

**[Report of the Medical Officer of Health for Acton].**

**Contributors**

Acton (London, England). Borough Council.

**Publication/Creation**

[1926]

**Persistent URL**

<https://wellcomecollection.org/works/wqrytedy>

**License and attribution**

You have permission to make copies of this work under a Creative Commons, Attribution, Non-commercial license.

Non-commercial use includes private study, academic research, teaching, and other activities that are not primarily intended for, or directed towards, commercial advantage or private monetary compensation. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

ACT 28  
1925

Borough of Acton

---

# ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1925.

1925

Borough of Acton

---

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1925.



# ANNUAL REPORT

OF THE  
MEDICAL OFFICER OF HEALTH  
FOR THE YEAR 1925.

MUNICIPAL OFFICES,  
ACTON, W.3.

June, 1926.

*To the Mayor, Aldermen and Councillors  
of the Borough of Acton.*

LADIES AND GENTLEMEN,

I beg to submit the Annual Report for the year 1925, on the health of the Borough, together with the work of the Public Health Department.

The report is a Survey Report which has to be submitted every five years. The Ministry of Health has issued a Memorandum as to the contents and arrangement of the report, and as far as possible the suggestions contained in the Memorandum have been adopted. For these reasons the Report is longer than the ordinary Annual Report, and certain activities of the Council have been considered at length.

The following table is a summary of the vital and other statistics for the year 1925.

Population (Census, 1921) ... ..	61,299
Population (Estimated, 1925) ... ..	63,110
Area of Borough ... ..	2,305 acres
Assessable Value (District Rate) ...	£489,535
Net Produce of a Penny Rate ... ..	£2,021
Birth Rate ... ..	16.6 per 1,000 inhabitants
Death Rate (all causes) ... ..	10.6 " "
Tubercular Death Rate ... ..	.9 " "
Death Rate from Pulmonary Tuberculosis ... ..	.74 " "
Cancer Death Rate ... ..	1.25 " "
Infantile Mortality ... ..	76 per 1,000 births
No. of inhabited houses (1921) ... ..	11,503
No. of families or separate occupiers (1921) ... ..	14,941

## POPULATION.

The Registrar-General estimates the population at the end of June, 1925, to be 63,110, an increase of 180 on the population of the previous year. At the Census which was taken on June 19th, 1921, the actual number enumerated in the district was 61,299. Owing to the abnormally fine weather in the summer of that year, some holiday movement was already in progress, and the Registrar-General, from figures at his disposal, made certain adjustments in the population of certain districts. The adjusted figure for Acton was 62,000. The estimated increase in the population since the Census is 1,110.

It is always difficult to estimate a population, and under present conditions estimation is made increasingly difficult. With a falling birth-rate, one would naturally expect a smaller average number of persons living in each house, but in the intercensal period 1911-1921, this expectation was not fulfilled. It is true that the average number of persons per family was 4.05 in 1921, as compared with 4.41 in 1911. But the average number of persons per house probably did not undergo much change in that period because although there was an increase of only 810, or 7.5 per cent. in the number of total dwellings in the district, there was in the same period an increase in the number of private families of 2,012, or 15.6 per cent.

Between April 1st, 1921, and October, 1925, 853 dwellings have been erected; that is, more dwellings have been erected since the Census than were erected in the intercensal period 1911-1921.

The increase in the population during the last intercensal period was 3,802 inhabitants. There is another method of estimating the value of the Registrar-General's estimates of the population.

The following table gives the increase in the total number of Parliamentary electors since 1921 :—

1921	...	...	...	...	30,350
1922	...	...	...	...	30,425
1923	...	...	...	...	31,394
1924	...	...	...	...	31,999
1925	...	...	...	...	32,776

Between the autumn of 1921 and the autumn of 1925, there has been an increase of 2,426 in the number of Parliamentary electors.

It is possible that an increase in the number of persons living at a certain age-period may be disproportionate to the increase in the rest of the population. Both a falling birth-rate and migration in and out of a district might have the effect of an altered distribution in the population at different age-groups. These two factors are in operation in this district, but not to such an extent as to limit the increase of population to one age-period.

The probability is that the estimate of the Registrar-General is too low, and that the population of the district exceeds 63,110.

### GENERAL AND SOCIAL CONDITIONS.

The district is divided into four Wards—North-East, North-West, South-East and South-West.

Almost all the area included in the South-East and South-West Wards has been developed and the available space built upon. There is some undeveloped land in the North-East and North-West Wards, but it is being rapidly developed for residential as well as factory purposes.

The whole district has a density of about 27 persons per acre. In the North-East Ward there are 16 persons to the acre; in the North-West 17; in the South-East 60; and in the South-West Ward 97 persons to the acre.

The district is partly industrial and partly residential. At the present time it cannot be said that one of the Wards is entirely residential.

The North-West and South-East Wards are almost entirely residential in character.

The South-East Ward comprises Bedford Park and there are only a few factories in the Ward and these are along its borders.

The North-West Ward is also almost entirely residential, and most of the factories are situated in the extreme north-west corner of the Ward.

The South-West Ward contains most of the laundries of the district, and though the laundry industry is not now the most important and in which the highest number is employed, it still is an important factor in the social and industrial conditions of the district. The industry at the time of the Census gave employment to 286 men and 1,827 women.

Most of the large factories are situated in the North-East Ward. In the Vale are situated large engineering and dyeing works, and in the northern part of the Ward, engineering and other works have recently been established. The Ward has a large number of workers engaged in transport work.

The following table gives the principal occupations of the inhabitants of the district in June, 1921 :—

	<i>Males.</i>	<i>Females.</i>
Metal Workers ... ..	2,768	—
Transport Workers ... ..	2,729	152
Commercial and Financial Occupations	2,413	843
Clerks, Draughtsmen, Typists, etc. ...	1,597	1,437
Builders, Bricklayers ... ..	934	—
Public Administration and Defence ...	901	439
Wood and Furniture Workers ... ..	851	—
Persons employed in Personal Service ...	866	4,160
Professional Occupations ... ..	748	617
Electricity—makers, fitters, etc.... ..	544	—
Makers of Textile Goods and Articles of Dress ... ..	341	693

#### POOR RELIEF.

I am indebted to Mr. Harmsworth, the Clerk of the Guardians, for the figures relating to Poor Law Relief.

The amount of out-door relief given by the Guardians for the Parish of Acton in the year ended December 31st, 1925, was :—

	£	s.	d.
Ordinary Relief ... ..	7,568	18	4
Unemployed Relief ... ..	982	16	0
	<hr/>		
	£8,551	14	4
	<hr/>		



## HOSPITAL PROVISION.

**General.**—The Acton Hospital, Gunnersbury Lane, provides for the treatment of Medical and Surgical cases of both sexes. It is maintained chiefly by voluntary subscriptions, and the number of beds is 50 ; 983 in-patients and 4,940 out-patients were treated in 1925.

Owing to our proximity to London, probably the general hospitals of London are utilised by the residents to a greater extent than the Acton Hospital. Last year 63 residents died in the general hospitals of London compared with 37 deaths of residents in the Acton Hospital. The 63 deaths were those which occurred in voluntary hospitals in London and did not include those who died in public hospitals such as Tuberculosis Sanatoria, Mental Hospitals, Infirmaries or Nursing Homes ; 260 deaths or nearly 39 per cent. of the total deaths occurred in public institutions. This number does not include deaths in nursing homes. The tendency in the district is to utilise Hospitals and Nursing Homes to a greater extent in every succeeding year. In most instances this is due to want of accommodation in the homes. Even where the family occupies the whole house, there is not sufficient accommodation in many of the houses which are now being built, for the efficient nursing and treatment of severe illnesses.

**Fever.**—The Council has its own fever hospital, which has accommodation for 80 patients.

The Borough is one of the constituent bodies which form the Middlesex Joint Smallpox Board. The Board owns Clare Hall Sanatorium which can be utilised in case of epidemics. The Joint Board has an arrangement with the Metropolitan Asylums Board for the treatment of occasional cases of Smallpox.

**Tuberculosis.**—The Tuberculosis scheme is administered by the Middlesex County Council, which has Sanatoria at South Mimms and Harefield.

**Poor Law.**—The district is in the Brentford Poor Law Union, and the Infirmary is at Isleworth.

### Clinics and Treatment Centres.—

Child Welfare Consultation Centres—(a) Church Road.  
(b) Palmerston Road.

Every Monday and Wednesday afternoon at 2.

Ante-Natal Consultation Centre—School Clinic every other Wednesday morning at 11.

Day Nursery—Bollo Bridge Road.

School Clinic—Adjoining Municipal Offices.

The above are provided and maintained by the Borough Council.

Tuberculosis Dispensary—School Clinic on Tuesday and Thursday.

Treatment Centres for Venereal Diseases—Various hospitals in London.

The two latter are provided by the Middlesex County Council.

### PROFESSIONAL NURSING IN THE HOME.

**General.**—There are two district nurses employed by the Acton Hospital. One of them is primarily engaged in district nursing and during the year 89 persons availed themselves of her services. The other is engaged to nurse patients who have been discharged from the hospital.

When the second nurse was engaged, it was understood that her services would be available, on suitable terms, for the nursing of Measles cases. During the late epidemic, her services were not called upon, as the Council was able to treat in the Fever Hospital any cases, the home conditions of which were, in the opinion of the doctor attending, such as rendered removal to hospital desirable.

**Midwives.**—There are six midwives practising in the district. The Council pays the fees of the midwives in certain necessitous cases, and last year £6 19s. 6d. was paid in fees to midwives.

## AMBULANCE FACILITIES.

(a) **For Infectious Cases.**—The Council has a Motor Ambulance in which all cases of infectious disease are removed to hospital. The ambulance is housed in a garage at the Fever Hospital.

(b) **For Non-Infectious and Accident Cases.**—Last year the Council obtained its own ambulance for the removal of accident and non-infectious cases. Previously there was an arrangement for the use of the Chiswick Council Ambulance, and subsequently for the use of the Ealing Council Ambulance to remove cases of street accidents to hospital. The frequency of street accidents, especially in the main streets, compelled these Councils to terminate their agreements, and the Council provided its own ambulance. The Ambulance is housed in a garage at the Fire Station, and is available at all hours. Between March 1st and December 31st, the Ambulance was used on 301 occasions—140 cases of street accidents were removed, and the ambulance was hired on 161 occasions for the removal of cases of illness to or from hospitals, nursing homes, etc.

## HOUSING.

Owing to the changing character of the population of the district the housing problem has become a more difficult and complex one. In former years, with the exception of the Laundry trade, there was no industry in the district which employed any considerable number of people. Like most extra Metropolitan areas, Acton was a dormitory of London. In the large majority of districts around London, the net movement in the day is outward. Acton is a notable exception to most of the districts in Greater London. It is the only area with a population of over 50,000 inhabitants in the Home counties outside the Metropolitan area where more people come in daily to work than go out. At the Census, 13,346 residents left the district daily to follow their usual occupations, and 14,575 came in for the same purpose.

Owing to the development of the northern part of the town for factory purposes, this phenomenon has become more marked since the Census. These figures alone tend to show that the Council's scheme would not solve the housing problem as it exists in Acton, and emphasise the necessity of a larger and more comprehensive scheme, which would include not only Acton, but also the other neighbouring authorities. There is no doubt as to the shortage of houses, and the Health Department constantly comes across cases of overcrowding, but in many instances these cases result from the emigration of people into the district to follow their employment.

The district is not a self-contained one, and a study of the Census figures would show that the action of the Council would not solve the housing question. The building of the houses in East Acton enabled a certain number of residents to obtain a better type of house than they had hitherto enjoyed, but it cannot be said to have relieved the overcrowding, or overcome the shortage. The houses vacated by the fortunate few who obtained houses in East Acton were at once occupied by others, in some instances by people living up to that time outside Acton, and to this extent the building of the houses has attracted a certain class of residents to the district, but has not contributed towards satisfying the demands of every type of resident. It may quite fairly be stated that employers of labour and others have done practically the same thing. The Great Western Railway Company have erected 100 houses, and have 15 more in course of erection. Mond, Nickel Company have completed 16 houses, and have 4 more in course of erection. The Goldsmith Company propose to erect dwellings for people engaged in clerical work.

All these Companies have a definite object in view, the accommodation of certain men who are engaged in a particular occupation, or of a certain social position. It is doubtful if the houses can be built at an economic rent. At any rate, it was contended that the Council could not build the type of houses originally intended at an economic rent.

These, and possibly other considerations, caused the Council to abandon the idea of completing the development of the estate which was bought in East Acton, and most of the undeveloped land has been rented or sold to private individuals. The Council from the commencement, adopted the policy of renting or selling the land at North Acton.

On the East Acton estate the Council erected 320 houses, together with 9 army huts. The Council also bought and converted 3 flats in Bollo Bridge Road. So that altogether the Council erected 332 dwellings.

At the housing inquiry which was held last year, the following table was submitted to the inspector of houses erected in the district since the War :—

By the Council under the Housing Acts ...	332
By private enterprise on Council land ...	152
By private enterprise on other land ...	490

The sale of the land to private individuals does not mean any slackening in the rate of building; in fact, since the Council has ceased operations, the erection of houses has proceeded at a greater pace. It would be unfair to assume that the acceleration in the erection of houses lately has resulted simply because the Council has ceased building. Other factors have come into operation. It may be interesting, though, to show the comparative activities of the Council and private individuals at different times.

					<i>Houses erected</i>	
					<i>Council</i>	<i>Private</i>
1918	...	...	...	...	...	None
1919	...	...	...	...	...	None
					<i>Council</i>	<i>Private</i>
April 1st, 1920, to April 1st, 1921	...	...	...	...	81	59
April 1st, 1921, to April 1st, 1922	...	...	...	...	133	34
April 1st, 1922, to April 1st, 1923	...	...	...	...	106	13
April 1st, 1923, to April 1st, 1924	...	...	...	...	12	97
April 1st, 1924, to April 1st, 1925	...	...	...	...	—	248
April 1st, 1925, to October 31st, 1925	...	...	...	...	—	190

**OVERCROWDING.**

(a) **Extent.**—There is no serious overcrowding in the district, but in the course of house to house inspection of the working class houses, cases are found occasionally of one or two children sleeping in a room in excess of the standard prescribed by the houses-let-in-lodgings bye-laws, namely, 300 cubic feet of free air space for adults, and 150 cubic feet for each child under 10 years.

(b) **Causes.**—The cause is found to be due to the shortage of suitable accommodation for this class of person.

(c) **Measures taken.**—Where any case of overcrowding is found to be serious, the facts are reported to the Public Health Committee, who authorises the service of a Statutory Notice for its abatement. To comply with the Notice, usually the only practical remedy found is for the parents to rearrange the sleeping accommodation, and where this is not possible, to arrange for some of the children to sleep at the houses of relations or friends.

(d) **Principal Cases.**—During the year there were 10 cases dealt with, the majority of which were abated in the manner indicated above.

## FITNESS OF HOUSES.

1. (a) **General Standard of Housing.**—The general standard of housing in this district is, on the whole, good.

(b) The principal defects found to exist are as follows :—

Defective plastering and dirty walls and ceilings.

Dampness from defective roofs, rain water gutterings, etc.

Defective W.C.'s.

Defective sinks and waste pipes.

Defective yard pavings.

Stopped drains.

Defective dustbins.

Defective fire grates and kitchen ranges.

(c) In the case of working class property the rents in most cases are collected by Agents or Rent Collectors, most of whom take little interest in the condition of the premises, but are concerned primarily with the collection of rents. The owners apparently seldom visit their property and appear to wait until they receive an intimation from the Sanitary Authority regarding any matters requiring attention.

Many of the minor defects found are doubtless due to the rough usage of the property by certain of the poorer class tenants.

2. **General Action Taken.**—(a) Notices are served under Sections 36 and 91 of the Public Health Act, 1875, and under Section 82 of the Acton Improvement Act to remedy insanitary conditions.

(b) Notices are also served under Section 3 of the Housing Acts wherever possible, and a considerable amount of work has

been carried out thereunder. In fact, it is the only Section under which the cleansing of walls and ceilings can be asked for, for the reason that it is not necessary to prove that they are in such a state as to be a nuisance, as is required under Section 91 of the Public Health Act, but that "the premises are not in all respects reasonably fit for human habitation." (For details as to the action taken under these Acts, see tabular statement of work done by the Sanitary Inspectors).

3. The principal difficulty found in getting the Council's Notices complied with arises wherever many houses belonging to the same owner are concerned. In such cases, the owner usually contends that it is unreasonable to require him to expend so much money at one time, and frequently he produces in support of his contention a statement showing his net income from the property. Often this income is but a very poor return on the property, and therefore extra time has to be granted for the carrying out of the work, or the less important items are not insisted on at the time, although the owners are pressed with regard to these after a reasonable period has elapsed.

In the inspection of houses from house-to-house, an endeavour is made to avoid, as far as possible, inspecting all the houses belonging to one owner at the same time, so as not to embarrass him financially. It is found much more satisfactory in practice to return to the property after a short time, and deal with the houses which did not come under our operations on the former inspection.

### LEGISLATION IN FORCE.

The following local acts, special local orders, general adoptive acts and byelaws relating to Public Health are in force in the district :—

	<i>Adopted</i>
Infectious Diseases (Notification) Act, 1889 ... ..	1889
Public Health Amendment Act, 1890 ... ..	1890
Infectious Diseases Prevention Act, 1890 ... ..	1893
Notification of Births Act, 1907 ... ..	1907
Public Health Act, 1907 (Clause 50) ... ..	1921
Public Health Act, 1925 (Sections 2, 3, 4 and 5) ... ..	1926
The Acton Improvement Act, 1904	

## BYELAWS.

New Street and Buildings	...	...	...	...	...	1925
Removal of House Refuse	...	...	...	...	...	1899
Common Lodging Houses	...	...	...	...	...	1898
Slaughter Houses	...	...	...	...	...	1898
Nuisances, etc.	...	...	...	...	...	1924
Offensive Trades	...	...	...	...	...	1903
Tents, Vans and Sheds	...	...	...	...	...	1906
Removal of Offensive or Noxious Matters	...	...	...	...	...	1908
Houses let in Lodgings	...	...	...	...	...	1925
Cleansing of Cisterns	...	...	...	...	...	1912
Employment of Children	...	...	...	...	...	1920

## SANITARY CIRCUMSTANCES OF THE AREA.

**Water.**—All the inhabited houses are supplied with water from the mains of the Metropolitan Water Board.

There are a few deep wells in the district, but the water from these is used entirely for industrial and similar purposes. For instance, the Public Swimming Baths are supplied with water from an artesian well, and the supply seems to be practically inexhaustible. Even in the driest summer the level of the water is not affected.

An analysis of the water from the well at Messrs. Eastman, showed the water to be of a very high degree of purity.

**Drainage and Sewerage.**—Under the Acton Sewage Act the sewage is discharged into the sewers of the London County Council. In cases of storm the overflow is filtered and emptied into the Thames.

**Closet Accommodation.**—There are no privy or earth closets in the district. All the water closets are connected with the Council's drainage system and there are no cess-pools.

**Scavenging.**—The collection of the House Refuse is carried out directly by the Council, and the whole of the house refuse is burnt in the Council's Refuse Destructor. Last year 15,687 tons of house refuse were collected.



**TABULAR STATEMENT OF INSPECTIONS AND DETAIL OF  
WORK CARRIED OUT BY THE SANITARY INSPECTORS.**

**Number and Nature of Inspections made.**

House-to-house inspections	...	...	...	...	...	237
After infectious disease	...	...	...	...	...	214
On Complaint, etc.	...	...	...	...	...	1,412
Re-inspections after Notice served	...	...	...	...	...	7,452
Enquiry visits on notification of infectious disease	...	...	...	...	...	230

**Number of Premises under Periodical Inspection.**

Workshops and Workplaces	...	...	...	...	...	212
Slaughterhouses	...	...	...	...	...	2
Public House Urinals	...	...	...	...	...	37
Common Lodging Houses	...	...	...	...	...	1
Houses-let-in-lodgings	...	...	...	...	...	26
Butchers' shops	...	...	...	...	...	38
Fish shops	...	...	...	...	...	25
Premises where food is manufactured	..	..	..	..	..	41
Milk Purveyors	...	...	...	...	...	85
Cowsheds	...	...	...	...	...	Nil
Piggeries	...	...	..	...	...	4
Rag and Bone Dealers	..	..	...	...	...	3
Méws	...	...	...	...	...	4
Schools	...	...	...	...	...	11
Show Grounds	...	...	...	...	...	1
						490

**Houses dealt with under Section 28 Housing Acts.**

Houses in respect of which Notices were served	...	...	271
Rendered fit by Owners	...	...	271
Rendered fit by Local Authority	...	...	Nil
			271

**Premises dealt with under Public Health Acts.**

Premises in respect of which Notices were served ... ..	1,099
Premises in which defects were remedied by Owners ...	1,099
Premises in which defects were remedied by Local Authority	Nil

**Rent Restriction Act.**

Number of Certificates granted ... ..	11
Number of Certificates refused ... ..	1

**Detail of Work carried out.**

Sanitary Dustbins provided ... ..	460
Yards paved or yard paving repaired ... ..	141
Insanitary forecourts remedied ... ..	109
Defective drains repaired or reconstructed ... ..	58
Defective soil pipes and ventilating shafts repaired or renewed ... ..	77
Defective fresh air inlets repaired or renewed ... ..	73
Defective gullies removed and replaced by new ... ..	56
Rain water downpipes disconnected from drain ... ..	24
Dishing and curb to gullies repaired and new gratings fixed	122
Defective W.C. pan and traps removed and replaced by new	111
Defective W.C. flushing apparatus repaired or new fixed ...	297
Defective W.C. seats repaired or new fixed ... ..	154
Defective flush pipe connections repaired ... ..	63
Insanitary sinks removed or new fixed ... ..	29
Sink waste pipes repaired or trapped ... ..	165
Insanitary wall surfaces over sink remedied ... ..	110
Ventilated food cupboards provided ... ..	7
Drinking water cisterns cleansed ... ..	228
Defective covers to drinking water cisterns repaired or new fixed ... ..	42
Insanitary sites beneath floors concreted ... ..	6

Spaces beneath floors ventilated	...	...	...	...	108
Dampness in walls from defective damp-proof course remedied	...	...	...	...	130
Dampness from defective roofs, rain water gutterings, etc., remedied	...	...	...	...	745
Defective plastering repaired (number of rooms)	...	...	...	...	722
Rooms where dirty walls and ceilings have been cleansed and redecorated	...	...	...	...	3,318
Defective floors repaired	...	...	...	...	153
Defective or dangerous stairs repaired	...	...	...	...	29
Defective doors and windows repaired	...	...	...	...	347
Defective kitchen ranges and fire grates repaired	...	...	...	...	294
Defective washing coppers repaired	...	...	...	...	95
Coal cupboards provided	...	...	...	...	10
New W.C. apartments provided	...	...	...	...	6
Accumulations of offensive matter removed	...	...	...	...	23
Drains unstopped and cleansed	...	...	...	...	162
Overcrowding nuisances abated	...	...	...	...	10
Drains tested, exposed for examinations, etc.	...	...	...	...	87
Smoke observations taken	...	...	...	...	126
Smoke nuisances abated	...	...	...	...	18
Nuisances from pigs and other animals abated	...	...	...	...	14
Notifications of waste of water sent to Metropolitan Water Board	...	...	...	...	207

Defects found in Factories, Workshops and Workplaces—

<i>Particulars.</i>	<i>Number of Defects.</i>	
	<i>Found.</i>	<i>Remedied.</i>
1	2	3
Nuisances under the Public Healths Acts :		
Want of Cleanliness	52	52
Unsuitable or Defective Sanitary accommodation	63	63
Total	115	115



If we compare the total number of births in Acton during the 7 years before the war 1908-1914 with that in the seven years following the termination of the war, 1919-1925, there were 2,126 fewer births in the latter period, though the population had increased.

The same phenomenon is observed through out the Kingdom, but the reduction in Acton has proceeded at a more enhanced rate than that observed throughout England and Wales. If the same factors continue to operate as far as this district is concerned, we are approaching the period when the death-rate will balance the birth-rate.

The discussions on problems of population and birth control have excited considerable interest, but outside professional associations, considerable timidity is shown and the problem of population is shirked by many. In the view of most people interested in public health it is the biological aspect of contraceptive methods which is of importance in the realm of preventive medicine. It is difficult to view the question solely from the biological standpoint, and ignore the economic or even the ethical aspects. Because the evidence both ways bearing upon the biological side of the question is at present too scanty to enable a just conclusion to be reached, many think that the question of the birth-rate had better be left alone

But the question forces itself upon our notice. Although we may be unable to make any suggestions, it would be fatuous if we entirely ignored its existence. There are no birth-control clinics in the district, but there are two close to the boundaries, and considerable propaganda is carried on. In the case of one of them, pamphlets are distributed in a wholesale manner and quite indiscriminately in some parts of the district, advising women to attend the clinic, where advice will be given as to the best contraceptive methods. In some instances, accompanying the leaflet is a small booklet which is sold for threepence.

A good deal of confusion has arisen over the use of certain terms, and many people imagine that birth-control and the use of contraceptives are synonymous terms. If we limit the term birth-control to the simple regulation of numbers, then birth-control has always been, is now, and will always be an absolute necessity.

If numbers are not regulated, the population will increase to the actually possible limit, until the average income will just keep men from death by starvation. The necessity for limitation has always been present, only formerly the limitation was practised without a clear realisation of what was being done. There is no excuse for the attitude that no limitation of numbers by any method is required.

The difficulties arise when any particular method is recommended, and it should be clearly understood that it is on this ground of method that objection has been raised by the Ministry of Health to the utilisation of Maternity and Child Welfare Centres for the purpose of birth-control propaganda. The answer which the Ministry of Health have given to the representation of the Edmonton Council, deals quite fairly with the objections to the utilisation of Maternity and Child Welfare Centres for the purpose. The answer of the Ministry of Health which is dated December 5th, 1925, is as follows:—

“I am directed by the Minister of Health to refer to your letter of the 4th instant with regard to the subject of Birth-Control, and to state that the Minister has adopted the policy laid down by his predecessors with regard to this matter, which is set out in the following principles:—

(1) That the Maternity and Child Welfare Centre should deal only with the expectant and nursing mother (and infant) and not with the married or unmarried woman contemplating the application of contraceptive methods. (2) That it is not the function of an Ante-Natal Centre to give advice in regard to birth control, and that exceptional cases in which the avoidance of pregnancy seems desirable on medical grounds, should be referred for particular advice to a private practitioner or hospital.

“I am to point out that these centres are maintained out of public funds to which people of all opinions are required to contribute, and the Minister considers that without the express authority of Parliament he would not be justified in assenting to the use of the Centres for a purpose on which public opinion is so acutely divided.”

The last paragraph obviously refers to the objections from religious or moral motives. A large number of people are adverse to the use of contraceptives on moral grounds, and amongst some sections their use is considered one of the gravest of human crimes.

We have two schools of thought. The first views the falling birth-rate with dismay and sees in it the decay of the race; the other regards the same phenomenon as the only solution to the danger of over-population.

Neither the fear of race suicide nor that of over-population has much to do with the falling birth-rate. Other factors operate, and these are of such a character that under present conditions tend to perpetuate a low birth-rate.

Most people if they were asked what the normal condition has been throughout recorded history would reply that an increasing population was normal. As a matter of fact, the population of England and Wales increased very slowly for 700 years, and then in the nineteenth century shot up with a rapidity previously unparalleled.

During the same period the same general tendencies were at work in the Continent of Europe. The causes are not difficult of explanation. Among primitive races, abortion and infanticide were prevalent. The Christian era witnessed a profound change. Abortion and infanticide were rendered illegal, but as the former practices went out so the postponement of marriage came in, and agencies were at work which enforced it, in part by legal enactment, but chiefly by the pressure of customs and conventions.

In England in the Middle Ages not only were early marriages determinedly discouraged, but the opportunity for them did not exist. A labourer living in a cottage by himself was a rare exception to the rule; and the work of the fields was performed generally by servants who lived in the families of the squire or farmer, and who, while in that position, commonly remained single, and married only when by prudence they had saved a sufficient sum to enable them to enter some other position.

At the same period there existed in the towns a system of compulsory apprenticeship, and until the apprenticeship was terminated, youths could not marry. Thus in many ways a pressure was exercised upon the youth of the nation whereby they were discouraged, if not prevented, from marrying early.

In addition, elimination played an important part. Warfare was constant; plagues and epidemics swept through all countries, and disease and famine assumed a great importance as an agent of elimination.

In the nineteenth century these factors went out of operation. The age of industrialism brought about profound changes in social conditions. All barriers to marriage in the shape of laws, customs and conventions vanished. In addition, sanitation and preventive medicine attacked the forces which formerly operated towards elimination.

But these checks upon the power of multiplication were followed by the growth of another system which we know to be in operation to-day. Married people began consciously to limit the size of their families. The date when they began to do so, and the influences which brought them about may be doubtful, but it is unquestioned that it is conscious limitation and not abstinence from marriage or postponement of marriage which dominates the position to-day.

The most celebrated attempt to review the whole problem of population was made by Malthus, who published the first edition of his famous book in 1798, but the views of Malthus can have had very little influence on the birth-rate, as the birth-rate did not decline until the fourth quarter of the nineteenth century. The doctrines of Malthus were very similar to many expressed this year, and yet the doctrines of Malthus were founded upon assumptions which most people admit were erroneous. At any rate, his predictions were hopelessly wrong. Probably had Malthus known that in 1925 the population of Great Britain would be approaching 50 millions, he would have predicted destitution, starvation and general misery, and would have been considerably astonished to learn that in every particular, the conditions of life had steadily improved with the increasing population and that starvation which in his day was not uncommon, had become unknown.

In spite of this, since 1880, there has been a revolutionary fall in human fertility, and the fall has been due mainly, if not wholly, to deliberate prevention. In the earlier part of the last century there was but little conscious limitation of the size of the family. In the latter part of the century the practice of limitation set in and has spread more and more widely through society. In what circumstances and for what reasons did people, then, and do now, in the main limit their families?

There are some who consider that the sudden spread of the practice of prevention after 1880 cannot be connected with any change of economic conditions increasing the need for restricting



families, and must be attributed to the invention of more effective means of prevention'—together with active propaganda. One of the causes is indirectly an economic one.

What appears to happen is something of this kind. People in this country are bent upon maintaining and improving their standard of living. If a married man's income is stationary or does not materially increase, in his struggle to maintain his standard of living, he may decide to have fewer children. If his income increases, or his expenses fall, he may decide to have more children and thus remain at the old standard of living, or to have the same number of children and rise to a rather higher standard. When faced with these alternatives, men in general tend to regulate their families so as to maintain or improve their standard of living.

Another factor quite as potent is the improved status of women, which has been one of the chief characteristics of recent social evolution. Women have become better educated and more independent; their position has in every respect become more dignified. A new generation of women has sprung up—fitter, healthier and more normal in every way, but though the modern woman may be particularly fitted to be the mother of healthy children, she has acquired many varied interests in life and refuses to be bound down to the narrow confines of domestic life. There can be little doubt that the increasing dignity of women in society is a factor leading to the acceptance of the principle of family limitation.

I cannot understand the anxiety of the Edmonton authority to obtain this power. It is unnecessary as far as one part of the population is concerned, and useless as far as a large proportion of the remainder is concerned. As stated in a previous paragraph, propáganda in the interests of birth control has been going on, and the knowledge through voluntary birth control clinics and publications is within the reach of those who wish to utilise the knowledge. Those who have religious scruples will not use contraceptives.

But, we have besides, those people who will not or cannot exercise any control over themselves or their actions. This lowest social class includes not only the mentally defective, but the improvident, the incapable, and the cast-off from other grades of society. It contains a large proportion of those who are inferior in vigour and in many of the desirable physical, mental and moral qualities. They exercise no self-control and it is amongst them that

the birth-rate continues high. No propaganda and no voluntary measures will have any effect upon them. The continuous high birth-rate among the lowest social class, together with the continuous decrease in the higher social classes has made the birth-rate dysgenic.

The class which has received most attention recently is the mentally defective. Although possibly not numerous, its members are a source of danger on account of the high birth-rate especially among the high-grade mentally defectives. Theoretically, the mentally defectives appear to be the easiest class of people to deal with.

A short time ago there appeared a letter in the Press signed by ten of the most prominent members in the medical profession urging the nation to arouse itself to the ever increasing evil of mental deficiency, and advocating sterilization as a means of checking that evil. This authoritative statement was challenged a few days later by the Central Association for Mental Welfare. The latter body advocated segregation, but the main defect of its pleading is that it assumes that sterilization is put forward as a universal alternative to segregation. Needless to say, no sane person with any knowledge of the facts would make such a proposal. There are two quite distinct classes of defectives, the one consisting of persons who, if left at large, would be a danger to themselves and to the community, the others so slightly tainted that the only mischief they are likely to do is to pass on their defect to future generations by marrying or by producing illegitimate children.

Sterilization does not mean castration, which is more or less serious on account of the alteration of the endocrine secretions; it means operations which are supposed to have no effect beyond the production of sterility. Neither in the male nor female is the operation a serious one or attended with much danger.

The attitude of the Ministry of Health may be deduced from a reply made to the Lutterworth Guardians: "That action cannot be taken unless public opinion is overwhelmingly in favour of it."

The present dysgenic birth-rate will not be altered greatly if the question of the mentally defective be solved. There is at present still a higher birth-rate among the lowest social class, who are

generally inferior both in physique and mental capacity. Many social workers expected the problem to be solved by the introduction of artificial methods of conception control, assuming that those least able to support a family would most readily avail themselves of the methods. Possibly this was the opinion of the members of the Edmonton Council when they circularised other Councils for support, but no propaganda will reach the class which it is intended to reach. The poorest and most ignorant of the population have not shown the necessary intelligence and prudence to use the methods effectively, whereas they are increasingly used by people whose children would be a national asset.

The following figures may be of interest as showing the difference which exists in the size of the families of the unskilled labourer and skilled artizan. All the figures were obtained in the course of inquiries into births which occurred in 1925, and the figure in the first column refers to the number of families, and the figure in the second column refers to the number of children born in the family. For instance, in the case of unskilled labourers, of the births inquired into, in 38 instances it was the first child, and in one instance it was the 22nd child :—

<i>Unskilled Labourers.</i>		<i>Fitters.</i>	
38 families	1st child	8 families	1st child
46 "	2nd "	1 "	2nd "
30 "	3rd "	1 "	3rd "
28 "	4th "	1 "	4th "
21 "	5th "	1 "	5th "
10 "	6th "		
9 "	7th "		
7 "	8th "	8 families	1st child
3 "	9th "	11 "	2nd "
6 "	10th "	2 "	3rd "
3 "	11th "	2 "	4th "
1 "	12th "	1 "	5th "
1 "	13th "	3 "	6th "
1 "	14th "		
1 "	22nd "		

*Railwaymen.*

*Hawkers and Greengrocers.**Policemen.*

4 families	1st child	1 family	1st child
1 "	2nd "	1 "	2nd "
2 "	3rd "	2 families	3rd "
3 "	5th "	1 family	4th "
3 "	6th "		
1 "	7th "		
3 "	8th "		
1 "	9th "	5 families	1st child
1 "	13th "	2 "	2nd "
1 "	14th "	1 family	3rd "
		2 families	4th "
		1 family	6th "
		1 "	7th "

*Painters.*

It has been suggested that the housing shortage has been one of the factors operating in the marked fall in the birth-rate in recent years. There is no doubt as to the shortage of houses, and young married couples are compelled to live with relatives, or in furnished and unfurnished apartments. These conditions are not altogether suitable for the rearing of children, and are operating towards a low birth-rate among a certain class of the population.

Another reason for the continued shrinkage of the birth-rate is the difficulty of obtaining domestic help. This applies to the middle, more perhaps than to any other class, for it is in this section of the community that the shortage of domestic labour is most felt.

**DEATHS.**

446 deaths were registered in the district; of these 18 deaths were of non-residents; 241 deaths of residents occurred outside the district.

The total number of deaths belonging to the district is 669. The net number of deaths corresponds to a death-rate of 10.6 per 1,000 inhabitants.

It has been explained in former reports that in order to compare the death-rate of one district with that of another it is necessary to make an allowance for the difference in age and sex constitution of the different districts.

Females live longer than males, but the most important factor is the age-constitution of a population. The tendency to death is greatest among persons living at the extremes of life—among infants and old people.

The Registrar-General has published a table of "factors" for all the large towns, by applying which to the "crude death-rate" it becomes corrected for age and sex distribution, so that the "corrected death-rate" gives the death-rate of any place, calculated on the basis that the age and sex distribution in that place is the same as that for the whole country. Thus all "corrected" death-rates being reduced to a common basis, may fairly be compared.

The "factor for correction" for Acton is 1.001, and may practically be ignored, as it makes a difference of only .01 per 1,000 inhabitants in the death-rate.

The interest of the "factors for correction" lies in its demonstration of the change which has occurred in the character of the population during the past quarter of a century.

The Registrar-General works out the factors for correction after each census. After the Census of 1901, the factor for correction for Acton was 1.0424. After the Census of 1911, this factor was raised to 1.064. But after the Census of 1921, the factor was reduced to 1.001. The age and sex distribution of the population has altered, and the proportion of people living in the age groups 5—65 years was much lower at the last Census than at the two previous ones.

Table I gives an analysis of mortality for the year 1925, and from this table it will be seen that the death-rate for the district is lower than that of England and Wales, of London, and of the 105 County Boroughs and Great Towns.

Table II gives the death-rates for the last 6 years, and it will be seen that the death-rate has been fairly steady in that period. The death-rate last year was higher than that of 1921, 1922 and 1923, and lower than that of 1920 and 1924. Compared with 1924, there was an increase in the number of deaths in the age periods under 1 year, over 65 years, and a slight increase in the age period 15 to 25 years. There was a decrease in the number at all other age periods.

**Ward Distribution.**—The decrease in the number of deaths was spread evenly throughout the district and the death-rate was lower in all the Wards than it was in 1924.

The number of deaths in each Ward was as follows :—

<i>North-East.</i>	<i>North-West.</i>	<i>South-East.</i>	<i>South-West.</i>
190	135	137	207

The death-rate of each Ward was :—

<i>North-East</i>	<i>North-West.</i>	<i>South-East.</i>	<i>South-West.</i>
10.9	10.3	9	11.2

One of the most satisfactory features is the evenness of the death-rate in the several Wards. During the past 5 years, the death-rates in the different wards have been as follows :—

	<i>North-East.</i>	<i>North-West.</i>	<i>South-East.</i>	<i>South-West.</i>
1925	... 10.9	10.3	9	11.2
1924	... 12.2	11.8	9.2	12
1923	... 10	9.1	10	9.6
1922	... 10.6	10	10	10.6
1921	... 10	11	9.5	11.5

Twenty years ago, the death-rate of the South-West Ward was consistently nearly twice that of the other Wards, and twelve and fifteen years ago it was considerably higher.

I append the death-rates of the several Wards in the years 1909-1912, though at that period a considerable improvement had taken place in the death-rate of the South-West Ward.

	<i>North-East.</i>	<i>North-West.</i>	<i>South-East.</i>	<i>South-West.</i>
1909	... 8.5	9.7	11.4	19.1
1910	... 8.8	8.9	9.9	15.5
1911	... 9.5	10.3	11.2	22.2
1912	... 8.4	10.4	9.9	14.0

**Causes of Death.**—On Table III the causes of death at the different ages are given. The principal causes of death are the following :—

Tubercular diseases	...	...	57 deaths
Cancer	...	...	79 „
Heart Disease	...	...	86 „
Bronchitis	...	...	63 „
Pneumonia	...	...	52 „
Congenital Debility and Prematurity			39 „

Tubercular diseases and Congenital Debility and Prematurity are referred to in other parts of the report. The number of deaths from Bronchitis and Pneumonia has remained fairly constant; the most important variation results from atmospheric conditions. A severe winter generally results in an increased fatality from respiratory diseases.

**Cancer.**—Although there were 13 less deaths from Cancer in 1925 as compared with 1924, the number is, with that exception, the highest recorded in the district. During the past 5 years 363 deaths occurred from Cancer, or 11.1 per cent of the total deaths in the district. In the 5 years 1916-1920, the number was 315, or 8.8 per cent. of the total deaths.

In July, 1923, the Ministry of Health issued a Memorandum and suggested certain lines of action to combat the disease.

A conference of the different authorities within the Union was convened by the Brentford Board of Guardians, and a Cancer Committee was appointed. This Committee met on several occasions to ascertain the means of diagnosis and treatment within the several districts, and drew up a pamphlet which might be issued by the sanitary authorities.

Two main difficulties are encountered in any attempt to reduce the mortality and suffering from the disease.

In spite of all the work which has been done, and is being carried out, it is generally admitted that the root cause or causes on which the occurrence of cancer depends are unknown. But though the actual cause is unknown, the fact that cancer is liable to follow chronic irritation of so many different types, makes necessary the adoption of certain common sense rules of prophylaxis.

In this category, for example, come the removal of rough stumps of teeth, and alteration of clothing which causes irritation of particular regions of the body—for example, the breast, the avoidance of constipation and like matters.

The other difficulty in carrying out curative treatment lies in the reluctance of patients to seek early medical advice. In any condition in which cancer is suspected, immediate and decisive action is necessary. If early advice were sought, the one from whom this would be sought would be the general practitioner, but the complaint of the doctor is that the patients do not come to him at a sufficiently early stage to enable him to apply successful treatment.

**Heart Disease.**—Organic heart disease occupies the unenviable position at the head of the list of the causes of death in this country.

Last year in Acton, 86 deaths from heart disease were registered and in the last five years 359 deaths, or 11 per cent. of the total deaths occurred from heart disease. The magnitude and importance of the problem have been overshadowed, partly, no doubt, by the consideration given to other scourges of the public health, and in addition from the belief that nothing in the way of preventative measures was likely to be of any avail.

The increase in the number of deaths from heart disease in this district is marked, and even more so than that of deaths from Cancer. It is doubtful, though, if heart diseases are so much more prevalent than formerly as the death returns suggest. Some of the increase is undoubtedly due to changes in method of classification. Still, though we may admit that part of the increase may be due to different classification and improved methods of diagnosis, this does not minimise the importance of heart disease as a factor in the public health. There is also another aspect of the question. The economic wastage in heart disease is greater than in most other diseases, particularly when one takes into account the years of invalidism that ante-date the fatal issue in most cases of heart disease. The following outline in Sir George Newman's introduction to the report of the Ministry of Health in Rheumatic Diseases suggests not only the need but the lines on which preventive action may be taken.

One sixth of the industrial invalidity of the country arises from Rheumatic affections. The annual cost to the Approved Societies is two million pounds and the work lost to the members equals three million weeks per year.



Nearly one half of the patients with Rheumatic Fever show evidences of heart disease.

In second and subsequent attacks of Rheumatic Fever the risk of heart affection is greater.

Fifty per cent. of patients with Rheumatic Fever have enlarged or septic tonsils.

### MATERNITY AND CHILD WELFARE.

**Infantile Mortality.**—Eighty deaths occurred in children under one year of age. This corresponds to an infantile mortality of 76 per 1,000 births, compared with an infantile mortality of 56 per 1,000 births in 1924.

The infantile mortality in the whole of England and Wales was 75 per 1,000 births; in London 67, and in the 105 County Boroughs and great towns, including London, 79 per 1,000 births.

The deaths were distributed as follows :—

North-East Ward	...	...	...	...	22
North-West Ward	...	..	...	...	11
South-East Ward	...	...	...	...	13
South-West Ward	...	...	...	...	34

It has been previously explained that the addresses of all the births belonging to the district which occur in outside districts are not obtained. In most instances we are informed of the birth by the Medical Officer of Health in whose district the birth has occurred. But from the Registrar-General's return at the end of the year it is evident that all Medical Officers of Health do not follow this practice, and some births are untraced and cannot be allotted to Wards.

The exact infantile mortality of each Ward cannot therefore be given, but approximately the infantile mortality of the Wards was as follows :—

North-East Ward	...	...	...	...	75
North-West Ward	...	...	...	...	65
South-East Ward	...	...	...	...	69
South-West Ward	...	...	...	...	90

The infantile mortality is the highest in the district since 1918, but it is probable that the increased mortality is due to transient and temporary causes, and not to permanent ones.

Five dead babies were found in different parts of the district, and probably did not belong to Acton residents.

Eight illegitimate babies died during the year, and this number corresponds with an illegitimate infantile mortality of 210 per 1,000, compared with a legitimate rate of 71 per 1,000 births. The number of children born out of wedlock last year was 38, which corresponds to an illegitimate rate of 36 per 1,000 births. Although the infantile mortality among illegitimate children has diminished, there is still a sinister difference between the infant death-rate for legitimate infants and that for illegitimate.

One of the main factors contributing to this undue mortality is the fact that only a small proportion of illegitimate infants are naturally fed, as generally an attempt is made to separate mother and child as soon as possible, so that the former may return to her work. Such children are usually put out to be "minded." Occasionally in this district illegitimate children are adopted, but the instances are few and far between. There is a popular belief that there are a number of childless homes willing, even anxious to adopt an infant of this class. Only when this theory is put to the test is it found that such a child is unwanted. The National Council for the Unmarried Mother and Her Child are doing good work by trying to keep the mother and child together, with better care of the mother both before and after the birth of the child.

There was also an increase in the deaths from Pneumonia, probably due to the severe weather which was experienced in the late autumn and early winter. The two other conditions which caused most deaths were Diarrhoea and Ante-natal causes.

There were 10 deaths from Diarrhoea, 5 from Congenital Debility, 5 from Congenital Malformation, 5 from Injury at Birth, 5 from Marasmus and 19 from Premature Birth.

Apart from the slight check of last year, there is nothing more significant in our death returns than the steady reduction which has taken place in the infantile mortality since the beginning of this

century. We have to remember, though, that during the last 40 years there has been a reduction, not only in the infantile mortality, but also in the mortality at all ages. Any study of the changes of mortality at one period of life is incomplete unless their relation to changes at other ages is also noted. Infants and adults live side by side in the same homes, and though some of the conditions prejudicial or favourable to the health of the one will be found to have a similar effect on the well-being of the other, yet the infantile death-rate is a more delicate index of favourable or unfavourable conditions. This is especially true of deaths from diarrhoeal diseases.

It is desirable to emphasise this fact, that a glance at the changes in mortalities at all different ages of life over a long period of years will show how general in their effect the harmful or beneficial factors have usually been.

The following table shows that, although the infantile mortality during the last 40 years has diminished more rapidly than the mortality at other ages, a vast improvement has occurred in the public health and the death-rate at all ages has been reduced.

<i>Period.</i>	<i>Average yearly General death-rate.</i>	<i>Average yearly Infantile Mortality.</i>
1879-1885 ...	16.3	154
1889-1895 ...	16.6	168
1899-1905 ...	13	147
1909-1915 ...	12	99.5
1919-1925 ...	10.5	65.5

I have taken periods of seven years so as to avoid as far as possible the period of the war.

It will be noticed that the reduction did not take place until the beginning of this century, and that simultaneously a reduction occurred both in the general death-rate and the Infantile mortality. The reduction in Infantile mortality has been greater than the reduction which has occurred in the general death-rate, and over and above the influences which have contributed towards the reduction of the general death-rate the child welfare movement has undoubtedly been responsible for the decline in the infant mortality.

It may be instructive to give the infantile mortality of twenty years ago in detail and compare it with the last seven years.

1899	187 per 1,000 births	1919	65 per 1,000 births
1900	168 " " "	1920	64 " " "
1901	170 " " "	1921	70 " " "
1902	150 " " "	1922	62 " " "
1903	105 " " "	1923	65 " " "
1904	143 " " "	1924	56 " " "
1905	106 " " "	1925	76 " " "

It is not claimed that the infant welfare movement is entirely or even mainly instrumental in this remarkable reduction. Other agencies have been at work, but ante-natal inspection and health visiting are those with which we are now concerned, and the comparison is important, because attempts to reduce infant mortality are regarded by many as an interference with natural selection, which must be inimical to the average health of those surviving. According to this school of thought, efforts to save infant life merely prevent the "weeding out" of the unfit, and ensure the survival of an excessive proportion of weaklings.

This statement, of course, is difficult of direct proof or disproof. The matter cannot be put to the test of actual experiment. To do this it would be necessary to transfer a large sample of the infant population of a county which has a high infantile mortality, who had survived the excessive dangers of the first year of life, to a county which has a low infantile mortality, and transferring an equal number of survivors from the county which has a low infantile mortality to a county which has a high infantile mortality. The relative experience of two such selected populations might settle the problem.

There are indirect ways by which the soundness of these views can be put to the test. If we only saved the weedlings in reducing the infantile mortality, we should expect an increased mortality in the age periods 1-2 years and 2-5 years. But the reduction in the mortality in these age periods is as great if not greater than the reduction in the mortality of infants under 1 year of age. If we take again the last 7 years and compare the number of deaths in the age-period 1-5 years with the number of deaths in the same age period in 1905-1911, we find an average yearly number of 91 in the period of 1905-1911 compared with an average annual number of 30 in the last 7 years.

Of course, allowance must be made for the reduced birth-rate, but the average reduction in the number of births has been less than 30 per cent. but the reduction in the average yearly number of deaths has been 66 per cent.

In the period 1905-1911, the deaths of children between 1 and 5 years of age formed 13 per cent. of the total, and in the last 7 years the deaths in the age periods 1-5 years only formed 4.6 per cent. of the total deaths. The following table gives the total number of deaths in the age period 1-5 year in the two periods:—

1925	24	1911	116
1924	48	1910	55
1923	20	1909	102
1922	27	1908	106
1921	32	1907	94
1920	33	1906	91
1919	28	1905	73

There is another table which is of interest in this connection, though it has been extracted from the School Annual Reports. The table gives the heights and weights of the children entering the schools. The periods selected have been slightly different, but this is due to the fact that School Medical Inspection was only instituted in 1908, and the figures prior to that date are not available.

HEIGHTS AND WEIGHTS OF CHILDREN ENTERING THE SCHOOLS.

	1908—1912						1921—1925					
	4-5 yrs.		5-6 yrs.		6-7 yrs.		4-5 yrs.		5-6 yrs.		6-7 yrs.	
	<i>Ht.</i>	<i>Wt.</i>	<i>Ht.</i>	<i>Wt.</i>	<i>Ht.</i>	<i>Wt.</i>	<i>Ht.</i>	<i>Wt.</i>	<i>Ht.</i>	<i>Wt.</i>	<i>Ht.</i>	<i>Wt.</i>
BOYS—												
Acton ...	39.3	36.9	41.8	38.7	44.4	43.6	40.7	36.9	43.3	41.9	45.5	44.3
Acton Wells ...	40.2	37.2	42.2	39.8	45.2	46.0	40.9	36.9	43.6	42.3	46.2	47.7
Beaumont Park ...	39.4	36.8	41.7	39.9	43.1	42.5	40.6	37.7	42.6	41.1	44.5	46.8
Derwentwater ...	41.0	39.2	42.7	41.4	45.2	46.3	41.4	37.8	44.6	41.6	46.3	47.1
Priory ...	39.3	35.6	41.5	39.9	43.3	41.5	40.8	37.8	42.8	40.8	44.5	42.4
Rothschild Road	40.4	37.1	42.2	40.0	44.6	43.8	40.7	36.5	42.6	39.9	44.5	43.1
South Acton ...	39.1	35.7	40.9	38.2	43.0	41.4	40.3	37.6	41.9	40.1	44.3	42.5
Southfield Road ...	40.8	37.9	42.8	40.3	44.5	43.5	41.4	38.7	43.4	41.6	45.3	45.1
Turnham Green ...	39.9	39.8	41.2	38.1	43.8	43.7	40.8	38.3	42.5	39.8	45.7	45.9
GIRLS—												
Acton ...	39.4	35.5	41.5	38.5	44.1	42.7	40.6	36.5	43.7	40.2	45.2	41.4
Acton Wells ...	39.9	36.3	41.9	39.0	44.3	43.7	41.4	37.3	43.1	40.3	46.0	45.4
Beaumont Park ...	37.7	36.2	41.4	38.8	44.2	42.7	39.9	35.5	42.3	39.5	45.0	44.0
Derwentwater ...	40.3	37.9	43.0	41.2	44.9	44.7	41.0	36.7	43.7	41.9	46.0	45.3
Priory ...	39.2	35.0	41.7	39.8	43.6	41.7	40.6	37.2	43.2	39.0	44.7	42.8
Rothschild Road	40.3	37.1	42.0	38.5	44.1	42.4	41.0	35.9	42.5	38.9	44.3	40.4
South Acton ...	38.4	35.1	41.2	37.9	43.0	41.7	40.6	36.7	42.0	39.6	44.3	43.1
Southfield Road ...	39.8	34.0	42.7	39.1	44.6	43.4	40.5	37.2	43.2	40.0	44.7	43.4
Turnham Green ...	38.2	33.7	40.4	37.8	42.5	41.7	40.9	37.4	41.9	39.8	44.7	43.3

1000

This aspect of the subject has been dealt with fully, as it has a bearing upon the whole question of child welfare work. If it were true that the efforts simply resulted in saving children who would grow up to be weedlings and inefficient, then it would be better to scrap the whole organisation of health visiting and begin anew. The figures given in the preceding page I think, prove that the opposite view is the correct one, and that the object of infant welfare work is the improvement of the conditions under which the children are reared, and not simply the treatment of individual cases. Consequently, not only infant life is saved, but the children who survive are stronger and healthier. Where the conditions were such as conduced to a high infant mortality, for every child who died, others who survived were scarred and maimed. It was the survivors under the unhealthy conditions which produced a high infantile mortality who grew up as weedlings and inefficient.

#### Notifications of Births Acts.

882 live births and 17 still births were notified. 909 births were registered by the local registrar of births. Over 97 per cent. of the births were notified last year compared with 98 per cent. in 1924. During the past two years, there has been a considerable improvement in the percentage of births which have been notified, but recently there has again been a tendency to neglect this duty. Two years ago, the Council reminded doctors and midwives of their duty under the Notification of Births Acts, and the percentage of births notified appreciably increased as a result. The following table gives the percentage notified in the last 7 years:—

<i>Year</i>					<i>Percentage Notified</i>
1925	...	...	...	...	97
1924	...	...	...	...	98
1923	...	...	...	...	91
1922	...	...	...	...	90
1921	...	...	...	...	94
1920	...	...	...	...	92
1919	...	...	...	...	90

#### Health Visiting.

During the year the health visitors paid visits to 715 infants under one year of age. The total visits paid to infants under 1 year was 4280.

In addition, 4172 visits were paid to children between the the ages of one and five years.

Although Child Welfare started with the home visiting of infants, it was soon found that not only were the health visitors unable to pay sufficient visits to the homes, but certain other activities could only be carried out in centres.

The Council has two Child Welfare Centres—one in the rooms attached to the Church Road Baptist Chapel and the other in the rooms attached to the Mission Hall, in Palmerston Road. The centres are held every Monday and Wednesday afternoons, and an average attendance of 55 and 56 per session respectively is made. Altogether 1539 children attended the two centres during the year.

#### Maternal Mortality and Ante-natal work.

Five deaths occurred in childbed—four from puerperal sepsis and one from other diseases of pregnancy and parturition. This number corresponds to a maternal mortality of 4.6 per 1000 births.

In the last 5 years the number of maternal deaths has been as follows:—

1925	...	5	1922	...	4
1924	...	7	1921	...	3
1923	...	8			

This question was discussed very fully in last years' report, and it was then stated that the district compared unfavourably with the whole of England and Wales, and with most of the metropolitan boroughs. Moreover, recently, the maternal mortality seemed to be greater now than it was 20 years ago, as the following figures show:—

1905-1908	3.74	maternal	deaths	per	1000.
1909-1912	2.7	"	"	"	"
1913-1916	4.53	"	"	"	"
1917-1920	4.59	"	"	"	"
1921-1924	4.6	"	"	"	"
1924	6.04	"	"	"	"
1925	4.6	"	"	"	"



The most important instrument within our reach to reduce maternal mortality is ante-natal care.

No one who has an intimate knowledge of maternity and Child Welfare Work, has any doubt of the importance of ante-natal work.

In the report submitted by Dame Janet Campbell to the Ministry of Health, the paramount importance of ante-natal work was emphasised, and at all recent conferences where Maternity Work or Maternal Mortality is discussed, one cannot but be struck by the insistence with which ante-natal care is stressed as a *sine qua non*. The young practitioners, most of them fresh from the teaching and practise of the big hospital ante-natal departments, are imbued with this idea. The young midwife from an up-to-date teaching school starts her district work determined to visit and examine all her patients ante-natally.

With the knowledge and experience gained by all workers in the field of obstetrics at the present time, there should be no weak links in the chain of preventive work. It should be clearly established that every expectant mother should be carefully and fully overhauled by a competent obstetrician at least once before every confinement, and that well before the seventh month.

Why is this not always done? It is sometimes said that the expectant mothers do not like it. This is certainly not our experience here. Practical experience in dealing with expectant mothers soon teaches one that no one is more appreciative of proper medical supervision and expert and encouraging advice, than is the expectant mother if dealt with on proper lines.

The real difficulty, the real hindrance to ante-natal care, lies, not in the objection of the patient, but in the want of realisation of old-fashioned practitioners in midwifery—doctors or midwives—of the necessity for preventive work and the want of the most elementary knowledge in its routine application.

The Ministry of Health have taken the lead in so far as they were able in these matters. The report on Maternal Mortality by Dame Janet Campbell is permeated with the teaching that ante-natal work is the keystone of midwifery. The Central Midwives Board recommend, though they do not yet make it compulsory, that all midwives engaged for a confinement, should keep a record of their bookings and of their ante-natal visits.

During the year the health visitors paid 336 visits to expectant mothers; of these 232 were first visits, that is 232 expectant mothers were seen during the year.

From time to time, we have circularised the mid-wives. In spite of these activities only 82 expectant mothers attended the Ante-natal Clinic. The Clinic is held every other Wednesday morning at the School Clinic premises, and Dr. Bell is the consultant in attendance. The average attendance at the Clinic was five per session.

In the 5 years under review, probably the greatest advance in Maternity and Child Welfare has been the closer co-ordination of the School Medical Work, and the Child Welfare Work. From the commencement there has been close co-operation between the two services, but the establishment of the School medical service has materially affected the trend of preventive medicine as a whole, and of infant welfare in particular. The number of defects found in children entering school showed that prevention must begin not only in childhood but in infancy and even in maternity. It became necessary to link the two services together.

Miss Loretz, the school dental surgeon talks occasionally to the mothers about the preservation of the children's teeth, and the leaflets issued to the school children are distributed at the centres. By arrangement with the Education Committee, the mothers and children from the centres are treated by the school dentist, and last year the following number of mothers and children were inspected and treated under the Maternity and Child Welfare scheme:—

	<i>Inspected</i>	<i>Referred for Treatment</i>	<i>Treated</i>
Mothers	35	35	24
Children	109	101	73

  

	<i>Fillings</i>	<i>Extractions</i>
Permanent teeth ...	25	Permanent Teeth ... 127
Temporary teeth ...	196	Temporary teeth ... 164
Total ...	221	Total ... 291

Similarly children with squint, etc., are referred to Dr. Banham, the school ophthalmic surgeon, and last year 9 children under 5 years of age were inspected and treated by Dr. Banham.

The Education Committee have an agreement with the Acton Hospital for the operative treatment of enlarged tonsils and adenoids, and the Child Welfare Committee refer cases under 5 years of age for treatment under this agreement. Last year 11 children under 5 years were operated upon for enlarged tonsils and adenoids.

### Day Nursery.

The Municipal Day Nursery is situated at 169, Bollo Bridge Road. The Nursery is open every day from 7.45 a.m. until 6.40 p.m., except on Saturdays, Sundays and holidays, when it is closed all day.

The charges for admission are 9d. a day for one child and 8d. a day each for two or more children of one family.

The Nursery is intended primarily for the children of mothers who go out to work, but in exceptional circumstances other children may be admitted at the discretion of the Matron.

Most of the mothers whose children are cared for in the Nursery, are employed in the local laundries.

Last year the Nursery was open on 222 occasions. 354 children attended, and the total number of attendances was 4223.

## INFECTIOUS DISEASES.

In connection with the control of infectious diseases, the two outstanding features recently have been the discovery and development of the processes known as the Schick Test for Diphtheria and the Dick test for Scarlet Fever.

The latter is a recent development and the results shown to follow the application of the Schick test and immunization cannot yet be claimed for the Dick test.

As far back as 1911, Schick published a paper in Germany in which he described the test which is now known by his name. The Schick test is used as a means of recognising susceptibility to Diphtheria. A standardised toxin is injected into the skin of the arm, and the re-action which follows, serves as guide to susceptibility or non-susceptibility of the person tested for Diphtheria. The test requires considerable care and experience in the interpretation of the results, but the test has now gone beyond the experimental stage, and in almost every instance the result is a reliable indication of susceptibility.

The function of the Schick test is to disclose the fact of the susceptibility or otherwise of an individual to diphtheria toxin and therefore his susceptibility to the disease. It is thus applicable for indicating which members of a community require to be immunized if any danger of attack be present.

The importance of the test lies in the procedure which follows. If the person is susceptible, he can be rendered actively immune by means of inoculations of a standard toxin-anti-toxin mixture.

The term "active" immunity is used in contradistinction to "passive" immunity which is conferred by the injection of diphtheria anti-toxin serum. The latter kind of immunity is frequently used by doctors when a case of Diphtheria occurs in a family. The doctor injects the members of a family who have been in contact with diphtheria, but who are not themselves at the time suffering from the disease. This "passive" immunity possibly only lasts a few weeks.

The injection of toxin-anti-toxin mixtures confers an active immunity of the same nature as that conferred by an attack of diphtheria and lasts for years, possibly for a lifetime.

The present wide interest in the use of toxin-anti-toxin mixtures is due to the work of Dr. Park of New York and his collaborators, in particular of Dr. Zingher.

In New York, the prevalence of diphtheria has been greater and the mortality from the disease considerably higher than in this country. Dr. Park has carried out the test in hundreds of thousands of children, and the children in many schools have been immunized by the toxin-antitoxin mixture.

The Dick test for Scarlet fever is a more recent one. In 1923, Drs. G. F. and G. H. Dick, of Chicago, claimed to have discovered the organism of Scarlet Fever, with which they had produced Scarlet Fever in volunteers. From this organism, a culture was made, and by the injection of this toxin into the skin, the susceptibility of a person to Scarlet Fever was shown in a similar way to that in which the Schick test does to diphtheria. The reaction usually appears from 4 to 6 hours after injection reaching its maximum size between eighteen and thirty-six hours after the injection.

Attempts have been made to immunize patients in a similar manner to the diphtheria immunization, and the serum has been manufactured for the curative treatment of Scarlet Fever, but so far, the time has not been sufficient to produce results so complete and definite as those which have been gained in Diphtheria.

Dr. Zingher points out that the susceptibility to Scarlet Fever as to Diphtheria, is much higher in the well-to-do classes than in the poor. Among 7,000 New York board school children tested, only 8 per cent. gave a positive Dick reaction, whereas in a private school 83 per cent. proved susceptible.

Both tests have been used extensively by local authorities in this country and can be regarded as a reliable test of susceptibility of the individual to the respective disease.

There is also adequate evidence that inoculation with the toxin-anti-toxin produces immunity at any rate in the case of diphtheria.

As a natural sequence one must face the further question to what extent can the procedure be grafted on to our existing public health system with a prospect of success.

The memorandum of the Ministry asks that this report should state whether any use has been made of the tests known as the Schick and Dick tests in diphtheria and scarlet fever respectively, or of the recently developed artificial methods of immunization against these diseases.

Except in a few isolated instances in the hospital, no use has been made of these methods, and in the conditions which obtain at present in the district, there is very little hope that any considerable proportion of the inhabitants would avail themselves of any facilities which we might offer.

For the last 10 years, Scarlet Fever has been of a mild character, and in the last 3 years diphtheria also has not been very prevalent in the district.

The following table gives the incidence and fatality of Scarlet Fever and Diphtheria in the last 10 years.

	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916
Scarlet Fever Notifications	83	105	160	305	630	176	95	38	45	64
Scarlet Fever Deaths	1	1	—	3	1	1	—	—	—	1
Diphtheria Notifications	63	45	61	223	205	141	54	116	67	81
Diphtheria Deaths	1	5	3	12	16	18	2	2	3	4

As far as Scarlet Fever is concerned, it appears that more information and experience would be necessary before the Dick test and subsequent immunization could be recommended. Much work though is being carried out both in this country and America, and progress may be expected in both directions.

With respect to diphtheria, the conditions are different. In this district, we happen to be in what is called the period of minimum prevalence of the disease, but an examination of the records for the past 50 years shows that the district regularly passes through periods of maximum and periods of minimum prevalence. These periods vary from 3 to 7 years, and though the deaths which occur in the periods of maximum prevalence are now much less than formerly, thanks mainly to the introduction of anti-toxin, the depredations of the disease are formidable. Evidence of this is seen in the table; in the 3 years 1920-1922, 46 deaths occurred from the disease.

We probably know more about the causal organism of diphtheria than we do of the cause of most infectious diseases, yet the attack on diphtheria has fallen behind that directed against other infectious diseases. Steady though the progress has been in the treatment of cases, it has recently been slow; the fact remains that, for reasons not altogether clear, diphtheria appears in this country to be strengthening its forces, and gathering power.

The experience of New York forms a powerful argument for the adoption of some form of immunization in an attempt to stamp out the disease.

The age incidence of the various diseases, the ward distribution, and their prevalence in the last 10 years, will be found in tables at the end of the report.

### Measles.

There was no death from Measles in 1925, but in the autumn, an extensive epidemic occurred, and early in the year 1926 some deaths occurred. One of the most remarkable phenomena since the War has been the low mortality from most of the common infectious diseases, and Measles has shared in the general improvement. The extent of this improvement may be gauged from the following table which gives the total number of deaths from Measles in this district in periods of 8 years during the last 40 years.

1918-1925	...	...	37 deaths
1910-1917	...	...	167 "
1902-1909	...	...	176 "
1894-1901	...	...	69 "
1886-1893	...	...	82 "

It is difficult to decide to what this improvement is due. It is certainly not due to any control which we have obtained over the disease. Measles still remains the commonest and possibly the most complicated of the eruptive infections. It is so common that, after a trial, compulsory notification was abandoned. The cost was great and inquiry into each case at the height of an epidemic was almost impossible.

During the recent epidemic, we were able to nurse in the Hospital a small proportion of the cases; these were admitted on the application of the doctor in attendance. But it would be impossible to nurse all the cases in hospital. There are no beds available for the treatment of all the cases. Our hospital would be swamped, and all other diseases would have to be excluded.

In spite of these considerations, a most remarkable fall in the number of deaths from Measles has recently occurred, as the above figures show, and I might suggest some factors which have operated in this diminished mortality.

Measles still stands very high among the infectious diseases as a cause of death in childhood. Attempts have been made to decide what proportion of persons pass through an attack of measles, and, it appears, that at least 95 per cent. of the population register one attack of measles before the twentieth year of life. Although a percentage of even 25 of children has been reported to have a second attack, it is generally agreed that a second attack is rare. One attack usually protects the individual from the disease for the rest of his life. From this we conclude that suppression of the disease is unlikely to be attained and may perhaps not be desirable. The aim of modern preventive medicine is not the prevention of infection but the suppression of its damage. The most successful efforts of modern prevention rely not on preventing infection, but diffusing it in a form in which it can be controlled.

It is well known that a summer epidemic of measles is far less fatal than a winter one, and one is justified to employ drastic means to postpone an epidemic in the winter even if it be only for a few months.

We might feel inclined to close a class or department on the appearance of a single case in December or January, in the hope of avoiding an epidemic, when such a course would not be justified if the outbreak started in the spring.

In the years 1921, 1922 and 1923, we were fortunate to have a series of summer epidemics, and in those years only 5 deaths occurred from the disease.

The occurrence of a series of summer epidemics is not the only explanation, as we find that in the last decade there has been a marked fall in the mortality from Measles throughout the kingdom. The reduction throughout the kingdom has not been so great as that which has occurred here, but sufficiently marked as to be accountable in part by some more general cause.

It has been frequently pointed out that the great majority of the deaths from Measles occur amongst children under 5 years of age. Many years ago, Dr. Theodore Thompson in a report to the Local Government Board on the control of Measles pointed out that the incidence of attack is different from that of death. For while the main incidence of death is on the second year, the incidence of attack is chiefly on the third, fourth, and fifth years.



From this different incidence of attack and of death, it results that the fatality from Measles is very much higher in the second year of life than in any of the succeeding years. Children in the second year of life, although less susceptible to attack, are much more likely to die if attacked than any other children. Unquestionably, much is gained by guarding young children between one and four years of age from exposure, for it is at this period of life that most fatalities occur. It is partly for this reason that school attendance before five is generally deprecated by medical officers.

In former years, Measles was introduced into a house by one of the younger school children. A child attending an infants department would suffer from Measles and infect the younger children in the house.

The lowered birth-rate has altered the age incidence of the population. At the present time the number of families in which there is a younger child at home as well as one in attendance in an infants department is considerably less than it formerly was, and this may partly account for the lowered mortality. Every attempt is made to prevent children under 5 years of age from coming in contact with Measles, but possibly the last word in Measles management will be immunization.

The most successful method of preventing Measles known at present is to inject 5 to 10 c.c. of serum from a person convalescing from the disease into the exposed child as soon after exposure as possible. The blood serum of a convalescent contains substances which make him immune to the infection, and by transferring some of it to a susceptible person, the latter is also rendered temporarily immune. This is what is called temporary or passive immunity.

Attempts at active immunization, as with vaccines, are still in the experimental stage. The disadvantage of the methods used is that they are temporary only. Still, in the case of young children exposed to measles infection, under certain conditions a temporary immunity is of great value.

At present the method cannot be made generally applicable but it will be useful in individual cases, and also where Measles has made its appearance in an institution or hospital.

Another factor which possibly has been operative in the reduction of measles mortality is the improved health of children under 5 years of age, and the natural resistance which these children offer to disease. In the section dealing with Infantile mortality, it is shown that in the mortality in the age periods 1-2 years and 2-5 years, there has been as great, if not a greater reduction than in the period under twelve months. When a reduced infantile mortality is effected, an improvement occurs in the conditions under which the babies live, and this improvement continues into the succeeding years.

### Encephalitis Lethargica

There were two notifications, and no death occurred from the disease, but one of these notifications was received in December. In the other case, it was notified in the summer, and on enquiry at the end of the year, she was apparently well and not suffering from any sequelae of the disease. It is too early to express any opinion as to the result in the case of, at any rate, one of these cases, but Encephalitis Lethargica, besides being an acute disease attended in its early stages and even later by considerable danger to life, is in the larger proportion of cases followed by a long period of convalescence which is not a mere debility, but has peculiar features which may be regarded as constituting a chronic stage of the disease. These features are usually termed "residua," and upon the particular residua present in any case and their severity, depends the possibility of the patient's restoration in a greater or less time to the normal condition of health.

Since the disease was made compulsory notifiable in 1919, 14 cases have been notified in this district. One of these was probably a case of mistaken diagnosis, and has left the district; Excluding also the 2 notified last year, there would be 11 cases; 8 are dead, and only one can be said not to exhibit any sequelae. Two of those who have survived are totally unable to follow their normal occupation.

### Tuberculosis.

There were 47 deaths from Pulmonary Tuberculosis, or Consumption, or Phthisis, and 10 deaths from other tubercular diseases. The number of deaths from Pulmonary Tuberculosis is the same as that of 1924. Since the end of the War, the death-rate from Tuberculosis is steadily though slowly becoming lower.

During the past 5 years, the number of deaths from Tuberculosis has been as follows :—

			<i>Pulmonary Tuberculosis</i>			<i>Other Tubercular diseases</i>
1925	...	...	47	...	...	10
1924	...	...	47	...	...	8
1923	...	...	54	...	...	15
1922	...	...	48	...	...	8
1921	...	...	59	...	...	8

Seventy new cases of Pulmonary Tuberculosis, and 13 cases of other forms of tuberculosis, were notified during the year. The age-incidence and ward distribution are given on Table V.

At the end of the year, the number of cases on the Register was :—

<i>Pulmonary.</i>			<i>Non-Pulmonary.</i>		<i>Total.</i>
<i>Male</i>	<i>Female</i>		<i>Male</i>	<i>Female</i>	
100	93	...	24	25	242

During the year, 29 medical cases were admitted to a Sanatorium under the Middlesex County Scheme, 24 to Hospital, and 4 surgical cases were admitted to a hospital.

#### Isolation Hospital.

During the year, 183 cases were admitted into the Hospital compared with 188 in 1924. On January 1st, 1925 there were 24 cases under treatment, and on January 1st, 1926, 28. 175 cases were discharged and there were 4 deaths.

The following is a list of the cases admitted :—

	<i>Acton</i>	<i>Wembley</i>	<i>Kingsbury</i>	<i>Total</i>
Scarlet Fever ...	58	31	2	91
Diphtheria ...	57	10	1	68
Measles ...	19	—	—	19
Others ...	5	—	—	5
<i>Total</i>	139	41	3	183

**Scarlet Fever.**

91 cases of Scarlet Fever were admitted, with two deaths. One of the deaths belonged to Acton, and the other to Wembley. This is a high fatality for Scarlet Fever patients, but one of the cases when admitted was suffering also from Whooping Cough.

**Diphtheria.**

68 cases of diphtheria were admitted, with one death. This is a very low fatality for Diphtheria. A number of mild cases, of course, were admitted, but throughout the year a fair percentage of the cases were severe, and some of them very severe.

**Measles.**

There were no deaths from Measles.

**Others.**

Amongst other cases admitted was one of Hodgkin's disease, which proved fatal.

**BACTERIOLOGICAL EXAMINATIONS.****(a) For Diphtheria.**

	<i>Positive</i>	<i>Negative</i>
Total Examinations—910 ... ..	88	822
Sent by Medical Practitioners ... ..	26	220
Sent from Isolation Hospital ... ..	16	168
Convalescents ... ..	2	37
Contacts ... ..	26	164

Of these Positive Contacts:—

17 were positive on the first occasion only.

6 were positive on the second occasion.

3 were positive on the third occasion.

	<i>Positive</i>	<i>Negative</i>
School Sore Throats ... ..	18	233

Seven of the Positive Sore Throats had sufficient clinical symptoms to warrant removal to Hospital.

(b) *For Ringworm.*

			<i>Positive</i>	<i>Negative.</i>
Total Examinations—20	...	...	15	5

(c) *For Tubercle.*

			<i>Positive.</i>	<i>Negative.</i>
Total Examinations—111	...	...	13	98

### INSPECTION OF FOOD.

In recent years, probably the two most important events in connection with food have been the discovery of vitamins, and the increasing attention which is being paid to cleanliness in the production and distribution of food.

It is now recognised that all proteins are not of equal nutritive value ; some, particularly most vegetable proteins, are incomplete, while most animal proteins are complete in that they contain the components necessary for growth. repair and replacement. A number of diseases whose causation was heretofore unknown have been definitely proved to be caused by lack of vitamins, and of late considerable evidence has been brought forth to prove that resistance to disease, particularly infection, may be dependent on vitamins and the quality of proteins, or both.

The proper selection of foods both in quality and quantity is not merely an individual problem but a public health question of great magnitude. The health worker must recognise that the lay public should possess knowledge between food and disease and of the relation of food to health.

Just as the newer knowledge of the nutritive principles of food has made the selection of proper food a matter of public health concern, so have the newer conceptions of food poisoning added greater importance to food hygiene. Before last year, with the exception of milk, little attention had been paid to the hygienic handling of food. Certain regulations had been passed for the provision of cleanliness in milk shops and dairies, but in respect of the cleanliness of other food, practically no public control was exercised. It was known of milk that it provided a suitable medium for the growth of certain organisms, and that certain diseases were

conveyed to man through milk. These facts resulted in the enforcement of certain regulations in dairies and cowsheds. But the other foods were left alone. Last year, a start was made, and action can now be taken under the Meat Regulations.

Action is long overdue in respect of other foods. It is unnecessary to prove that certain diseases are caused by the dirty handling of food. When obvious facts as to contamination with filth can be adduced, as they very easily may, there is no need for voicing the theories of the experts as to what the effect upon the food and afterwards upon the consumer may be.

**Public Health Meat Regulations, 1924.**—One most notable advance has been made during the past year. I refer to the Public Health Meat Regulations, 1924, which came into force on April 1st, 1925.

The Regulations are divided into six parts of which the first part deals with definitions, and indicates the local authorities which are responsible for the executive work imposed by the regulations, and further sets out the officers of the authority who shall be responsible for the work.

**Slaughterhouses and Slaughtering.**—Part II of the Regulations contains provisions for the regulation of slaughterhouses and slaughtering, and in particular for requiring notices of slaughtering, and of evidence of disease to be given to the appropriate officer of the local authority. Although there are only three slaughterhouses in the district, and in one of these practically no slaughtering has taken place for a considerable time, and in another an inspector is always present during slaughtering, these regulations have been proved in the past to be necessary ones.

It will be recollected that in December, 1924, the Council instituted proceedings and obtained a conviction against a firm for having in its possession diseased meat. Article 10 of the regulations provides that the carcass and the important organs shall not be removed from the place of slaughter until the carcass with its organs has been inspected or its removal authorised by an inspector of the local authority.

Before dealing with the results of inspection in this district, Part III of the Regulations may be noted as both have bearing upon the meat inspection carried out here.

**Meat Marking.**—Under Part III of the Regulations, the Minister of Health is empowered to authorize a local authority to adopt a distinctive mark for placing on carcasses which have been inspected at the time of slaughter and found to be free from disease and fit for human consumption, and to approve the mark so adopted. Before giving authority the Minister will require to be satisfied that the local authority have an adequate and competent staff of inspectors, and that the criteria laid down in Memorandum 62 (foods) are being adopted.

Certain difficulties would arise in putting this part of the regulations in force, and as in the past most of the meat slaughtered in this district is made up into sausages and similar articles of food, the Council did not deem it necessary to apply for a distinctive mark.

I do not think an application by the Council would be refused. The details of the meat inspection carried out here are given on a subsequent page, and compared with most districts, the inspection is a stringent one.

This aspect of the question is an important one, and the value of meat marking will become more and more appreciated by the public. At the present time, it was not possible for the purchaser of a joint to distinguish between inspected and uninspected meat, and it is hoped that the demand for inspected meat will become more insistent and frequent by the public. Some retailers objected to "marking" because their customers thought meat so distinguished was colonial produce, but in the present state of meat inspection in this country, the position might well be reversed, and the importer demand that his reasonably well-inspected product should be protected against the substitution of inferior and uninspected home produce.

In last year's report it was stated that arrangements had been made for the inspection of all carcasses slaughtered in the district. The vast majority of the carcasses are slaughtered in one slaughterhouse, and the following particulars of the results are given in the following Tables:—

Number of Pigs' Carcasses Inspected from 1st January to 31st December, 1925, with Analysis of  
Surrenders on account of Disease (Tuberculosis).

1925.	No. of Carcasses Inspected.	No. of Heads Diseased.	No. of Carcasses Diseased.	No of Sides Diseased.	No. of Fore Quarters Diseased.	No. of Hind Quarters Diseased.	No. of Legs Diseased.	No. of Shoulders Diseased.	Plucks. (Lungs, Livers and Hearts.)	Mesenteries, Stomachs and Intestines.	Weights.			
											Tons	Cwts	Qrs	Lbs
January ...	1617	112	3	1	—	—	—	—	265	1936 lbs.	1	0	1	20
February ...	1336	99	4	—	—	—	—	4	119	1240 ..	1	11	0	22
March ...	773	68	3	—	—	—	—	—	92	720 ..	1	5	2	1
April ...	741	35	3	—	2	1	—	—	76	624 ..	1	0	0	10
May ...	884	54	6	—	—	2	—	—	65	1120 ..		18	0	0
June ...	599	75	2	—	1	—	—	—	61	912 ..	1	3	3	22
July ...	643	65	3	—	—	—	—	—	78	896 ..		19	0	16
August ...	876	46	5	—	—	—	—	2	80	792 ..		19	1	19
September ...	1223	116	5	1	—	1	1	2	71	528 ..	1	17	0	19
October ...	1537	113	6	—	—	—	1	—	55	576 ..	1	12	2	11
November ...	1154	92	7	1	—	—	—	4	66	256 ..	1	19	3	4
December ...	1016	49	—	—	—	—	2	—	51	176 ..		16	3	16
TOTAL ...	12399	924	47	3	3	4	4	12	1079	9776 ..	15	4	0	20



Counties from which the Animals were consigned and Percentage  
Diseased.

County	No. of Towns from which Animals were consigned	No. of Carcases Inspected	No. of Animals Diseased	Percentage of Animals Diseased
Bedfordshire ...	1	25	12	48.0%
Berkshire ...	1	40	11	27.5%
Bucks ...	4	64	10	15.6%
Cambridgeshire ...	3	364	11	3.0%
Channel Islands (Guernsey) ...	1	3	0	—
Cheshire ...	1	17	0	—
Cork, Ireland ...	1	215	23	10.7%
Derbyshire ...	1	24	2	8.3%
Dorset ...	10	1,804	185	10.2%
Essex ...	8	2,636	102	3.9%
Gloucestershire ...	1	253	33	13.0%
Hampshire ...	18	1,709	119	7.0%
Leicestershire ...	1	147	24	16.3%
London ...	1	82	21	25.6%
Middlesex ...	5	240	44	18.3%
Norfolk ...	3	60	10	16.7%
Oxford ...	1	30	2	6.7%
Pembroke ...	1	28	—	—
Somerset ...	7	428	69	16.1%
Suffolk ...	12	2,788	168	6.0%
Surrey ...	4	323	21	6.5%
Sussex ...	2	864	33	3.8%
Warwickshire ...	1	34	—	—
Waterford, Ireland ...	1	30	5	16.7%
Wiltshire ...	3	160	15	9.4%
Yorkshire ...	3	31	14	45.2%
Total ...	95	12,399	934	7.5%

All the animals slaughtered belong to one firm, and the meat is converted mostly into sausages. The firm gives us every assistance in carrying out the work, and is in no way averse to the inspection. But the firm does complain, and rightly so, that our

inspection is far more stringent than that carried out in some places and it is contended that some uniformity should be observed in the inspection.

In March, 1922, the Ministry of Health issued a memorandum on a system of meat inspection, recommended for adoption by local authorities and their officers. This memorandum—No. 62—was based upon the report of the departmental committee appointed to consider the measures necessary to secure adequate protection for the health of the people in connection with the slaughter of animals and distribution of meat for human consumption.

The memorandum gives detailed instructions for the routine inspection of carcasses, but the instructions of most interest are those which refer to the action to be taken in the event of evidence of Tuberculosis being found in Bovines and Swine. An organ shall be seized when tuberculosis exists on its capsule, or in its substance, or in the associated lymph glands.

The head, including the tongue, shall be seized if any of the lymphatic glands of the head are affected.

The entire carcass and organs shall be seized when the following conditions are found :—

- (a) Tuberculosis with emaciation.
- (b) Generalised Tuberculosis.
- (c) Lesions are multiple, acute and actively progressive.
- (d) Multiple and widespread infection of the carcass lymph glands,

and certain other conditions.

The directions given in the memorandum are carried out in this district and every effort is made to inspect the carcasses and viscera of all animals slaughtered within the area.

An endeavour has been made to ascertain the time required to carry out this inspection. Three of the Sanitary Inspectors have the meat inspector's certificate, and the same Inspector does not carry out all the inspections. Most of the inspection, though, is carried out by Mr. Kinch, the Chief Sanitary Inspector. The

Inspectors are accompanied by a man who is used to the procedure, and thus the time which the Inspectors spend in inspection is economised. Roughly, about 60 per cent. of the time of one inspector, together with that of the man who accompanies him, is taken up with inspection from September to March, and about 35 per cent. of their time during the summer months.

Every endeavour is made to carry out strictly the instructions of the Ministry of Health, as laid down in Memorandum 62. This strict inspection has had unfortunate results. Complaint was made that the high percentage of organs and carcasses condemned affected their trade adversely. Traders were diverting the supply of pigs to other manufacturers whose slaughterhouses were situated in districts where the inspection was less stringent. Two specific instances were given. In one instance, the firm slaughtered over 24,000 pigs every year. Last year in this slaughterhouse, the Sanitary Inspector who is also the Borough Surveyor devoted an average of three quarters of an hour three times a week for the inspection. If I give some of the instructions in Memorandum 62, it will be seen how utterly inadequate such an inspection must be.

The Memorandum lays down that every effort should be made to inspect the carcasses and viscera of all animals slaughtered within the area. All viscera shall be examined as they are removed from the carcass, or in such circumstances as will ensure that they are the viscera of a particular carcass. Every organ and the associated lymph glands shall be examined by the eye and by palpation. When any abnormal condition is observed, the nature and significance of which cannot be determined, the organ or gland shall be incised. The efficient examination of lymph glands shall be by multiple incisions into their substance.

The carcass shall be examined for condition of nutrition, evidence of bruising, dropsy, efficiency of bleeding, and swellings or deformities. The pleura and peritoneum shall be examined in every case, and in no case shall they be removed nor shall any evidence of disease be modified or obliterated by washing, rubbing, stripping, or in any other manner before examination.

This examination is presumed to be carried out on about 460 carcasses in 2½ hours. The whole inspection is, of course, totally inadequate; it might be said to be non-existent.

The slaughterhouse where this inadequate inspection takes place belongs to one of the largest sausage manufacturers in the country.

The inspection of the carcasses of pigs should be particularly stringent, as it is well known that the cooking of sausages is generally light and does not result in the sterilization of the meat.

I have brought these facts to the notice of the different authorities, and it is some satisfaction to know that certain proposals have been made by the firm for the more efficient inspection of the meat.

Another firm's name was given to which pigs had been diverted. This firm also controls some of the largest sausage manufactories in the kingdom.

Although the inspection carried out here is done by veterinary inspectors, the inspectors are employed by the firm, and the percentage of pigs condemned for tuberculosis is extremely low.

The following figures show the results of inspection in one particular week. There were 1,426 pigs slaughtered, no carcasses were condemned, but 3 heads, 16 lungs, 16 livers, 7 stomachs, 8 spleens, and 9 intestines. The loss resulting from the destruction of the lungs, livers, stomachs, spleens and intestines is not very considerable and may be ignored. The important articles are the carcasses and the heads.

The proportion condemned in this slaughterhouse would be no carcase per 1,000 compared with 4 per 1,000 here, and 2 heads per 1,000 compared with 74 per 1,000.

If a comparison be made with the results in public abattoirs, it will be found that these percentages of condemnations are far too low to assume that efficient inspection is carried out.

Unless some uniformity of inspection can be obtained, there is a danger that the pigs will be diverted into districts where inspection is either inefficient or non-existent. We have strong grounds for suspecting that illicit slaughtering does take place on a considerable scale, even in districts quite close to London.

**Stalls.**—The requirements of this part of the Regulations are designed to ensure that meat is exposed for sale from stalls under satisfactory conditions.

There was only one stall in the district, and that has now been removed, but the fact that this stall existed caused more discussion and unpleasantness than the remaining regulations, because a distinction is made between stalls and shops.

**Shops, Stores, Etc.**—Part V of the Regulations deals with the cleanliness of meat in shops. The regulations contain provisions for the protection of meat against contamination by dirt, flies, etc. Section 20, Sub-section 5(a) is the particular sub-section around which discussion has been raised and feelings aroused.

The subsection reads as follows :—

“ The occupier of any such room (in which any meat is sold or exposed for sale) shall take such steps as may be reasonably necessary to guard against the contamination of the meat therein by flies and shall cause the meat to be so placed as to prevent mud, filth, or other contaminating substance being splashed or blown thereon.”

The Health Committee met the butchers on several occasions and invited suggestions from them, so that some uniformity of action might be taken. The Committee and the butchers were agreed that there were some practices which do not lend themselves to control, and in regard to which, improvement could only be effected by the force of an educated public opinion. An instance of this is the common practice of handling meat before purchase. The butchers are the greatest sufferers in this respect, and they asked the Council to issue notices against this practice, and the notices were exhibited in all the shops.

An improvement has already been noticed, and this practice, it is hoped, will fall entirely into disuse.

No agreement, though, was reached as to the means which should be adopted to prevent contamination by flies and the splashing of mud. The subsection is vague, and rightly so, and it would be unreasonable to insist upon some detail of construction which would be applicable to every district.

A great point was made that the Ministry of Health had expressed an opinion upon this point and that a glass front should not be insisted upon in every instance. But in a busy street with a narrow pavement, the avoidance of splashing of mud and the blowing of dust on to the meat is practically impossible unless a glass front be provided. But some of the butchers failed to appreciate less precautions than a glass front. They had been so used to expose meat on the outside of the shop, that no argument was of any avail. Although the Council was loth to prosecute, proceedings had to be taken under this section against one of the butchers. Several warnings were issued, but were unavailing. The butcher was fined 20s. and two guineas costs.

In the enforcement of these regulations again, there are complaints of a want of uniformity on the part of local authorities.

It is reasonably resented by butchers that in a neighbouring area, meat is exposed outside the premises with impunity, and no attempt is made to enforce the regulations.

No one wishes to argue that the regulations are perfect, but it is only by a proper enforcement of them that the way is made clear to secure an improvement in the general conditions under which meat is treated before it reaches the public.

A start must be made somewhere, and these regulations do call attention to the underlying principle that the great object is to prevent contamination, not only of meat, but also of all food stuffs.

**Transport and Handling.**—Regulation 21 deals particularly with the vehicle used for transporting meat and sets out the requirements. As far as this district is concerned, this section is not a difficult one, and we are principally concerned with the delivery of the meat by the retailer to the consumer. The delivery of the meat by the wholesaler to the retailer is dealt with by other Authorities. The van has to pass the City Authorities as most of the meat consumed here is bought at Smithfield.

**Bakehouses.**—There are thirty-two bakehouses in the district; seven of these are underground bakehouses and were in use before the passage of the Factory Act of 1901. Very frequently these bakehouses have been placed underground when there was plenty of room to erect the building above the surface of the ground.

It is curious what a predilection our forefathers had for underground bakehouses. From a sanitary point of view, there is no comparison between the two types of building. An underground bakehouse is dark and difficult to keep clean and in some, artificial light has to be used in the day. The only point in favour of the underground bakehouse which I heard from its occupants is the fact that it is easier to keep it at an equable temperature. When the dough is made it is placed in a wooden receptacle for some time and fermentation takes place. In order to obtain the best results, a warm equable temperature is necessary, and this is secured, according to the advocates of the underground bakehouse, more easily where no doors lead directly from the open air to the baking-room.

The intractable and relapsing skin eruptions sometimes associated with the baking and confectionery trade have recently attracted considerable notice in both the medical and lay press, and according to the report of the Conference of operative Bakers and Confectioners held last August, the Secretary of their Union stated that there were twenty cases of baker's dermatitis to-day where only one existed a few years ago. This statement may be true of some districts, but it certainly is not true of London and Greater London.

I have made careful inquiries about the health of the bakers in this district, and I came across only one man who suffered from dermatitis or eczema. Over 200 men are employed in the baking of bread and pastry in the district. I have recently come across cases of dermatitis in other occupations than bakers, and many authorities group all these eruptions under one generic term—occupational dermatoses. In a discussion which took place at the Royal Society of Medicine in April, 1925, the view was generally expressed that there is no eruption specific to, or distinctive of, the industries of bakers and confectioners.

Evidence suggests strongly that the majority of these cutaneous disorders were incidents rather than consequences of the work.

This statement is combated by Dr. Mummery, the Medical Officer to Messrs. Lyons' employees at Cadby Hall. He thinks that there is a definite dermatitis to which persons engaged in factories manufacturing bread and confectionery are liable. To what part of the process the disease is due is doubtful. Sometimes the disease is called "Baker's Itch," but mites are rarely found in English milled flour.

A great improvement has recently taken place in the conditions under which bread is made, and this is due to the fact that in most bakehouses, mechanical mixers have been installed. In all but three bakehouses in Acton, the kneading is now mechanically done. The abolition of hand kneading has not only conduced to cleanliness, but has reduced the prevalence of dermatitis. When hand kneading was in vogue, it was a common occurrence to see caked dough on the hands and forearms, and hours might elapse before the baker would wash. It was not a pleasant sight in former days to see a baker over the wooden mixing trough on a hot summer afternoon with beads of perspiration on his forehead and face. With hand kneading, a sack of flour would take about three quarters of an hour to mix.

Although it is pleasing to report a great improvement in the conditions, in some of the bakehouses, there is still room for further improvement. I admit the difficulties which exist in underground rooms, but such matters as the prohibition of cigarette smoking, etc., might be taken into consideration.

**Milk Supply.**—There are 85 dairies and milkshops on the register. This number is three less than in 1924. The diminished number is due to the refusal to register persons who kept general shops. When the Dairies Act of 1922 came into force, the Council decided that it would not register any person who kept a general shop, but did not refuse to register those who were at that period selling milk. On any change of Occupation of general shops, the Council refuses to register the new occupier.

Twenty-two of the registered purveyors have shops and rounds, eight have shops without rounds, thirteen have rounds only, four are primarily caterers of food, and thirty-eight have general shops.

Under the Milk (Special Designations) Order, 1922, eleven licenses were granted for the sale of Certified Milk, ten for the sale of Grade A (Tuberculin Tested) Milk, and eight for the sale of Pasteurised milk.

“Certified” Milk must comply with the following conditions. Every cow must be examined by a veterinary surgeon once in every three months, and tuberculin tested once in every six month. The milk must be bottled at the farm and the milk must not be removed from the bottles before delivery to the customer. A sample of the milk must not contain more than 30,000 bacteria per cubic centimetre nor any bacillus coli in one-tenth of a cubic centimetre.



The milk shall not at any stage be treated by heat.

"Grade A" milk must comply with the following conditions. The cows must be examined once in every three months by a veterinary surgeon. The milk must be delivered in bottles or in containers of not less capacity than two gallons. A sample of the milk must not contain more than 200,000 bacteria per cubic centimetre nor any bacillus coli in one-hundredth of a cubic centimetre.

"Grade A (Tuberculin Tested)" Milk must comply with the following additional condition. The cows must be tuberculin tested by a Veterinary Surgeon once in every six months.

"Pasteurised" Milk must comply with the following condition. The milk shall be pasteurized, that is to say, retained at a temperature of not less than 145° and not more than 150° Fahrenheit for at least half an hour, and be immediately cooled to a temperature of not more than 55° Fahrenheit.

The milk shall not be so heated more than once and shall not be otherwise treated by heat. A sample of milk must not contain more than 30,000 bacteria per cubic centimetre, nor any bacillus coli in one-tenth of a cubic centimetre.

Although in the summer months, especially, most milk sold in this district has been heated, from a public health point of view, the term "pasteurization" should be confined to the process of heating to not less than 145° F. and not more than 150° F. for a period of thirty minutes.

When milk is treated in this way, no appreciable change takes place in the milk proteins. If ordinary raw milk is allowed to stand, the cream gradually rises to the top and a line of demarcation appears between the cream and the remainder of the milk. This layer of cream, sharply demarcated from the rest of the milk, is known as the cream line

When milk is pasteurized at 145° F. for thirty minutes, the cream line is hardly at all affected. The cream line, however, is affected above this temperature; the cream rises slowly and imperfectly and in milk pasteurized at 148° F. the cream line may be decreased by 40 per cent.

We frequently have complaints that milk is deficient in fat, but invariably when a sample is taken, the milk is found to contain more than the legal minimum of 3 per cent. of cream.

The effect of pasteurization on the vitamins in milk is important. Milk contains three vitamins—the fat soluble A vitamin, the water soluble B vitamin, and the anti-scurvy vitamin C. The two former have a relatively high resistance to heat so that pasteurization has practically no effect upon them. The anti-scurvy vitamin C, however, is sensitive to heat above 122° F., and there seems to be little doubt that pasteurization at 145° F. for thirty minutes weakens the anti-scorbutic property of milk.

The ideal milk, of course, would be that obtained from perfectly healthy cows under the cleanest conditions and consumed immediately with the least possible manipulation or handling, and certified milk complies with these conditions, but the cost of producing such a milk places it beyond the reach of most people.

The great advantage of pasteurization is that it confers its benefits without any serious disadvantages such as appreciable impairment of appearance, taste, flavour, or nutritive value.

It is generally admitted that a great improvement has recently occurred in the conditions under which milk is being produced and distributed. Not only is the milk cleaner, but adulteration is far less frequent than it used to be. The result is seen in the increasing consumption of raw milk. Five years ago, dried milk was rapidly ousting raw milk, especially in infant feeding. But there are indications that liquid milk is gaining in popularity, and the sale of dried milk is not advancing and increasing to the extent which it did a decade ago.

A great deal of propaganda work for the increasing consumption of milk has been done, but it was pointed out by Medical Officers of Health that the best means of propaganda was by the production of a cleaner and purer article.

It is admitted that milk is not only a valuable food, but also a cheap one, and for young children it was almost indispensable. But so long as the conditions under which it was produced and distributed were unsatisfactory, the increasing use of milk could not be expected. The conditions have improved, and the money spent on the improvement is proving a good investment to those concerned.

Food Analysis.—List of samples taken during the year ended 31st December, 1925, kindly supplied by Mr. Robinson, Chief Officer, Public Control Department, Middlesex County Council:—

<i>Article.</i>	<i>Taken</i>	<i>Adulterated.</i>
Milk ... ..	308	4
Cream ... ..	5	2
Butter ... ..	5	—
Cocoa ... ..	1	—
Corn Flour ... ..	2	—
Cream of Tartar ... ..	1	—
Egg Powder and Egg Substitute Powder	2	—
Ground Almonds ... ..	1	—
Mustard ... ..	1	—
Prescription ... ..	1	1
Sweets ... ..	4	—
Vinegar ... ..	4	—
Whisky ... ..	1	—
White Precipitate Ointment	1	—
	<hr/> 337 <hr/>	<hr/> 7 <hr/>

The figures given for adulterated samples include some adulterated informal samples in respect of which no proceedings could be taken.

TABLE I.

## COMPARATIVE RATES OF MORTALITY FOR THE YEAR 1925.

	Birth-rate per 1,000 total Population.	ANNUAL DEATH-RATE PER 1,000 POPULATION									RATE PER 1,000 BIRTHS		PERCENTAGE OF TOTAL DEATHS		
		All Causes	Enteric Fever	Small Pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis under 2 yrs.	Total deaths under 1 year	Causes of Death certified by Registered Medical Practitioners	Inquest Cases	Uncertified Causes of Death
England and Wales ..	18.3	12.2	0.01	0.00	0.13	0.03	0.15	0.07	0.32	0.47	8.4	75	92.1	6.9	1.0
105 County Boroughs and Great Towns, including London ... ..	18.8	12.2	0.01	0.00	0.17	0.03	0.18	0.09	0.30	0.43	10.8	79	92.1	7.3	0.6
157 Smaller Towns (1921 Adjusted Populations, 20,000—50,000) ..	18.3	11.2	0.01	0.00	0.15	0.02	0.14	0.06	0.31	0.38	7.6	74	93.0	5.9	1.1
London ... ..	18.0	11.7	0.01	0.00	0.08	0.02	0.19	0.11	0.23	0.46	10.6	67	91.1	8.9	0.0
Acton ... ..	16.5	10.6	.016	0.00	0.00	.016	0.12	.016	0.17	0.2	10.4	76	93.4	6.6	0.0

TABLE 2.

## VITAL STATISTICS FOR WHOLE DISTRICT DURING 1925 AND PREVIOUS YEARS.

Year	Population estimated to Middle of each Year	Births		Total Deaths Registered in the District		Transferable Deaths		Nett Deaths belonging to the District			
		Nett		Number	Rate	of Non-Residents Registered on the District	of Residents Registered outside Dist.	Under 1 year of Age		At all Ages	
		Number	Rate					Number	Rate per 1,000 Births	Number	Rate per 1,000 inhabitants
1920	61,000	1541	25.3	560	9.2	16	217	100	64	671	11.0
1921	62,000	1314	21.1	445	7.1	—	205	92	70	658	10.4
1922	62,390	1203	19.3	404	6.5	14	214	75	62	632	10.1
1923	62,720	1171	18.6	368	5.8	11	243	77	65	599	9.5
1924	62,980	1158	18.4	488	7.7	8	235	65	56	715	11.2
1925	63,110	1047	16.5	446	6.8	18	241	80	76	669	10.6

TABLE 3. AGES AT DEATH, AND WARD DISTRIBUTION OF DEATHS IN 1925.

CAUSES OF DEATH	AGES.									WARDS.			
	All ages	Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	North East	North West	South East	South West
Enteric Fever ... ..	1	—	—	—	—	—	1	—	—	—	—	1	—
Scarlet Fever ... ..	1	—	—	—	—	—	1	—	—	—	—	1	—
Whooping Cough ... ..	8	2	4	2	—	—	—	—	—	2	2	1	3
Diphtheria ... ..	1	—	—	—	1	—	—	—	—	—	—	1	—
Influenza ... ..	11	—	—	1	—	1	1	2	6	4	3	3	1
Meningoccal Meningitis ... ..	1	—	—	—	1	—	—	—	—	1	—	—	—
Pulmonary Tuberculosis ... ..	47	—	—	—	—	12	25	9	1	10	5	11	21
Other Tuberculous Diseases ... ..	10	2	2	2	1	—	2	1	—	2	2	2	4
Cancer ... ..	79	—	—	—	—	—	6	39	34	22	17	24	16
Rheumatic Fever ... ..	3	—	—	—	1	—	—	1	1	—	—	—	3
Diabetes ... ..	9	—	—	1	—	—	—	4	4	4	—	3	2
Cerebral Hemorrhage ... ..	39	—	—	—	—	—	—	17	22	9	11	8	11
Heart Disease ... ..	86	—	—	—	1	7	7	29	42	24	19	13	30
Arterio Sclerosis ... ..	9	—	—	—	—	—	—	3	6	3	2	2	2
Bronchitis ... ..	63	4	—	—	—	—	—	17	42	15	14	12	22
Pneumonia (All Forms) ... ..	52	13	3	4	3	2	3	12	12	13	6	12	21
Other Respiratory Diseases ... ..	3	—	—	1	—	—	—	1	1	1	—	—	2
Ulcer of Stomach or Duodenum ... ..	6	—	—	—	—	—	—	3	3	2	—	3	1
Diarrhoea (under 2 years) ... ..	11	10	1	—	—	—	—	—	—	2	—	4	5
Appendicitis and Typhilitis ... ..	4	—	—	—	1	—	2	1	—	2	2	—	—
Cirrhosis of Liver ... ..	5	—	—	—	—	—	—	3	2	2	1	1	1
Acute and Chronic Nephritis ... ..	17	—	—	—	—	2	1	5	9	7	4	3	3
Puerperal Sepsis ... ..	4	—	—	—	—	—	4	—	—	1	—	—	3
Other Accidents and Diseases of Pregnancy and Parturition ... ..	1	—	—	—	—	1	—	—	—	—	—	—	1
Congenital Debility and Malformation													
Premature Birth ... ..	39	39	—	—	—	—	—	—	—	16	6	5	12
Suicide ... ..	7	—	—	—	—	1	1	4	1	2	1	2	2
Other Deaths from Violence ... ..	13	1	—	—	2	1	2	3	4	2	1	4	6
Other Defined Diseases ... ..	138	8	1	2	4	2	13	22	86	44	39	20	35
Causes ill-defined or unknown ... ..	1	1	—	—	—	—	—	—	—	—	—	1	—
	669	80	11	13	15	29	69	176	276	190	135	137	207

1025

TABLE 4.

## INFANTILE MORTALITY, 1925.

CAUSES OF DEATH.	AGES.								WARDS.				
	Total	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	1-3 months	3-6 months	6-9 months	9-12 months	North East	North West	South East	South West
Whooping Cough ... ..	2	—	—	—	—	—	1	1	—	2	—	—	—
Tuberculous Peritonitis ... ..	1	—	—	—	—	1	—	—	—	—	—	1	—
Tuberculous Meningitis ... ..	1	—	—	—	—	—	—	1	—	—	—	—	1
Bronchitis ... ..	4	—	—	—	—	1	1	—	2	—	1	—	3
Pneumonia ... ..	13	—	—	—	—	4	3	4	2	—	4	1	8
Acute Tonsillitis ... ..	1	—	—	—	—	—	—	—	1	1	—	—	—
Convulsions ... ..	1	1	—	—	—	—	—	—	—	—	—	—	1
Meningitis ... ..	2	—	—	—	—	—	1	1	—	—	1	—	1
Diarrhoea ... ..	10	—	1	—	—	2	3	3	1	2	—	4	4
Congenital Debility and Atrophy ... ..	5	2	—	—	—	2	—	—	1	2	—	2	1
Congenital Malformation ... ..	5	—	—	—	—	4	1	—	—	1	1	—	3
Injury at Birth ... ..	5	5	—	—	—	—	—	—	—	4	—	1	—
Marasmus ... ..	5	—	—	—	—	2	2	1	—	—	1	—	4
Premature Birth ... ..	19	12	2	1	—	4	—	—	—	9	3	2	5
Congenital Syphilis ... ..	1	—	—	—	—	—	—	1	—	—	—	—	1
Infantile Scurvy ... ..	1	—	—	—	—	—	—	—	1	—	—	1	—
Intussusception ... ..	1	—	—	—	—	—	—	—	1	—	—	—	1
Found Dead ... ..	1	1	—	—	—	—	—	—	—	—	—	1	—
Other Causes ... ..	2	—	—	—	—	—	1	—	1	1	—	—	1
	80	21	3	1	—	20	13	12	10	22	11	13	34

TABLE 5.

## CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1925.

Notifiable Disease	Cases notified in whole District. At Ages—Years.								Total cases notified in Wards.			
	At all Ages.	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and up- wards	North East	North West	South East	South West
Scarlet Fever ... ..	83	—	22	54	4	3	—	—	24	14	16	29
Diphtheria ... ..	63	—	10	48	3	2	—	—	19	5	10	29
Enteric Fever ... ..	5	—	—	2	—	2	1	—	1	2	2	—
Pneumonia ... ..	44	4	15	6	3	10	4	2	11	3	11	19
Puerperal Fever ... ..	4	—	—	—	—	4	—	—	2	—	1	1
Cerebro Spinal Fever ... ..	1	—	—	—	—	—	1	—	1	—	—	—
Acute Poliomyelitis ... ..	1	—	—	1	—	—	—	—	—	—	—	1
Encephalitis Lethargica ... ..	2	—	—	—	—	2	—	—	—	—	2	—
Ophthalmia Neonatorum ... ..	5	5	—	—	—	—	—	—	1	2	2	—
Erysipelas ... ..	15	—	1	—	1	5	6	2	1	6	3	5
Tuberculosis (Resp.) ... ..	70	—	3	1	26	29	11	—	21	8	15	26
Tuberculosis (Other) ... ..	13	1	1	5	2	4	—	—	5	1	2	5
	306	10	52	117	39	61	23	4	86	41	64	115



TABLE VI.

## CASES REMOVED TO HOSPITAL, 1925.

	N. East	N. West	S. East	S. West	Total
Scarlet Fever ...	15	10	13	27	65
Diphtheria ...	18	5	10	29	62
Enteric ...	1	1	1	1	4
Pneumonia ...	2	2	2	11	17
Puerperal Fever ...	2	—	1	1	4
Cerebro Spinal Fever ...	1	—	—	—	1
Acute Poliomyelitis ...	—	—	—	1	1
Encephalitis Lethargica ...	—	—	1	—	1
Erysipelas ...	1	1	1	2	5
Tuberculosis (Resp.) ...	13	7	9	23	52
Tuberculosis (Other) ...	5	1	2	3	11
	58	27	40	98	223

TABLE VII.

## NOTIFICATIONS OF INFECTIOUS DISEASES IN LAST 10 YEARS.

	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916
Scarlet Fever ...	83	105	160	305	630	176	95	38	45	64
Diphtheria ...	63	45	61	223	205	147	54	46	67	81
Enteric Fever ...	5	0	3	1	1	—	5	3	4	5
Pneumonia ...	44	54	28	30	13	20	26			
Puerperal Fever ...	4	5	3	2	1	4	6	—	1	4
Cerebro-Spinal Fever ...	1	1	2	1	—	2	—	1	—	2
Acute Poliomyelitis ...	1	1	2	—	—	—	—	2	—	2
Encephalitis Lethargica ...	2	6	1	1	1	2	1			
Ophthalmia Neonatorum ...	5	4	4	4	2	15	11	7	6	6
Erysipelas ...	15	22	16	14	18	17	17	11	20	30
Malaria ...	—	—	—	—	—	4	31			
Tuberculosis (Resp.) ...	70	85	73	87	96	103	128	128	139	139
Tuberculosis (Other) ...	13	9	24	11	13	15	14	21	29	26
Dysentery ...	—	—	—	1	—	1				
Measles ...							365	417	1455	1059

TABLE VIII.

## BIRTHS.

	Males	Females
Total Births ...	539	508
Legitimate ...	522	487
Illegitimate ...	17	21

## NOTIFIED BIRTHS IN DISTRICT.

N. East	N. West.	S. East	S. West.	Total
242	144	158	338	882
	Still Births	...	17	...

## BIRTHS REGISTERED, BUT NOT NOTIFIED.

Males ...	15	Females ...	12	
N. East	N. West	S. East	S. West	Total
10	5	8	4	27

## Notifications were received from—

Doctors ...	...	...	481
Midwives ...	...	...	360
Nurses ...	...	...	104
Parents ...	...	...	13

## OUTSIDE BIRTHS

Males ...	55	Females ...	42	
	Total ...	97.		
N. East	N. West	S. East	S. West	Total
36	19	22	20	97
STILL BIRTHS (Outside)	...	...	...	5

TABLE IX.

INFANT WELFARE CENTRES, 1925.

Health Visitors' Attendances	...	...	...	200
Number of Children who attended	...	...	...	1,539
Number of Attendances by Children	...	...	...	11,231
Number of Children under 1 year of age	...	...	...	629
Number of Children over 1 year of age	...	...	...	910
Children who attended the Clinic for the first time	...	...	...	640
Children Treated at Dental Clinic	...	...	...	73
Children Treated at Ophthalmic Clinic	...	...	...	9
Children Treated for Enlarged Tonsils and Adenoids	...	...	...	11

ANTE-NATAL CLINIC.

Number of Attendances by Dr. Bell	...	...	...	25
Number of Expectant Mothers who attended	...	...	...	82
Number of Attendances made by Expectant Mothers	...	...	...	137
Number of Cases admitted to Acton Hospital	...	...	...	3
Mothers referred for Dental Treatment at Clinic	...	...	...	35
Mothers supplied with Dentures	...	...	...	7
Midwives Fees paid	...	...	...	5
Expectant Mothers to whom Dried Milk was supplied	...	...	...	43
Number of Packets of Dried Milk supplied	...	...	...	444

TABLE X.

INQUESTS—44.

Heart Disease	...	8	Run over by Motor	
Pneumonia	...	2	Vehicle	...
Cerebral Haemorrhage	...	2	Suicide	...
Bronchitis	...	2	Want of Attention at	
Arterio-Sclerosis	...	1	Birth	...
Ruptured Aneurism	...	1	Accidental Fall	...
Pancreatic Abscess	...	1	Found Drowned	...
Too decomposed to			Septicaemia after	
Ascertain Cause	...	1	Abortion	...
Premature Birth	...	1	Accidental Burns	...
			Accidental Scalds	...
			Accidentally Suffo-	...
			cated	...
			Taking Lysol	...

1925

STAFF TO WHOSE SALARY CONTRIBUTION IS MADE UNDER THE PUBLIC HEALTH ACTS OR BY EXCHEQUER GRANTS.

There has been no change in the staff ; Mr. Matthews during the year obtained the meat certificate of the Sanitary Institute.

- D. J. THOMAS. M.R.C.S., L.R.C.P., D.P.H., Medical Officer of Health (Medical Superintendent of the Isolation Hospital and School Medical Officer).
- M. W. KINCH. Member of the Royal Sanitary Institute, holds Meat Certificate ; Senior Sanitary Inspector. (Inspector under Diseases of Animal Acts, and the Rag Flock Act).
- J. J. JENKINS. Cert. Sanitary Institute ; holds Meat Certificate. Sanitary Inspector. (Inspector under Fabrics Mis-description Act).
- E. W. BROOKS. Cert. San. Inst. Sanitary Inspector.
- J. J. MATTHEWS. Cert. San. Inst. Sanitary Inspector ; holds Meat Certificate.
- Miss A. COOKSEY. Cert. San. Inst. Health Visitor.
- Miss J. WELSH Cert. San. Inst. C.M.B., Health Visitor.
- Mrs. LIGHT Clerk.

I have again to thank all the members of the Public Health Department for ungrudging assistance during the year.

I am,

Your obedient servant,

D. J. THOMAS.

