be the inclusion of all excessive and avoidable noise, whatever its source, as a nuisance with which sanitary authorities were empowered to deal under new Public Health legislation.

*Regulations have now been made and come into force on Aug. 1st, 1929.

APPENDIX.

TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1928 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	310	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	13.36	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	585	12.38	620	14.6	454	347	48	90	522	12.1
1927	42,209	320	505	11.96	728	17.2	531	333	19	38	530	12.5
1928	39,280	301	473	12.0	739	18.8	546	338	27	57	531	13.5

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, 1928.

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	331	27	11	12	8	20	53	175	130	95	
{ Uncertified ... ..	...	...	...	...	...	...	...	...	...	...
1. Enteric Fever ... ..	...	...	...	...	...	...	...	...	...	...	1
2. Small-pox ... ..	...	...	...	...	...	...	...	...	...	...	...
3. Measles	8	1	2	4	1	...	...	...	...	...	1
4. Scarlet Fever ... ..	...	...	...	...	...	...	...	...	...	...	...
5. Whooping Cough	4	...	4	...	...	...	...	...	...	...	2
6. Diphtheria and Croup	2	...	...	1	1	...	...	...	...	...	2
7. Influenza	3	...	...	...	...	...	1	...	2	...	...
8. Encephalitis Lethargica ... ..	...	...	...	...	...	...	...	...	...	...	2
9. Meningo-coccal Meningitis	1	1	...	...	...	...	...	...	...	...	4
10. Tuberculosis of Respiratory System	41	...	...	...	...	8	13	20	...	...	19
11. Other Tuberculous Diseases	6	...	2	1	...	1	...	2	...	...	43
12. Cancer, malignant disease	66	...	...	...	...	...	5	35	17	9	52
13. Rheumatic Fever	1	...	...	...	1	...	...	...	...	...	6
14. Diabetes	6	...	...	...	...	...	1	3	2	...	5
15. Cerebral Hæmorrhage	24	...	...	...	...	...	...	8	8	8	14
16. Heart Disease	74	...	...	...	...	2	5	22	27	18	24
17. Arterio-sclerosis	37	...	...	...	...	...	...	3	14	20	3
18. Bronchitis	52	...	...	...	...	...	1	12	19	20	9
19. Pneumonia (all forms)	50	4	3	3	2	1	6	15	13	3	73
20. Other Respiratory Diseases	7	...	...	1	...	...	...	6	...	...	10
21. Ulcer of Stomach or Duodenum	7	1	...	...	...	...	1	3	2	...	4
22. Diarrhoea, etc.	7	6	...	...	...	...	...	...	...	1	47
23. Appendicitis and Typhlitis	3	...	...	1	...	...	2	...	...	...	3
24. Cirrhosis of Liver	4	...	...	...	...	...	...	4	...	...	8
25. Acute and Chronic Nephritis	18	...	...	...	...	2	4	9	2	1	17
26. Puerperal Sepsis	1	...	...	...	...	1	...	...	...	...	1
27. Other accidents and diseases of Preg- nancy and Parturition ... ..	...	...	...	...	...	...	...	...	...	...	...
28. Congenital Debility and Malformation, Premature Birth	11	10	...	...	...	1	...	...	...	...	58
29. Suicide	12	...	...	...	...	...	6	4	2	...	2
30. Other Deaths from Violence	11	...	...	...	...	1	1	4	1	4	5
31. Other Defined Diseases	75	4	...	1	3	3	7	25	21	11	160
32. Causes ill-defined or unknown ... ..	...	...	...	...	...	...	...	...	...	...	...
	531	27	11	12	8	20	53	175	130	95	575

TABLE III.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1928.

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	1	..	...	...	1	...	..	...	...	1	1
Diphtheria (including Membranous Croup) ...	57	1	12	19	15	9	1	...	11	46	57
Erysipelas	23	...	...	1	3	9	7	3	11	12	16
Scarlet Fever	111	1	30	54	12	13	1	...	47	64	108
Enteric Fever	10	...	1	...	2	4	2	1	8	2	10
Puerperal Fever	4	...	...	...	1	3	...	...	3	1	3
do. Pyrexia	7	...	...	...	3	4	...	..	3	4	4
Cerebro-spinal Fever ...	1	1	...	..	...	...	...	...	...	1	1
Ophthalmia Neonatorum	10	10	...	...	...	...	...	...	1	9	3
Dysentery	2	1	...	...	1	...	...	..	1	1	2
Malaria	1	...	...	...	...	1	...	...	1	...	...
Pneumonia—Primary ...	49	2	7	4	4	12	15	5	19	30	30
do. Influenzal ...	10	...	...	1	4	2	2	1	3	7	3
*Tuberculosis—Pulmonary	91	...	1	5	13	44	26	2	41	50	61
do. Non-Pulmonary	14	...	4	3	2	3	2	...	6	8	7
Whooping Cough ...	104	15	57	32	...	...	...	...	17	87	52
Acute Poliomyelitis ...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...
	495	31	112	119	61	104	56	12	172	323	357

* Less 1 withdrawn.

TABLE IV.
INFECTIOUS DISEASES IN HOLBORN FOR THE LAST ELEVEN YEARS.

	NOTIFICATIONS						DEATHS					
	Decennial Average, 1918-1927			Year 1928			Decennial Average, 1918-1927			Year 1928		
	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	1	0.02	0.07	0	0.00	0.00	0	0.00	0.00
Diphtheria	96	2.31	2.72	57	1.45	2.74	4	0.10	0.17	2	0.05	0.09
Erysipelas	17	0.42	0.45	23	0.58	0.48	...	...	0.02	...	...	0.02
Scarlet Fever	96	2.27	3.37	111	2.82	3.45	1	0.03	0.04	0	0.00	0.02
Enteric Fever	4	0.09	0.08	10	0.25	0.13	0.5	0.01	0.01	0	0.00	0.01
Cerebro-spinal Fever	1	0.02	0.03	1	0.02	0.02	...	...	...	0	0.00	0.01
Acute Poliomyelitis	1	0.02	...	0	0.00	0.01	...	...	...	0	0.00	0.00
Whooping Cough†	78	2.33	...	104	2.64	...	5	0.11	0.16	4	0.10	0.09
Measles‡ ... ..	...	...	...	...	...	...	5	0.11	0.18	8	0.20	0.30
Tuberculosis—Pulmonary	85	2.07	...	91	2.32	1.52	51	1.24	1.09	41	1.04	0.89
Ditto Non-Pulmonary	16	0.37	...	14	0.36	0.40	8	0.18	0.17	6	0.15	0.14
Puerperal Fever*	2	5.89	3.44	3	21.35	4.09	1	2.57	...	1	2.11	1.60
Ditto Pyrexia ... ..	...	...	...	7	...	10.67	...	...	...	...	...	...
Ophthalmia Neonatorum*	7	14.42	9.36	10	21.35	10.19	...	...	...	...	...	...
Diarrhoea (under 2 years)*‡ ... ..	...	...	...	...	...	...	8	12.95	11.98	6	12.62	10.32

* 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 ... ..	...	...	...
Milkshops	129	96	...
Registered houses let in lodgings ...	515	884	...
Ice cream premises	44	223	...
Slaughter-houses	1	2	...
Offensive Trades ... ..	...	...	...
Restaurants and Eating Houses ...	244	405	...
HOUSING OF THE WORKING CLASSES—			
Number of houses inspected:—			
(a) On account of complaints or illness (Public Health Act)	...	...	} 1090
(b) House to house (Housing Consolidated Regulations, 1925)	...	...
Number of notices served:—			
(a) Under Public Health Act:—			
(i.) Intimation ... ..	...	...	436
(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 ... ..	...	...	2
Number of houses included in such representations ... ..	...	...	2
Number of Closing Orders made ... ..	...	...	2
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 (Census, 1921)
Number of houses occupied by the working classes ... ..	...	...	8571 tenements (Census, 1921)
UNDERGROUND ROOMS—			
Number illegally occupied, notices served ... ..	...	...	3
Number closed or illegal occupation discontinued ... ..	...	...	3
OVERCROWDING—			
Number of cases of overcrowding found; notices served ... ..	...	...	2
Number of prosecutions ... ..	...	...	0
Number remedied ... ..	...	...	2
SMOKE NUISANCES—			
Number of observations ... ..	...	...	432
Number of notices ... ..	...	...	5
Number of complaints ... ..	...	...	0
Number of summonses ... ..	...	...	0
CLEANSING AND DISINFECTION—			
Number of adults cleansed ... ..	...	...	135
Number of children cleansed ... ..	...	...	0
Number of premises disinfected:—			
(a) After infectious diseases ... ..	...	...	408
(b) For vermin ... ..	...	...	70
WATER SUPPLY TO TENEMENT HOUSES—			
Number of premises supplied ... ..	...	...	3
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	466	19	3	...
Workshops	765	59	7	...
Workplaces	3,557	51	1	...
Total	4,788	129	11	...

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	39	39	...	...
Want of ventilation ... ..	...	...	...	...
Overcrowding	1	1	...	...
Want of drainage of floors ... ..	...	...	...	...
Other nuisances	72	72	...	...
Sanitary accommodation {	insufficient	3	3	...
	unsuitable or defective	63	63	...
	not separate for sexes... ..	8	8	...
OFFENCES UNDER THE FACTORY AND WORKSHOP ACT :				
Illegal occupation of underground bakehouse (S. 101) ... ..	...	...	...	...
Breach of special sanitary requirements for bakehouses (SS. 97 to 100) ... ..	...	...	...	...
Other offences (excluding offences relating to out-work which are included in Part 3 of this Report) ... ..	...	...	...	...
Total	186	186	...	...

* 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.	110	263	268	2	9	...	110	...	...	...	...	...	...	...	...
(2) Cleaning and Washing ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Racquet and Tennis Balls ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Coathangers ... ..	...	...	...	1	...	3	...	...	...	...	...	...	...	...	...
Paper Bags and Boxes ...	2	...	13	...	...	...	2	...	...	...	...	...	...	...	...
Total	112	263	281	3	9	3	112	...	...	...	...	...	...	...	...

TABLE VI.—continued.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at the end of the year.	Number.
(1)	(2)
Bakehouses (including 16 factory bakehouses)	24
Other Workshops	616
Total number of workshops on Register	640

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) ...	13
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) ...	22
	22
Other... ..	—
Underground Bakehouses (S. 101) :—	
Certificates granted during the year	—
In use at the end of the year	14

TABLE VII.

METEOROLOGY OF LONDON 1928.

(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.m.
January ...	47.5	36.0	41.7	+3.2	1.41	+0.17	17	77	+34
February ...	50.7	36.5	43.6	+3.8	2.84	+0.80	29	30	-10
March ...	52.2	37.5	44.9	+2.4	3.13	-0.27	27	43	-1
April ...	56.7	39.6	48.1	+0.5	4.12	-0.90	30	35	-2
May ...	62.4	43.7	53.1	+0.9	5.02	-1.45	32	63	+19
June ...	68.7	47.3	58.0	-1.9	7.29	+0.59	44	58	+7
July ...	79.0	54.7	66.9	-3.4	9.35	+2.85	58	54	-3
August ...	72.9	52.5	62.7	+0.1	6.46	+0.26	45	72	+16
September ...	68.3	46.0	57.1	-0.9	7.03	+2.08	56	17	-28
October ...	60.1	43.5	51.8	+1.6	3.46	+0.34	32	88	+24
November ...	53.0	41.8	47.4	-3.4	1.67	-0.05	19	45	-13
December ...	43.5	33.5	38.5	-1.7	0.89	-0.17	11	61	+4
Year... ..	59.6	42.7	51.1	+1.0	4.39	-0.34	33	643 or 25.07 ins.	+47 or +1.83in.

*The averages used are obtained from observations extending over 35 years (1881-1915).

Ultra-Violet Rays.

Thanks to the work of Dr. Leonard Hill and others, figures are available showing the amount of biologically-active ultra-violet rays present in London and certain other towns throughout the year. The measurements are taken "by the amount of fading produced in a standard solution of acetone and methylene blue . . ." The amount of fading of the solution at the end of 24 hours is measured by comparison with a set of standard tubes numbered 10 to 3, of varying depths of blue, fixed and unbleachable. The degrees of this colour scale are equal and biologically standardised. One degree of the scale is equal to two to four times the dose required to produce a slight sunburn, the sensitivity of the skin varying in individuals. The particular wave length of ultra-violet rays which are absorbed by and fade the acetone blue solution, closely correspond to those which are active in producing sunburn of the skin and in activating ergosterol in the skin and so forming vitamin D (antirachitic). The table following gives the daily average for the various months in the year in some of the towns where records are taken. It will be seen that Central London (Kingsway) and Hull show low readings.

The figures show that the ultra-violet rays do not penetrate a smoky atmosphere in sufficient quantities to be of practical value, and they lend weight to the contention that the limited ultra-violet rays in town are often not used to the greatest advantage. The majority of town dwellers spend the best hours of daylight behind windows of ordinary glass, so that even the ultra-violet rays that do penetrate the smoke laden atmosphere remain obscured to the indoor dweller or worker. This condition would be improved by the more general use of glass permeable to ultra-violet radiation. At the same time it should be understood that the use of such glass would not make less urgent the need for every possible step to be taken for the abatement and avoidance of smoke nuisances; the fact that ultra-violet radiation is reduced by smoke in industrial areas is but an additional reason why the small amount that does get through should be used to the greatest advantage.

TABLE VIII.

SUNLIGHT (ULTRA-VIOLET RAYS), 1928—DAILY AVERAGE

Kindly supplied by Professor Leonard Hill, M.B., F.R.S.

	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
London— Hampstead	0.79	1.40	1.38	2.00	4.71	6.81	15.83	10.19	6.10	1.92	0.90	0.50
Kingsway	0.61	1.24	1.13	1.65	1.61	3.00	6.84	4.37	2.4	0.86	0.36	0.16
Lowestoft	1.55	1.68	1.90	2.56	3.51	4.70	10.93	13.00	12.8	4.51	2.13	1.87
Ventnor	1.56	1.93	2.15	2.81	3.72	10.60	23.27	15.03	12.16	5.66	2.55	2.40
Hull	0.40	0.50	0.63	1.22	1.69	2.20	2.76	2.11	1.52	0.66	0.42	0.21

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.

SALE OF FOOD AND DRUGS ACTS, 1875-1907.

Date.	Name.	Address.	Offence.	Result.
1928 Mar. 8	PETER SERVINI	49, Mount Pleasant...	Selling tinned beans containing colouring matter	Dismissed on payment of 42s. costs
Apr. 25	E. PREVIDI ...	11, Museum Street ...	Selling milk 24.3% abstracted fat	Dismissed under P.O. Act, £2. 2s. costs
July 2	HEPELLS, LTD.	49, New Oxford St.	Selling glycerine of borax 61.5% deficient in borax	Defendant convicted and fined £5
Sept. 28	W. D. DAVIES	26, Frith Street ...	Selling milk 15% abstracted fat	Dismissed under P.O. Act on payment of £3. 3s. costs
Oct. 24	DAVID GREIG, LTD.	84, Leather Lane ...	Selling sau-ages containing a preservative without being labelled	See summons for exposing. Withdrawn on payment of costs
Oct. 24	do.	do.	Unlawfully exposing for sale by retail, sausages containing a preservative, without a notice to that effect	Withdrawn on payment of 21s. costs

PUBLIC HEALTH (LONDON) ACT, 1891.

Date.	Name.	Address.	Offence.	Result
1928 Apr. 25	R. MAJUMDAR ...	Caledonian Hotel, Harpur Street	Accumulation of refuse, defective skylights, area undrained, ventilation of bedrooms	Order made to abate within 21 days
Aug. 8 & Sept 19	W. FENEMORE ...	24, Devonshire Street	Waste pipe of sink connected to rain-water pipe	Summons withdrawn on payment of 5s. costs
Sept. 19	do. ...	do. ...	Failure to deposit plans and particulars of proposed addition of certain pipes	Summons withdrawn on payment of 5s. costs
Nov. 5	W. J. NICHOLLS ...	50, Devonshire Street	Accumulation of refuse, roof defective	Work done, ordered to pay 10s. 6d. costs
Nov. 5	do. ...	52, Devonshire Street		

