

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

**Contributors**

Acton (London, England). Borough Council.

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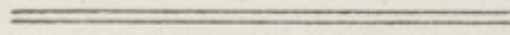
Wellcome Collection  
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ANNUAL REPORT

# Borough of Acton.

Medical Officer of Health

FOR THE YEAR 1934



# ANNUAL REPORT

OF THE

## Medical Officer of Health

TOGETHER WITH THE

## Report on the Medical

## Inspection of Schools

FOR THE YEAR 1934.



# ANNUAL REPORT

Extracts from Vital Statistics.—The following table gives the extracts from the statistics required by the Ministry of Health—

## Medical Officer of Health

FOR THE YEAR 1934.

PUBLIC HEALTH DEPARTMENT,

MUNICIPAL OFFICES,

ACTON, W.3.

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

LADIES AND GENTLEMEN,

I herewith submit the Annual Report required by the Ministry of Health, together with the Annual Report on the School Medical Services.

Incidentally, I may mention that this is the 30th Annual Report which I have submitted to the Council since my appointment

Area.—A rearrangement of boundaries was made by the County Council and the order came into force on April 1st, 1934. The changes affected chiefly the Acton and the Brentford and Chiswick Councils, but a small readjustment also was between the Acton and Ealing Councils. The net result has been an increase in the area from 2,305 acres to 2,317 acres, and a loss of rateable value of between £3,000 and £4,000.

Rateable Value.—The rateable value of the borough on 1st April, 1934, was £763,441, and the sum represented by a penny rate was £2,969 (year ended 31st March, 1934).

The number of inhabited houses, according to the Rate Books at the 31st March, 1934, was 16,060.

# ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1934

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MUNICIPAL OFFICE

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2,305 acres to 2,317 acres, and a loss of rateable value of between  
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Rateable Value.—The rateable value of the borough on 1st  
April 1934 was £703,441, and the sum represented by a penny rate  
was £2,000 (year ended 31st March, 1934).

The number of inhabited houses, according to the Rate Books  
of 31st March, 1934, was 16,000.

Extracts from Vital Statistics.—The following table gives the extracts from the vital statistics required by the Ministry of Health:—

## POPULATION 69,472.

<i>Live Births.</i>	POPULATION 69,472.			Birth-rate per 1,000 of estimated population—13.57
	Total.	M.	F.	
Legitimate .....	907	464	443	
Illegitimate .....	36	19	17	
	<u>943</u>	<u>483</u>	<u>460</u>	

*Still Births.*

Legitimate .....	32	10	22	Rate per 1,000 births
Illegitimate .....	—	—	—	—34
	<u>32</u>	<u>10</u>	<u>22</u>	

Deaths ..... 727      Death-rate per 1,000 inhabitants—10.46

Deaths from Puerperal causes (Headings 29 and 30 of the Registrar General's short list).

	Deaths	Rate per 1,000 births
No. 29 Puerperal Sepsis .....	2	{ 5.3
No. 30: Other Puerperal causes	3	

*Death-rate of Infants under 1 year of age.*

All infants per 1,000 births .....	41
Legitimate infants per 1,000 legitimate births .....	42
Illegitimate infants per 1,000 illegitimate births .....	28
<i>Deaths from Measles</i> —all ages .....	11
<i>Deaths from Whooping Cough</i> .....	2
<i>Deaths from Diarrhoea</i> —under 2 years of age .....	7

## POPULATION.

The Registrar General has supplied the following memorandum on the change of boundary.

The statistics of births, deaths and notifiable diseases for the calendar year in respect of Acton are composite figures combining the records for the first portion of the year prior to the date of change

with those for the altered area for the remaining portion of the year. The normal mid 1934 estimate of population for the area as now constituted is 69,343, but, for use with the composite statistics now supplied, a working population figure, modified to take account of the fact that the records do not wholly relate to the entire year, has been provided and fixed at 69,472.

The number of parliamentary electors in Acton has been as follows :—

1931	.....	47,865
1932	.....	48,126
1933	.....	48,245
1934	.....	48,228

The number of houses erected in the last 4 years were :—

1930-31	.....	449
1931-32	.....	257
1932-33	.....	188
1933-34	.....	146

### SOCIAL CONDITIONS OF THE DISTRICT.

There has been no material change in the social conditions of the district. There is of course a gradual change which is noticeable to those who remember the district for a considerable period. The north-east and south-east wards are still mainly residential in character, but many of the larger houses are now sub-let.

In the south-west ward are situated most of the Laundries in the district, and until the conditions of employment are changed, they are likely to remain in a part of the district which is occupied by persons of the artisan and labouring classes. There are no laundries in the north-west part of the district in which most of the factories are situated, and probably this is due to the peculiar conditions which obtain in the laundries.

There are factories scattered throughout the district, but most of them are situated in the north-west ward. These factories are conveniently situated for transport services and probably the majority of the employees live outside the district. The figures for the last Census are not yet available, but even in 1921, there was a larger number of people coming into the district to work than the number which left in the mornings to work in other areas. This tendency has probably become more emphasized in the last 10 years.

## AMBULANCE FACILITIES.

The ambulance facilities are similar to those described in previous reports.

A new motor ambulance has been provided for the removal of infectious cases to the hospital.

There are two ambulances provided for accident and non-infectious cases. These are housed at the fire station and are available at all hours. Last year the ambulance was called out to 440 street accidents, and on 520 occasions to private cases. Fees amounting to £111 2s. 6d., were paid for the use of the ambulance for private cases.

There has been no development or marked changes in the services provided in the area under the following heads:—

*Laboratory facilities.*

*Ambulance facilities.*

*Nursing in the home.*

*Clinics and Treatment Centres.*

*Hospitals—Public and Voluntary.*

## HOSPITAL PROVISION.

**General.**—The only General Hospital in the district is the Acton Hospital, Gunnersbury Lane, which has an accommodation of 65 beds.

During the year 1,302 in-patients were admitted; this is an increase of 93 on the previous year. Of these 155 were in for only 1 day and 106 for 2 or 3 days.

The Education Committee has an agreement with the Hospital for payment for the removal of tonsils and adenoids and the patients are kept in the Hospital for at least 1 night.

8,265 out-patients were treated during the year, an increase of 870 and the out-patient attendances were 33,373, an increase of 2,551 as compared with 1933.

The Hospital supplies a great need in the District, and is greatly appreciated. Most of the beds are continuously occupied, last year the average number of beds in daily occupation being 53.13. Extensions are contemplated in the near future.

**Fever.**—Acton Council Fever Hospital.

**Small-Pox**—Acton was one of the constituent bodies which



formed the Middlesex Joint Small-Pox Board. Under the Provisional Order Confirmation Act of 1929, the Joint Board was dissolved from the 1st April, 1929, and the duties of the Board transferred to the Middlesex County Council.

**Tuberculosis.**—The Tuberculosis scheme is administered by the Middlesex County Council which has sanatoria at Clare Hall and Harefield.

#### **Child Welfare Consultation Centres.**

- (a)—47, Avenue Road—Every Monday, Tuesday, Wednesday and Thursday afternoons at 2 p.m.
- (b)—Noel Road—Every Thursday afternoon at 2 p.m.
- (c)—East Acton—Every Monday afternoon at 2 p.m.
- (d)—Steele Road—Every Tuesday afternoon at 2 p.m.

**Ante-Natal Consultation Centre.**—School Clinic every Wednesday.

**Day Nursery.**—169, Bollo Bridge Road.

**School Clinic.**—45, Avenue Road.

(The above are provided and maintained by the Borough Council).

**Tuberculosis Dispensary.**—Green Man Passage, Ealing, W.13, on Tuesdays, Wednesdays, Thursdays and Fridays at 10.30 a.m. Mondays at 2 p.m., 1st and 3rd Tuesdays in month at 6 p.m.

**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, who visit the homes of both the poor and those who are able to pay.

There are also nursing associations which provide nurses for different classes of cases.

Midwives.—The Supervising Authority under the Midwives Act is the Middlesex County Council and from the County Council I understand that there are 21 certified midwives practising in the Borough.

### 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 .....	1899
Notification of Births Act, 1907 .....	1907
Public Health Act, 1907 (Clause 50) .....	1921
Public Health Act, 1925 (Parts 2, 3, 4 and 5) .....	1926
The Acton Improvement Act, 1904 .....	—
New Streets and Buildings .....	1925
Removal of House Refuse .....	1899
Common Lodging Houses .....	1898
Slaughter Houses .....	1924
Nuisances, &c. ....	1924
Offensive Trades .....	1903
Tents, Vans and Sheds .....	1906
Removal of Offensive or Noxious Matters .....	1908
Cleansing of Cisterns .....	1912
Employment of Children .....	1920
Fouling of Footpaths by Dogs .....	1929
Smoke Abatement .....	1930
Houses let in Lodgings .....	1934

### HOUSING.

For several years I have written extensively upon the housing conditions in the district, but as these conditions have not in any way materially altered during the last twelve months, I do not think it necessary to review the position this year.

In October the Council decided to appoint a temporary sanitary inspector whose duties would be primarily to make a house-to-house inspection of some parts of the district. A systematic house-to-house inspection of the district has not been done for nearly ten years, and it was deemed advisable to carry this out again dur-

ing the year. In view of the proposed legislation, his period has been extended from the six months originally intended.

During the year 17 houses have been closed under Section 19 of the Housing Act, of 1930, and the Council have built 28 new ones (flats) which are all occupied.

There are no areas in the borough consisting of squalid dwellings nor are there any courts or alleys with houses built around them. All houses with one or two exceptions abut on to 40-ft. roads and have ample air space in the rear. The majority of the houses are of two storeys built either in pairs or terraces and none can be considered ancient. What houses there were of great age have all been demolished except one, and this has now been represented as unfit.

In arriving at a conclusion as to the fitness for human habitation or otherwise of any premises represented to them, the Council is guided by the general housing standard in the borough and by how far the premises fall short of the requirements of the existing byelaws.

1,548 houses have been inspected and recorded under the Housing Consolidated Regulations of 1925. Such inspections entail a great amount of detailed work and occupy much time.

From time to time cases of overcrowding are discovered. These can usually be remedied by an elder member of the family sleeping out or by altering the general sleeping arrangements. On occasion, however, the difficulty cannot be so easily overcome, as in the case of a man and wife with a large young family. Very often the husband cannot afford the rent of the necessary number of rooms to house the family decently, nor could he afford to do so, is it simple to find accommodation as private landlords will not let their premises to persons having several children. The natural solution in these cases is to rehouse the families on the Council's housing estate. This unfortunately always means waiting a considerable time owing to the inadequacy of the estate, and during this time the overcrowding remains unabated.

There are quite a number of basement houses in the central and northern part of the borough which were formerly occupied by one family. The majority of these houses are now let off in separate floors, including the basements. The rooms habitually used as sleeping rooms only in a basement can be closed if they cannot be made to comply with the Council's regulations relating to such rooms, but it would be well if the regulations applied equally to rooms used as living rooms or workshops.

Under Section 20 of the Housing Act, 1930, proceedings may be taken to close a separate tenement in a house as unfit for human habitation but no such power is given to deal with any particular room in the tenement. Here again it would be advantageous if a separate room of any such tenement which was unfit for habitation whether used for sleeping only or otherwise, could be closed.

None of the three and four storied tenement houses in the borough have W.Cs. on the third or fourth floors; nor in most cases is there space to construct one. Most of these houses come under the byelaws with regard to houses let in lodging or occupied by members of more than one family, but it is doubtful whether the clause in these byelaws dealing with the adequacy and accessibility of W.Cs. for each family can be construed so as to require an owner to construct a W.C. on each floor, although this is most desirable.

### HOUSING.

Number of Houses erected during the year:—

(a) Total (including number given separately under (b) .....	146
(b) With State assistance under the Housing Acts:—	
(i) By the Local Authority .....	28 (flats)
(ii) By other bodies or persons .....	62

1. *Inspection of Dwelling-houses during the Year 1934:—*

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) .....	1959
(b) Number of inspections made for the purpose .....	4886
(2) (a) Number of dwelling-houses (included under sub-head(1) above), which were inspected and recorded under the Housing Consolidated Regulations, 1925 .....	1548
(b) Number of inspections made for the purpose .....	3722
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .....	Nil.
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .....	1888

2. *Remedy of Defects during the Year without Service of formal Notices :—*

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers 1753

3. *Action under Statutory Powers during the Year :—*

A.—Proceedings under sections 17, 18 and 23 of the Housing Act, 1930 :

(1) Number of dwelling-houses in respect of which notices were served requiring repairs ..... 127

(2) Number of dwelling-houses which were rendered fit after service of formal notices :—

(a) By owners ..... 127

(b) By local authority in default of owners ..... Nil.

B.—Proceedings under Public Health Acts :—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied ..... 8

(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—

(a) By owners ..... 8

(b) By local authority in default of owners ..... Nil.

C.—Proceedings under sections 19 and 21 of the Housing Act, 1930 :

(1) Number of dwelling-houses in respect of which Demolition Orders were made ..... 8

(2) Number of dwelling-houses demolished in 1934, in pursuance of Demolition Orders ..... 17

D.—Proceedings under section 20 of the Housing Act, 1930 :—

(i) Number of separate tenements or underground rooms in respect of which Closing Orders were made ..... Nil.

- (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ..... Nil.

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

### Number of Inspections and Action Taken.

Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) .....	1959
(1) Dealt with by service of Informal Notice .....	1753
(2) Dealt with by service of Statutory Notice under Section 17, Housing Act, 1930 .....	127
(3) Dealt with by service of Statutory Notice under Public Health Acts .....	8
Premises (other than defective dwelling houses) inspected for nuisances and miscellaneous defects.....	929
(1) Dealt with by service of Informal Notice .....	755
(2) Dealt with by service of Statutory Notice under Public Health Act, &c. ....	32
Reinspections subsequent to service of Notice .....	6987
Inspection after notification of Infectious Disease .....	429

### Number of Premises under Periodical Inspection.

Workshops and Workplaces .....	135
Bakehouses .....	29
Slaughterhouses .....	2
Public House Urinals .....	37
Common Lodging Houses .....	1
Butchers' Shops .....	47
Fish Shops .....	32
Premises where food is manufactured or prepared .....	35
Milk Purveyors .....	110
Cowsheds .....	Nil.
Riggeries .....	Nil.
Rag and Bone Dealers .....	7
Mews .....	4
Schools .....	13
Caravan Grounds .....	2

## Rent Restriction Act.

Number of Certificates granted .....	32
--------------------------------------	----

## Detail of Work carried out.

Sanitary Dustbins provided .....	546
Yards paved or yard paving repaired .....	213
Insanitary forecourts remedied .....	58
Defective drains repaired or reconstructed .....	67
Defective soil pipes and ventilating shafts repaired or re- newed .....	89
Defective fresh air inlets repaired or renewed .....	53
Defective gullies removed and replaced by new .....	67
Rain water downpipes disconnected from drain .....	16
Dishing and curb to gullies repaired and new grating fixed .....	264
Defective W.C. pan and traps removed and replaced by new .....	61
Defective W.C. flushing apparatus repaired or new fixed .....	585
Defective W.C. seats repaired or new fixed .....	198
Defective flush pipe connections repaired .....	157
Insanitary sinks removed or new fixed .....	46
Sink waste pipes repaired or trapped .....	203
Insanitary wall surface over sinks remedied .....	145
Ventilated food cupboards provided .....	10
Drinking water cisterns cleaned .....	593
Defective covers to drinking water cisterns repaired or new fixed .....	214
Insanitary sites beneath floors concreted .....	7
Spaces beneath floors ventilated.....	183
Dampness in walls from defective damp-proof course remedied .....	148
Dampness from defective roof, rain water gutterings, &c., remedied .....	877
Defective plastering repaired (number of rooms) .....	456
Rooms where dirty walls and ceilings have been cleansed and redecorated .....	3142
Defective floors repaired .....	118
Defective or dangerous stairs repaired .....	33
Defective doors and windows repaired .....	327
Defective kitchen ranges and fire grates repaired .....	144
Defective washing coppers repaired .....	96
Coal cupboards provided or repaired .....	23
New W.C. apartments provided .....	4
Accummulations of offensive matter removed .....	31
Drains unstopped and cleansed .....	289
Overcrowding nuisances abated .....	14
Drains tested, exposed for examination, &c. ....	73

Smoke observations taken	.....	.....	.....	.....	163
Smoke nuisance abated on service of notice	.....	.....	.....	.....	18
Nuisances from animals abated	.....	.....	.....	.....	7
Notifications of waste of water sent to Metropolitan Water Board	.....	.....	.....	.....	314

## UN SOUND FOOD SURRENDERED DURING 1934.

TABLE 1. Diseased Meat.

### *Tuberculosis.*

#### PIGS.

60 Carcases with Heads.  
5 Forequarters.  
583 Heads.  
331 Plucks.  
2784-lbs Chitterlings.

#### CATTLE.

2 Cows' Carcases with Offal.  
5 Stirks' Carcases with Offal.  
16 Calves' Carcases with Offal.  
6 Forequarters of Veal.  
2 Loins of Veal.  
1 Side of Veal.  
2 Stirks' Heads & Tongues.  
4 Calves' Heads & Tongues.  
2 sets Cows' Lungs with Hearts  
3 sets Calver' Lungs with  
Hearts.  
2 Stirks' Plucks.  
24 Calves' Plucks.  
2 Cows' Livers.  
1 Calf's Liver.  
2 Calves' Kidneys.

### *Tuberculosis and Pleurisy.*

1 Calf's Carcase with Offal.

### *Tuberculosis & Dropsy.*

1 Calf's Carcase with Offal.

### *Parasites.*

1 Cow's Liver.  
1 Calf's Liver.

1 Calf's Pluck.  
2 sets Cows' Lungs with  
Heart.  
1 set Cow's Lungs.  
1 Cow's Liver.  
1 set Calf's Lungs with  
Heart.

#### SHEEP.

14 Sheeps' Plucks.  
74 sets Sheeps' Lungs.  
13 Sheeps' Livers.  
1 set Sheep's Lungs with  
Heart.

### *Parasites and Cirrhosis.*

#### CATTLE.

1 Calf's Pluck.

### *Pleurisy.*

#### PIGS.

2 Forequarters.  
5 Ribs.

#### CATTLE.

1 Calf's Carcase with Offal.  
1 Brisket of Beef.  
2 Forequarters of Veal.  
9 Breasts of Veal.  
19 Ribs of Veal.  
1 Stirk's Pluck.  
17 Calves' Plucks.  
46 sets Calves' Lungs with  
Hearts.



## SHEEP.

- 1 Breast of Mutton.
- 2 Sheeps' Plucks.
- 1 Rib of Mutton.

*Pleurisy and Parasites.*

## CATTLE.

- 1 Calf's Pluck.

*Pleurisy and Pneumonia.*

- 1 Calf's Carcase with Offal.

*Suppurating Pleurisy.*

- 2 Calves' Carcases with Offal.

*Abscesses.*

## PIGS.

- 1 Leg of Pork.

## CATTLE.

- 9 Calves' Heads.
- 1 Calf's Pluck.
- 18 Calves' Livers.

## SHEEP.

- 1 Sheep's Head and Scrag of Mutton.

*Pneumonia.*

## CATTLE.

- 1 Calf's Pluck.
- 2 sets Calves' Lungs with Hearts.

*Jaundice.*

- 5 Calves' Carcases with Offal.

*Dropsy.*

- 1 Calf's Carcase with Offal.

*Dropsy and Emaciation.*

- 1 Cow's Carcase with Offal.

## SHEEP.

- 5 Sheeps' Carcases with Offal.

*Adenitis.*

## CATTLE.

- 3 Calves' Plucks.
- 2 Calves' Livers.

*Arthritis.*

## PIGS.

- 1 Leg of Pork.

## CATTLE.

- 1 Shoulder of Beef.
- 1 Knuckle of Veal.
- 1 Shank of Veal.

*Pyæmia.*

- 2 Calves' Carcases with Offal.

*Leukaemia.*

- 1 Calf's Carcase with Offal.

*Cirrhosis.*

- 2 Cows' Livers.
- 3 Stirks' Livers.
- 4 Calves' Livers.

*Nephritis.*

- 2 Cows' Kidneys.
- 13 Calves' Kidneys.

*Congestion.*

- 3 Calves' Carcases with Offal.
- 2 Calves' Plucks.
- 2 sets Calves' Lungs with Hearts.

*Congestion and Bruising.*

- 2 Calves' Carcases with Offal.

*Cystic.*

- 5 Calves' Kidneys.

*Bacterial Necrosis.*

- 4 Calves' Livers.

*Melanosis.*

- 5 Calves' Carcasses with Offal.
- 2 Ribs of Veal.
- 2 Hindquarters of Veal.

*Moribund.*

## PIGS.

- 2 Carcasses with Offal.

## CATTLE.

- 12 Calves' Carcasses with Offal.

## SHEEP.

- 2 Sheeps' Carcasses with Offal.

*Bruised, Fractured, etc.*

## PIGS.

- 2 Hindquarters.
- 1 Leg.

## CATTLE.

- 5 Calves, Carcasses with Offal.
- 6 Loins of Veal.
- 1 Forequarter of Veal.
- 2 Hindquarters of Veal.
- 1 Side of Veal.
- 1 Leg of Veal.
- 4 Knuckles of Veal.
- 3 Calves' Kidneys.

*Unsound.*

## CATTLE.

- 1 Calf's Pluck.
- 1 Calf's Liver.
- 1 set Calf's Lungs with Hearts.

*Suffocation.*

## PIGS.

- 12 Pigs Carcasses.

## SHEEP.

- 4 Sheeps' Carcasses.

## OTHER FOODS.

*Bruised.*

- 1 Turkey.
- 1 Chicken.

*Mastitis.*

- 12-lbs. Minced Belly of Pork.

*Unsound.*

- 3 Turkeys.
- 6 Ducks.
- 42 Chickens.
- 50 Rabbits.
- 19-lbs. Cod Fillets.
- 36 tins Prawns.
- 1 (6-lb.) tin Ox. Tongue.

TABLE II.  
 NUMBER OF PIGS' CARCASSES INSPECTED FROM 1ST JANUARY TO 31ST DECEMBER, 1934 WITH  
 ANALYSIS OF SURRENDERS ON ACCOUNT OF DISEASE.

1934	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	Pieces of Pork.
January	1687	53	3	—	—	2	—	—	26	232 lbs.	— lbs.
February	979	23	4	—	—	—	—	—	15	136 „	— „
March	1412	59	5	—	—	—	—	—	30	256 „	— „
April	1373	34	5	—	1	—	—	—	22	192 „	40 „
May	1179	40	2	—	2	—	—	—	24	168 „	34 „
June	1223	49	4	—	—	—	—	—	20	184 „	— „
July	1295	50	4	—	—	1	—	—	27	146 „	— „
August	1433	35	3	—	—	—	1	—	23	168 „	— „
September	1747	60	10	—	2	—	—	—	32	248 „	— „
October	2618	108	11	—	2	—	—	—	44	432 „	— „
November	2248	71	7	—	—	—	2	—	31	272 „	42 „
December	2175	81	6	—	—	—	—	—	39	328 „	— „
TOTAL	19369	663	64	—	7	2	3	—	333	2762 „	116 „

## SANITARY CONDITION OF THE SCHOOLS.

A complete sanitary survey of the schools has been made by the Sanitary Inspector, and I am pleased to report that the conditions in all the schools are excellent. In none of the schools were there any serious defects found ; there were a few minor conditions which required to be remedied, such as a defective W.C. seat, &c.

Considering that some of the schools are about 40 years of age, the sanitary conditions are astonishingly good.

## INSPECTION AND SUPERVISION OF FOOD.

### MILK SUPPLY.

There are no cowsheds in the Borough, all the milk being produced outside.

There are 119 persons or firms retailing milk in the district under the following categories :—

Dairymen.			Purveyors of Milk
No. with rounds <i>not</i> occupying premises in the Borough.	No. with rounds occupying premises in the Borough.	No. of General shops from which milk is sold from covered pans only.	No. of shops from which milk is sold in closed and unopened receptacles only.
11	19	2	87

### SPECIAL DESIGNATED MILK.

The number of persons or firms licensed to sell Special Designated Milk are as follows :—

- 3 " Certified "
- 5 " Grade A (Tuberculin Tested) "
- 1 " Grade A "
- 16 " Pasteurised "
- 1 " Grade A Pasteurised "

### BAKEHOUSES.

Of the 29 bakehouses in the Borough 5 are underground these were licensed under the Factory Acts of 1901.

## SMOKE ABATEMENT.

Nuisances from the emission of smoke from industrial chimneys in the Borough arise chiefly from the use of unsuitable coal, or through the absence of proper appliances for burning it.

In an attempt to reduce overhead charges, most of the laundries and manufacturing companies purchase the cheapest fuel possible, which is known in the trade as "duff", namely, slack, dust, or fine siftings of house or steam coal, costing from 20/- to 22/- per ton delivered, and such coal is not always washed.

The siftings of Welsh Steam Coal or semi-anthracite have a high calorific value and give off little smoke, but the slack of coals from Derbyshire and Nottingham—soft house coals—is highly bituminous and gives off as much as one third of its weight in smoke. It is therefore impossible to fire such coal by hand without causing a nuisance.

A certain amount of skill is required of the stoker when firing these soft slack coals, and the work is decidedly harder as there is a tendency for the coal to cake or fuse together, and the hard tight crust which is formed prevents air passing through the fire bed. If this is not carefully watched combustion is impeded, except where the crust cracks and air passes through. Any slowing down of combustion naturally affects the amount of steam raised, and manufacturers cannot as a rule meet their requirements for steam unless the boiler is working at its full rated capacity.

To burn any soft coal it is necessary to stoke at frequent intervals—not longer than 5 minutes—but this has the decided disadvantage that every time the fire door is opened the cold air which enters the furnace, reduces its temperature and also the temperature in the combustion-chamber, with the consequence that volumes of smoke are emitted from the chimney. It is also necessary to break up with a slice bar the crust on the fire bed at frequent intervals and during this operation volumes of dense smoke are given off. Moreover forced draught is needed for burning this class of coal with a result that coal-dust, grit and ash is blown up the chimney. During the year six cases of nuisances from dust, grit and ash were dealt with.

For burning "duff" satisfactorily, mechanical stokers are necessary, and in one laundry where an under-feed mechanical stoker was installed excellent results were obtained.

During the year the chimney of a certain manufacturing company suddenly began to emit volumes of black smoke every few minutes after being quite satisfactory for many years. On en-

quiry it was found that a soft Nottingham slack costing about 20/- per ton was being burned, whereas formerly semi-anthracite peas costing 30/- per ton had been used. Although the firm was saving £250 per annum on their coal bill the district around the works was subjected to a very bad smoke nuisance.

There was one prosecution during the year against the owners of a laundry for emitting black smoke, and a fine was imposed. The nuisance arose through the use of unsuitable coal in a boiler of insufficient capacity to meet the demands for steam. A new boiler of sufficient capacity is now about to be installed.

On the investigation of a complaint from the emission of ash it was found that the firm was burning in their boiler as fuel, wood waste and saw dust. Coal is now being burned.

Many laundries in the borough are using boilers of the locomotive type. These are good smoke producers, and as all efforts to prevent smoke nuisances from this class of boiler have failed, many firms are replacing them by boilers of the Paxman type.

Complaints are frequently received of smoke nuisances on vacant land caused through the burning of wood waste, sawdust, old motor tyres, etc. As such offences do not constitute nuisances under the Smoke Clauses of the Public Health Acts, nothing beyond persuasion can be done to abate them.

### BIRTHS.

Table 7 gives particulars of the births registered and notified in the district, and the births belonging to the district, which have occurred and been registered outside the district.

The total number of registered births is obtained from the Registrar-General on form S.D.30. The notified births are obtained through the notification of births in the district, and from those Medical Officers of Health of districts in which outside births have occurred, and who have sent lists during the year.

The total number of births registered was 943:483 males and 460 females. This figure is equal to a birth-rate of 13.57 per 1,000 inhabitants. In addition 32 still births were registered as belonging to the district.

The birth-rate is 1 per 1,000 higher than that of 1933, and the number is 57 higher in 1934 than in 1933.

If Table I at the end of the report be examined it will be observed that both the birth-rate and the death-rate of Acton are

below those of the whole of England & Wales. Our death-rate has always been lower, but until recently our birth-rate was higher than the rates which obtained in the rest of the country. In some of the districts around London the birth-rate is still higher than in the whole of England and Wales. This fact does not point to a real increase or even to a high birth-rate, but is due to changes in the population. The higher birth-rates occur in those districts which are now in course of development, as these naturally attract newly married couples ; based upon the gross population, their birth-rates appear high. If the birth-rates were standardised according to the age distribution of the population, or based upon the number of married people between ages say of 20 and 45 years of age, it would be found that the extra-metropolitan districts had a lower birth-rate than that of the whole of the Kingdom, and that the rate was a falling one.

The birth-rate has been declining regularly since 1880. Except for the abnormality of the years 1915-21, due to war conditions, the birth-rate is a regular slant to 1934. In Acton this phenomenon has not been marked until recently, because of the abnormal age-distribution of the population as a developing district, but now that the borough is almost fully developed, the birth-rate will exhibit the same character as that of the rest of the Kingdom and show a regular decline, probably in an exaggerated degree. Moreover, not only the rate will decline, but the actual number of births will be much less.

What is the explanation of the fact that the birth-rate and the number of births last year were higher than they were in the previous year ?

This phenomenon, of course, may only occur in 1934, and as the period is such a short one, is of no significance, but I am of opinion that the cause is due to an underestimate of the population by the Registrar General. Before the last Census it was suspected that the estimate of the population was too low, and the Census proved that our suspicions were well founded. At the present time also, I think that similar conditions exist, and that instead of the population being lower than it was at the Census, it is higher, and that the birth-rate had not increased last year.

### DEATHS.

Four hundred and fifty-four deaths were registered in the district ; of these 24 did not belong to Acton, and were transferred to other districts.

Two hundred and ninety-seven deaths of Acton residents occurred outside the area and have been included in our returns. The total number of deaths belonging to the district is therefore 727, which corresponds to a death-rate of 10.46 per 1,000 inhabitants. This rate is what is called the crude death-rate and as such is not comparable to the death-rate in the whole of England and Wales, nor is it comparable to that of other districts. It has been explained in previous reports that the death-rate of a district depends among other things upon the age and sex incidence of its population, and in order to establish a comparison these conditions must be standardised. For this purpose the Registrar-General has supplied each district with a comparability factor for adjusting the local death-rate of 1931 and subsequent years. The comparability factor for Acton before the change of boundaries on April 1st, 1934, was 1.07 and after April 1st, 1.08. In order to institute a comparison with other districts the death-rate has to be multiplied by the comparability factor. The standardised death-rate of Acton would therefore be 11.29 per 1,000 inhabitants.

The following extracts from the Memorandum issued by the Registrar General will explain how and why the comparability factor is used.

The crude death-rate of an area should be multiplied by the comparability factor in order to make it comparable, from a mortality point of view, with the crude death-rate of the country as a whole or with the mortality of any other local area, the crude death-rate of which should be similarly modified with its own factor for the purpose.

If the populations of all areas were similarly constituted as regards the proportions of their sex and group components, their crude death-rates (deaths per 1,000 population) could be accepted as valid comparative measures of mortalities experienced by the several populations.

In practice, however, populations are not thus similarly constituted and their crude rates fail as true comparative mortality indexes in that their variations are not due to mortality alone but arise also from differences in their population constitution, the two elements being combined in indistinguishable proportions. In order to isolate the mortality factor it is first necessary to identify and remove the population variable. For the present purpose, the average mortality rates experienced in England and Wales during the three years 1930-32 divided into 11 sex-age groups have been adopted as the standard and have been applied to the corresponding sex-age groups in the 1931 census population of every



Borough, Urban District and Rural District in the country. The adjusting factor now supplied in respect of a given area represents the ratio of the resulting death rate for the national 1931 census population to the similarly obtained hypothetical death-rate for the said area. The factor may be said to represent the population handicap to be applied to the area and, when multiplied by the crude death-rate experienced in the area, modifies the latter so as to make it comparable with the crude death-rate for the country as a whole or with the similarly adjusted death-rate for any other area.

Two extreme examples are taken to illustrate the working of the comparability factor—Bournemouth and Dagenham. Bournemouth's crude death-rate for 1933 was 14% above the national average, but by the adjusted comparison it is seen to be 15% below; the apparent excess in the first comparison being nothing more than a reflection of the elderly nature of the Bournemouth population

The abnormal distribution of the population accounts for the remarkably low crude death-rates in some of the rapidly growing districts. Apart from the abnormal age distribution of the population, the death-rates in some districts would require all persons who died in those districts to be centenarians, and only the method of comparison is by the use of the comparability factor.

As the population becomes stabilised, the death-rate must rise. Even at the present time, the death-rate tends to increase, but it may be asserted with confidence that never has the population as a whole been so healthy.

The death-rate has declined irregularly since 1880, but it was not until 1900 that the drop became marked. Throughout the Kingdom the rate since 1920 has been fluctuating with a slight tendency to increase.

In Acton the death-rate has not yet actually shown an increase. Were it not that the death-rates at all ages below 80 have been reduced, the death-rate would have started to rise steadily about 1910, but actually it fell during the period 1920-1930 and has not yet started to rise steadily, but inevitably it must do so before many years have passed in spite of a healthier population.

Analysed for age periods, we find that in infancy the drop is great, but it is less and less for each successive age-period. For persons over 80, the death-rate is much the same and probably will continue to be so.

In 1900 the average age at death was 34 years, and in 1933 it was 64.

At the end of the report there is a table giving the age-distribution of the deaths which occurred. From that table it will be seen that only 116 persons under 25 years of age died whilst 336 of the deaths were in people over 65 years of age. Nearly one-half of the deaths—46 per cent.—occur in people over 65 years of age. In previous reports I have pointed out how the increased age at death affects the morbidity of certain diseases. Apart from the diseases which are associated with worn out cells of the body such as old age with 38 deaths, Cerebral Haemorrhage 43 deaths, thickened arteries 44 deaths, there has been a great increase in the number of deaths from other causes such as Heart Disease and Cancer. Although there is an apparent increase in the number of deaths from Heart Disease, there is no reason to assume that post infective heart disease, which may be preventable is on the increase, 103 of the deaths from heart disease were in persons over 65 years of age, and it is fair to assume that most of these are due to a degeneration which is inevitable, and the increase in the number of deaths from heart disease is due to the altered age distribution of the population.

There was a decrease of 11 in the number of deaths from Cancer as compared with 1933, but there is an increased tendency of death from Cancer. In studying the apparently increased incidence of Cancer, we must also bear in mind the altered age-distribution of the population, and the relative increase of people living to an age in which Cancer claims most of its victims.

Only one death was uncertified. This occurred in Glossop.

I have pointed out in different annual reports the attitude of the public towards the treatment of disease in institutions, and the increasing number of deaths in Public Institutions. Last year 358 deaths occurred in Public Institutions, and in recent years, nearly one-half of the deaths have occurred in public institutions.

Thirty years ago less than one-fifth of the deaths occurred in public institutions. In 1905, 1906 and 1907, the numbers were 118, 119 and 158 respectively.

The increase has been a gradual one, and at no particular period was there any marked or sudden increase. The increase though has been most marked in the County Hospitals and in the local general hospital. Thirty years ago, less than one-half of the total deaths in public institutions occurred in the old poor law infirmaries. In 1905 out of 118 total deaths in public institutions 54 occurred in the local infirmary, and out of 119 in 1907, 44 occurred in Isleworth Infirmary.

In 1932, 1933 and 1934, 179, 195 and 200 deaths respectively occurred in the Middlesex County Hospitals out of totals

of 386, 386 and 358 in all public institutions. This increase is due partly but not entirely to the change in the character and control of these institutions. By the Local Government Act, 1929, these institutions were transferred from the Boards of Guardians to the County Councils, and the old stigma of the Poor Law was removed. But the popularity of these institutions had commenced before the transfer, and even when they were under the control of the Guardians the general public were making increased use of the facilities which they offered.

During the last 30 years, as far as this district is concerned the great voluntary hospitals of London have declined in their popularity. With the exception of the West London Hospital, fewer deaths have occurred in the Voluntary London Hospitals in the last 5 years, than occurred in them 30 years ago.

#### **Inquests and Coroner's Inquiries.**

Thirty inquests were held and in 27 instances the Coroner issued a certificate without an inquest after he had ordered a post-mortem examination.

### **INFECTIOUS DISEASES.**

#### **Scarlet Fever.**

Two hundred and thirty-six cases of Scarlet Fever were notified last year with one death. These figures are sufficient to indicate that the type of the disease was mild. For a number of years the mildness of Scarlet Fever has been a subject of comment, but in the Annual Report of 1932, a resume of the history of Scarlet Fever was given, and it is evident from that history that Scarlet Fever throughout some centuries has varied greatly in its severity. A mild type would be followed by one of extreme malignancy, and mild and severe epidemics have alternated throughout the ages.

If the prevalent views of Scarlet Fever are accepted, the mild type which now prevails does not mean that there is an alteration in the character of the disease. The behaviour of Scarlet Fever varies considerably not only in different areas but in different districts of the same area. These variations are explicable if we are willing to accept that Scarlet Fever is not a specific disease, but that the Scarlet Fevers are a group of somewhat specialistic reactions to a group of allied parasites.

It has been found that the incidence of the types of streptococci in Scarlet Fever varies in different localities and reflects the clinical character of the prevailing scarlatinal infections.

A number of the cases admitted to hospital have a definite train of signs and symptoms. The earliest symptom is usually a sore throat, accompanied by a temperature which frequently reaches 103, 104 and 105 degrees. The throat is congested and the soft palate may be uniformly injected or it may have the appearance of a punctate rash, which may be regarded as the enanthem of the disease. The tongue, at first furred, afterwards assumes the typical strawberry appearance.

The rash appears about 24 hours from the onset of the disease and consists of closely set minute points, usually of a brilliant red colour. The rash is general on the trunk and limbs, but does not invade the face.

When these signs and symptoms are present there is no difficulty in the diagnosis, but the conditions may be modified to an extraordinary degree. The temperature may not be above the normal; the throat symptoms may be very mild; the appearance of the tongue may be quite indefinite, and the rash so evanescent as to have disappeared before admission to hospital. So that although most of the cases are easy, others are difficult, and some are impossible to diagnose correctly at the stage in which they are admitted to hospital.

If we admit that Scarlet Fever is not a specific disease, the difficulty of diagnosis is fundamental, and not due to want of skill. The conditions are so variable as to warrant the assumption that the disease we call Scarlet Fever is not a specific entity but caused by different strains of the Streptococcus. The conditions are too variable to be explained by different degrees of virulence in the same strain.

Bacteriologically, the Scarlet Fever reaction may result from infection of numerous kinds of streptococci which are not identical. In the majority of the cases of Scarlet Fever, the organism found is a haemolytic streptococcus belonging to one of four types. In some epidemics scarlatinal types 1, 2, 3 and 4 represent over 75 per cent of the strains isolated, and it is confidently stated in some quarters that the severity or mildness of the disease depends on the type of streptococcus present in the epidemic. But although the assumption of the causation of the disease by different strains of streptococci may explain some of the clinical manifestations of Scarlet Fever, it leaves certain phenomena obscure. For instance, we should on this assumption expect that a fair proportion of the cases admitted to hospital would develop secondary attacks during their stay in the hospital. But if a definite diagnosis of Scarlet Fever has been made on admission, secondary rashes and throats

are very rare. Last year in only two instances did we have a secondary rash and throat symptoms in a person who had had what we had diagnosed as Scarlet Fever. on admission to hospital.

It has also been suggested that the return case may be caused not by a continuance of the original infection, but by another disease picked up in hospital by the patient and taken home with him or her. The objection to this suggestion is that these patients frequently show no other symptoms before their discharge from the hospital. Besides patients of certain ages very rarely give rise to return cases. An adult hardly ever gives rise to a return case; neither does a child under 3 years of age. It is the children between the ages of 3 and 13 years who normally give rise to return cases. Last year only one person over 15 years gave rise to a return case, one in 1933 and 2 in 1932. The ages of the infecting cases in 1934 were 16, 7, 4,  $4\frac{1}{2}$ , 7, 5, and 2. In 1933, the ages of the infecting cases were 11, 13, 12, 11 and 34, and in 1932, 10, 10, 11, 12, 12, 16 and 20.

In most hospitals the acute cases are separated from the convalescent. In the third week the patients are usually removed to a clean convalescent ward. The only patients who are not subject to this regime are the adult cases and the very young children, and these are the ones who seldom give rise to return cases.

Return cases always cause a good deal of annoyance, and also inconvenience. Many theories have been advanced of the cause of return cases, but no theory will fit all the conditions. The subject has been discussed for over 30 years, and though improvements in hospital management may have reduced the numbers, we have not yet found out the true cause. It was at one time suggested that return cases occurred because the quarantine period in the hospital had been too short, and that the infection still persisted in the patient. That the latter was correct was obvious, but it was not so evident that the persistent infection was due to too short a stay in the hospital. In recent years the tendency has been to shorten the stay of uncomplicated cases of Scarlet Fever in hospital. A few years ago the minimum stay of a Scarlet Fever case in hospital was six weeks, or until all peeling had finished. We now ignore the question of peeling and the hospital quarantine has been reduced to a month. Every uncomplicated Scarlet Fever case is now discharged at the end of the fourth week. The number of return cases has not increased, and it has been suggested that these cases would be reduced if the period of quarantine be lessened.

The more recent views on immunity have been responsible for the suggestion that the sooner the case is returned from the hospital the less is the likelihood of return cases, upon the grounds

that at the time of removal the other members of the family will be immunized by sub-reacting doses of the parasite, and that the longer the case is retained the weaker will be this primary immunization.

At the present time the return case is almost entirely a hospital phenomenon, but that is because a case is nearly always removed to hospital if there are any children or susceptible persons in the house. If a case is nursed at home, it is usually an only child. It is therefore unfair to compare the figures because the conditions are entirely different. Some years ago, when a fair percentage of cases were nursed at home, in one of the annual reports I worked out the figures based upon the number of susceptible persons in the house, and these showed that there was practically no difference between hospital and home treated cases. At the present time for the reasons stated above, it is almost impossible to make a comparison.

### Measles.

Eleven deaths occurred from Measles during the year. Since the War measles in this district has been a less fatal disease. Part of this improvement had been due to the altered age incidence of the population ; this will be referred to in a later paragraph.

During the last 25 years measles in Acton has occurred in regular periods. This, of course, has been the experience of most other towns. But our experience has been different to other towns if a longer period still is taken into consideration. During the past 55 years there have been 4 distinct eras as far as periodicity is concerned. As these periods form an interesting study in the epidemiology of measles I am giving these in different columns.

<i>Year.</i>	<i>Deaths.</i>	<i>Year.</i>	<i>Deaths.</i>	<i>Year.</i>	<i>Deaths.</i>	<i>Year.</i>	<i>Deaths.</i>
1879	0	1892	24	1906	27	1910	1
1880	0	1893	2	1907	20	1911	44
1881	3	1894	15	1908	38	1912	0
1882	3	1895	6	1909	40	1913	25
1883	2	1896	24			1914	0
1884	1	1897	2			1915	2
1885	25	1898	6			1916	11
1886	3	1899	0			1917	<del>2</del> 39
1887	8	1900	16			1918	7

1888	1	1901	0	1919	0
1889	25	1902	32	1920	9
1890	11	1903	0	1921	0
1891	9	1904	15	1922	5
		1905	4	1923	0
				1924	16
				1925	0
				1926	12
				1927	0
				1928	12
				1929	0
				1930	9
				1931	3
				1932	12
				1933	1
				1934	11

During the 13 years 1879-1891, measles did not show any regular periodicity. This was followed by the 14 years 1892-1905, in which measles regularly appeared in epidemic form every other year. Then follows a curious period of 4 years—1906-1909, in which measles occurred every year. The epidemic of 1904 extended into the spring and summer of 1905 and caused 15 deaths in 1904 and 4 in 1905. In January 1906 another epidemic started which caused 27 deaths. In 1907 there was another outbreak in January, February, March and April, which caused 20 deaths. In March 1908 another epidemic occurred which prevailed during the months of April, May and June. In November 1908, measles again appeared in epidemic form and continued throughout the early spring of 1909. These two epidemics caused 38 deaths in 1908 and 40 in 1909.

Since 1909 measles has for a quarter of a century almost regularly appeared every other year.

It is difficult to explain the behaviour of measles in Acton during the four years 1906-1909, but during the past 25 years it has invariably followed a measles epidemic in London. Many theories have been propounded to account for the regular periodicity of measles. Formerly it was believed by many that an epidemic was always due to the properties of the organism, and that the periodicity of epidemics which occur at regular intervals depends for the most part on the life history of the organism. It is now generally admitted that the character of an epidemic of measles, the severity and fatality of the disease, the speed with which it travels and the

means which bring it to an end depend upon the interaction of a number of variable factors. One of the most important factors is the immunity factor or the total quantity of immunity in the population which may delay the speed or spread or even entirely prevent the disease establishing itself. It had been known for many years that an outbreak would not spread in a school or a class, if the number of children in that school or class who were protected by a previous attack of measles exceeded a certain proportion of the total in the school or class. But it is now believed that in addition to the permanent immunity which an attack of measles usually confers, a certain amount of temporary latent immunity also occurs during every epidemic amongst the child population of populous areas and that this immunity may be the main factor responsible for bringing an epidemic to an end and determining its periodicity. For every 100 children suffering from a clinical attack of measles in a densely populated area about 300 others become temporarily immunized, and of these 250 lose their immunity again before the next epidemic is due.

Starting with 300 children so immunized at the end of one epidemic, 225 would still be immune after three months, 168 after a year and 112 after  $1\frac{1}{2}$  years and 50 after 2 years.

We may assume therefore that the children at risk at the the beginning of the next epidemic will be the sum of the children who have attained the susceptible ages of one to two years plus those older children who have lost their immunity and that the latter, when attacked, will convey the disease to the former.

This may afford a possible explanation of the age mortality of measles. It has been pointed out for years that measles is much more fatal to children in their second and third years than in the other age groups. It was formerly assumed that the lower fatality at later ages was due simply to the increased physiological resistance which came with years, but in view of recent research, it is more probable that the children who get measles later in life showed a lower case mortality because they had survived small doses of the disease; they had been naturally vaccinated, as it were, from the disease.

With our modifications of view of the epidemiology of measles, there has been a change in our administrative scheme in the control of the disease. Formerly the elementary school was supposed to play the most important part in the spread of the disease, and school closure was very frequently resorted to. Now, a school or department is never closed. If we were fortunate in discovering the first case in the school before the first crop fell, a class might



be closed towards the end of the incubation period. It is doubtful whether this would be very effective, and even this modified procedure was not adopted during the recent epidemic.

The first cases were reported in January, but these were not school children. Cases in the school did not occur until late in the spring term. The disease had not become general in any of the departments before the Easter holidays. With the closure of the schools for the Easter holidays, there was a slight break in the spread of the disease. More cases were reported from the schools when they were reopened for the summer term, and cases were recorded in all the schools almost until the time the schools were closed for the summer holidays.

One peculiarity which we noticed, and I believe was also noticeable in the London epidemic, was—the epidemic took a longer time to reach its peak and to spread throughout the district. This may have been due to the fact that the Easter holidays occurred fairly early in the outbreak and affected its course. At any rate cases cropped up until the schools closed for the summer holidays.

Returning to the tables another interesting feature in the figures appears in the sudden drop in the morbidity of measles which occurred 20 years ago. It is difficult to measure the mortality from measles. Owing to the altered age incidence of the population on account of the declining birth rate, it would not be a fair comparison if the number of deaths were assessed as a proportion of the population. If this method were adopted a very great improvement could be recorded, but such figures would be useless because the incidence of measles in Acton is almost entirely among children under 10 years of age; a fairer way would be to assess the mortality on the basis of the number of births. If we take a fairly large number of years this method is not liable to a high margin of error.

An examination of the table giving the number of deaths in the last 55 years shows that this may be divided into 4 periods, viz.:—1879-1888; 1888-1905; 1905-1913; and 1914-1934. The births and deaths from measles in these periods were as follows:—

<i>Period</i>	<i>Total births</i>	<i>Deaths from Measles</i>	<i>Deaths from Measles per 1,000 births</i>
1879-1888	7042	44	6.24
1889-1905	16364	201	12.29
1905-1913	12012	195	16.23
1914-1934	23616	112	4.74

The increased mortality from measles commences in 1889 and continued with few intermissions to 1913. There was then a sudden drop which continued until 1924. There was a slight rise in that year and although, compared with the period 1889-1913, there has been a vast improvement we have not succeeded in attaining the high standard reached in the decennium 1914-1923.

Various explanations have been given for this behaviour of measles.

The most obvious explanation of the phenomenon is that the varying fatality of the disease depends upon the virulence of the organism or virus which causes measles. As the causative agent has not been isolated this theory cannot be proved or controverted. From a long experience of the disease, and in the last ten years, this experience has included treatment of cases in hospital, I am inclined to doubt this supposition. The initial symptoms in those cases which were removed to hospital in 1934 in an early stage were severe in almost every instance; a temperature ranging from 103 to 105 degrees was usual and continued for several days. The rash was intense, general and profuse. The initial symptoms did not differ materially from those observed in the beginning of this century, and there is not safe ground for the assertion that the virulence of the causative agent has varied.

The alternative theory to an increasing or diminishing virulence of the germ has to do with the improved resistance of the child. It is unlikely from the history of measles that the improvement has been secured by an increasing immunity on the part of the children. It has been previously stated that in the older children a certain amount of immunity has been established, but this does not apply to the children in the second and third years of life, amongst whom the majority of deaths occur.

It has been suggested that the increased attention paid to infant welfare has been the means of increasing the resistance to infectious disease or at any rate has enabled the child to escape the complications associated with these diseases, and especially those of measles. It is well known that the special attention paid to infant welfare has been instrumental not only to reduce the infantile mortality or mortality in infants under twelve months old, but has been almost as successful in reducing the mortality amongst older children,—in those between 1 and 5 years of age. It is sometimes assumed that our efforts to reduce infantile mortality have left us with a legacy of weaklings at later ages. But this is far from the truth. The conditions which formerly killed a large number of infants, scarred and maimed many of those who survived beyond

the age of twelve months, and these fell ready victims of ailments which attacked them between the ages of 2 and 5 years, of which measles was one of the most important. In this manner, probably our infant welfare efforts did affect the mortality from measles. Moreover our propaganda work has resulted in a realization of the seriousness of measles.

But this is not the only factor which has operated. The reduction in the mortality from measles did not take effect for a decade after the appointment of Health Visitors in London and the Home Counties. A joint appointment of School Nurse and Health Visitor was made in Acton in 1904, but not only was there no reduction in measles mortality until 1914, but a most marked rise commenced in 1906 and continued for about 8 years. Other factors which may have been mentioned as likely to be operative are improved housing conditions, and increased institutional treatment. These would not result in the abrupt improvement which was noticed about 1914, and the improvement took place before these were in operation. During the war, dwelling-house erection was practically at a standstill, and naturally the conditions at the end of the war were worse than they were in the pre-war period. In Acton, removal of cases to the fever hospital did not start until 1924, and extensive hospital treatment of measles did not commence in London before that date.

There is something more than a coincidence in the fact that a fall in measles morbidity followed closely on the discovery of vitamins. In saying this I know that one lays oneself open to the old gibe of "post hoc, propter hoc". Neither do I forget the well-known gibe about the increase in Cancer and the increased consumption of bananas. But there are good reasons for assuming that measles morbidity may be associated with deficiency of vitamins.

As often happens in the development of science, a fundamental idea is foreshadowed in many quarters, but has long to wait before it emerges as a basis of accepted knowledge. The existence of vitamins was suggested long ago, but it was the publication of Professor Gowland Hopkins' researches in 1912 which served the purpose of gaining for vitamins a universal recognition. The 22 years since the appearance of Professor Hopkins' paper have been a truly remarkable progress in the study of vitamins. I may mention only two of the vitamins. When severe deficiency of vitamin A is present records nearly always mention a high morbidity rate from various infections, and undoubtedly A—deficiency itself is in part responsible. A deficiency of vitamin D is probably particularly associated with infections of the respiratory tract.

On the positive side, we have evidence that one of the most hopeful modes of the treatment of measles is with a fish-liver oil concentrate rich in vitamins A and D. In the London County Council Report on the measles epidemic of 1931-32, Dr. Ellison reports favourably on this treatment which was tried in the case of 300 patients. The mortality of the treated group was rather less than half that of the controls, suggesting that the vitamins exert a specific beneficial action on acutely inflamed lung tissues. Whether this apparent action is real or merely accidental can only be determined by a further and larger series.

We treated the majority of the cases admitted into our hospital in the epidemic last year with Cod-liver oil, and, though our figures are too small on which to base any conclusions, we were satisfied that the treatment was well worth further trial. Of the 78 cases admitted into hospital there were 5 deaths. Most of our cases were admitted on account of complications, severity of attack, or unfavourable home conditions. In the circumstances, therefore, they are very favourable figures.

If we turn again to the mortality figures on a former page, it will be seen that the worst period was in the later years of the last century, and the earlier years of this century, and the best period toward the end of the war and in the boom period following the war. It is known that in the former period sophistication of food was rampant. Milk and dairy products were treated unscientifically and substituted, and cod-liver oil was used chiefly as a medicine in tubercular diseases, and these are the chief sources of vitamins A and D.

Margarine was very largely used instead of butter, and in those days margarine contained no vitamins. So little care was taken in the production and distribution of milk, that prolonged boiling had to be resorted to in order to prevent its souring. In the summer, milk would not keep unless it was boiled, and even in the winter it was not considered too safe to drink raw milk. Pasteurization, in the sense that it is now done, was hardly ever carried out. The prolonged boiling of the milk destroyed the vitamins, and the margarine contained none. It is only since the war that the use of cod-liver oil in the feeding of infants and young children has become so common. So that in the years during which measles was so fatal the infants and young children were suffering from vitamin deficiency and more especially vitamins A and D. It is also possible that in the boom years which followed the war, the food contained the

*(Note—Of the 78 cases admitted to hospital, 6 came from outside the Borough and 1 death was of an out-patient).*

necessary vitamins. It is true that butter was difficult to obtain during the war, but by that time cod-liver oil had been recognised as a valuable source of vitamins A and D. Although, not to the extent which prevailed at the beginning of the century, it is possible that the depression of recent years may have had some effect in the slight rise on morbidity which has been noticed in the last ten years. There was no noticeable change in our administrative methods. When accommodation permits, certain selected cases are admitted into the fever hospital. During the spring and summer circumstances permitted us to admit all urgent cases. Altogether 78 cases were admitted to hospital.

### Diphtheria.

Eighty-six cases of diphtheria were notified during the year, and there were 7 deaths. These figures compare with 161 notifications and 23 deaths in 1933, and 151 cases with 21 deaths in 1932.

Although there has been a great reduction in the number of notifications and deaths compared with the two previous years the figures show that the type of disease which is present in the district is of the same virulent character as that experienced in 1932 and 1933. The virulent type of Diphtheria is not a recent mutation. Every one with a long experience can recall outbreaks of a virulent type of the disease. But whereas formerly the virulent type of the disease occurred not only in a few towns, but was limited to a small part of the town, recent reports show that this type is now prevalent in all parts of the country ; in the southern parts as well as in the northern towns, and the outbreaks are scattered broadly in the towns affected.

I can recall limited outbreaks at different times in Acton, but in the last 30 years no outbreak of a virulent type (before the present one) was found to exist throughout the district. These graver forms were limited to a school or small circumscribed area. Since the autumn of 1932, cases of the graver type have been found in all parts of the district and among pupils of all the schools in the borough.

Within the last few years Medical Officers of Health in several parts of the country have been faced with outbreaks of diphtheria characterised by unusually high incidence and mortality. Whatever may be the full explanation of the phenomenon, it is well-known that the case mortality of diphtheria in many areas has risen in late years. The graver form of the disease has been present not

in isolated towns only, but it has been reported from many towns in almost every part of the kingdom.

Another recent development has been the bacteriological differentiation of types. Professor MacLeod and his co-workers in 1931 described three types of diphtheria bacilli—the gravis, mitis and the intermediate. That these types exist is agreed, and it is also generally acknowledged that the clinical type of disease is closely correlated to the particular *Corynebacterium* isolated from the patients. The soil alone does not determine the character of the symptoms. The severity of the symptoms depends upon several factors which are independently variable,—individual immunity, virulence of the organism, and the stage at which antitoxin is given.

From an administrative as well as the treatment point of view, the former methods appear in a great many instances to have failed. The early administration of serum, the swabbing of contacts, and the separation of carriers formerly controlled the spread of the disease and averted a fatal issue. Antitoxin given within 48 hours of the onset of symptoms would result in neutralizing the toxin. But the graver form is an intensely rapid disease and antitoxin given as early as 24 hours after the onset of the symptoms is frequently of no avail. It has been stated that serum prepared from Park 8 strain is effective against the bacillus gravis as well as the bacillus mitis, if injected early; that is, if the antitoxin is administered soon after the dose of toxin has been given.

Large amounts of toxin or culture of gravis and mitis strains have been injected into guinea pigs and ordinary antitoxin given at intervals of two hours after infection saved all animals; after eight hours it saved none. In the intervening periods there was no significant difference between the percentage saved in the gravis and the mitis group of animals.

In spite of this, many if not most clinicians now admit that recently there have been admitted to hospital a large number of severe cases which formerly were few and far between and that the increase of these severe cases was found to coincide with the appearance of the gravis and intermediate type of bacilli in the throat. In these severe cases antitoxin does not have the same beneficial effect even when it is administered early. We have seen cases in which the disease has progressed so rapidly that death has occurred within 24 hours and even 12 hours of the time a doctor was called in. The following cases may be given as examples. A girl of 7 years of age, from a good home and where a doctor was always called in early for almost every illness was taken ill of diphtheria. On Saturday she went to a party and afterwards to a pantomime. On

Sunday she appeared fairly normal, possibly a little listless, which would be accounted for by the activities of the previous day. On Monday morning she complained of a sore throat and vomitted, and a doctor was called in. He examined the throat and took a swab. Some people might blame him for this, but having had experience of these graver forms, and that there were at the time none of the characteristic signs of diphtheria in the throat, we do not think he was in any way to blame. He was again sent for in the afternoon and when he arrived between 4 and 5 the picture had entirely changed. The tonsils and soft palate were swollen, the glands of the neck swollen, and the child was obviously desperately ill. He sent her to hospital at once, but on arrival her condition was hopeless,—bull-neck, foetid breath, profuse nasal discharge, greyish toxic appearance of throat. She died about 8.30 p.m.

A boy of 16 years, a pupil at a local secondary school, was admitted to hospital one morning. He was quite definite that his throat was first sore on the previous afternoon at school. The illness was thus of less than 24 hours' duration and yet on admission to hospital a thin membrane extended over the fauces and soft palate and there was a profuse nasal discharge. The glands in the neck were also very large. The boy was given 80,000 units of antitoxin intravenously immediately and the dose was repeated the same evening. In spite of this he died within 48 hours of the first onset of sore throat.

Another boy of 15 years was admitted to hospital on the same night as the previous boy. He had a history of sore throat commencing that morning. There was a patch of membrane on each tonsil but no further extension. In view of the fact that he attended the same school as the previous boy, he was given 56,000 units of antitoxin intravenously on admission at 10 p.m. The following morning at 9 a.m. the membrane had spread on to the soft palate and into the nose, and the glands of the neck were very much swollen. The dose of antitoxin was repeated and, as the membrane still appeared to be extending, that evening another dose of 50,000 units if antitoxin was given. This boy ultimately recovered.

I have mentioned these cases as examples, but we have had many others in which the symptoms had advanced almost as rapidly, and where death had occurred in a few days after admission, in spite of the intravenous administration of 80,000 and 100,000 units of antitoxin. In the graver forms of diphtheria, fatality is not going to be abolished or even greatly reduced by means of antitoxin treatment alone; our hope lies in immunization as a means of prevention, and our experience of immunization since we started in 1932 may be of interest.

A full account of the outbreak of diphtheria was given in the Annual Report of 1932, and it is unnecessary to give the details of its origin. It will be recalled that in the autumn of 1932, and the spring of 1933, we experienced an outbreak of diphtheria of a particularly virulent character. The records of the incidence of the disease in Acton since 1890 show that there have been irregular periods of maximum and minimum prevalence of the disease. Prior to 1932, the last period of maximum prevalence had been in 1921, 1922 and 1923, and this followed a short period of only four years of minimum prevalence. Between 1923 and 1932 the district had been comparatively free of the disease. We therefore had a favourable soil for the introduction of a virulent organism in a gradual accumulation of susceptible persons in the population. Until September 1932, the disease followed a fairly normal course. Its incidence was slightly higher than that observed in inter-epidemic years, but there were no cases of extreme virulence in the early part of the year. The virulent cases occurred at the end of September and beginning of October, 5 cases occurring in different classes in one week, 3 of which proved fatal. These cases occurred not in an infants' department, but in a junior department, and the next cases occurred in a Secondary School. Formerly our deaths had usually occurred in young children, either in those under school age or in the infants' department.

Dr. O'Brien of the Wellcome Research Laboratory kindly examined some swabs from the severe cases, and of 10 swabs examined, 6 were of the gravis type, 2 of the mitis type and 2 contained bacilli of both the gravis and mitis types. We therefore had two of the conditions which would conduce to the occurrence of severe symptoms—a probable herd susceptibility and the presence of virulent organism. The following table gives the number of notifications and deaths, and it is given because it throws a light on the probable effect of immunization on the course of the disease :—

	Date.	Notifications.	Deaths.
1932	September.	17	3
	October	33	4
	November	48	9
	December	17	2
1933	January	29	3
	February	17	7
	March	26	4
	April	15	3
	May	19	2
	June	17	2



	July	13	—
	August	4	—
	September	4	—
	October	7	—
	November	2	—
	December	7	1
1934	January.	8	1
	February.	11	—
	March.	10	2
	April.	5	1
	May.	4	—
	June.	9	—
	July.	2	—
	August.	3	1
	September.	8	2
	October.	10	—
	November.	7	—
	December.	8	—

We commenced our immunization at the school where the outbreak originated, and the response was most encouraging. The junior and infants' departments were tested on 10th October, 1932, and the first dose of the immunizing agent given on 17th October, 1932. In the junior department 68.8% of the children were schick-tested and in the infants' department 61.8%.

Before the end of the Christmas term of 1932 we had started immunization in 5 of our schools and at the beginning of June 1933, we had visited the 9 schools in the Borough and given 3 doses of the immunizing agent. We were then ready to do the post-schick testing in the schools which had been the earlier ones to be visited.

Until recently we used Toxoid Antitoxin mixture (Burroughs Wellcome T.A.M.) for children and Toxoid-Antitoxin-Floccules (T.A.F.) for adults. Recently for children of pre-school age (under 5 years) we have used Burroughs Wellcome's Formol Toxoid. We have not used any Alum-Toxoid. We have not used Formal Toxoid generally throughout the schools, owing to the extra time involved in the use of the Maloney test.

For children between 5 and 11 years of age, we give 3 doses of 1 c.c. each of T.A.M. In children between 11 and 14 years we give only  $\frac{1}{2}$  c.c. of the T.A.M. for the first dose. If no reaction occurred the second and third doses were 1 cc. each. In adults we gave as a first dose .2 c.c. of the T.A.F. In children under 5 years of age we gave 3 doses of 1 c.c. each of Formol Toxoid. In 1932 we gave the second dose in 2 weeks after the first, and the third

three weeks after the second. In 1933 we revised the interval periods and we now allow three weeks between the first and second dose and 4 weeks between the second and third dose.

In the first school which we visited both the infants' and the junior departments were schick-tested. In the infants' department 84.9 per cent. of the children were found to be schick-positive. In the light of this experience we decided to immunize all children under seven years of age without a preliminary schick test, but a posterior schick test is done on children of all ages.

We have been fortunate in the absence of any marked reactions—local or constitutional. In some cases the arms have become red and swollen; sometimes the swelling has reached as far as the elbow. In every instance swelling has completely disappeared at the end of two or three days. In no instance have we heard of or seen the swelling and redness persisting more than four days. In only three cases did we know of any constitutional disturbance. We saw two of these, and the disturbance was not sufficiently marked to keep the children away from school. We did not see the third child, as he was attended by his own doctor.

Because of the necessity of controlling the outbreak in the schools we had to concentrate at first our attention very largely on the children of school age. It was recognised though, that if preventive measures are undertaken to stamp out diphtheria, it is essential that a large proportion of the most susceptible children—those of pre-school age—should be immunized. Since the summer of 1933, we have concentrated our efforts upon the infants' departments and the Infant Welfare Clinic, and the majority of the children immunized in the autumn of 1933 and the whole of 1934 have been under 7 years of age.

We endeavour as far as possible to prevent the addition of non-immune entrants to the infants' department, and so lower the herd immunity. An immunizing clinic is held every Saturday morning at the school clinic for children under school-age. The health visitors distribute circulars to the mothers at the infants welfare centres. The numbers on these Saturday mornings vary, the lowest attendance being 9 and the highest 108.

At the beginning of each term, a list of the non-immunized entrants is sent to the Headmistress of every infants' department, who have greatly assisted us in obtaining consents. The head teachers have not forgotten the sad results of the outbreak and are convinced of the efficacy of our efforts.

In the spring of 1934, we were given some unsolicited publicity which helped us considerably. The Anti-Vaccination League

circularised the district, pointing out the danger of immunizing. During the following week we had a great increase in the number of requests for consent forms from parents of pre-school age and on the next Saturday morning there was a large increase in the number at the school clinic. The League had quite unintentionally awakened the parents to the fact of the existence of diphtheria, had taught many whom we had not reached, and that the public health authority was doing something in the matter.

We have not felt the necessity of an elaborate system of propaganda ; we have found the quiet efforts of the officers of the local authority, including, of course, the education authority, to have been more effective.

We are fortunate that we are an autonomous education authority. We are therefore in close contact with both the infant welfare centres and the schools. We are given every facility by the education authority. The school routine has been very little disturbed. When immunization takes place in the school, there is little or no commotion, and very seldom is there any crying.

The numbers dealt with in the 26 months November, 1932, to December, 1934, inclusive were as follows :—

*Preliminary Schick Tests* :—2469.

*Reactions—Positive* : 1394.

*Negative* : 1075.

*Posterior Schick Tests* :—

*Positive* : 13.

*Negative* : 2050.

The total number immunized were :—

*1st Dose*—4052.

*2nd Dose* :—3840.

*3rd Dose*—3631.

91 refused after the 1st dose and 71 after the 2nd dose.

2 were schick-negative after the 1st dose and 3 after the second dose.

119 were awaiting their 2nd and 3rd doses and 135 were awaiting their 3rd dose.

Of more importance are the ages of those who have been immunized. In the 14 months November, 1932 to December, 1933, the ages were as follows:—

*Under 5—406.*  
5-7—619.  
7-15—1678.

In 1934 the ages of those who were immunized were as follows:—

*Under 5—328.*  
5-7—377.  
7-15—203.

It will be seen that the relative number under 5 who were immunized was much higher than in the first year. This is due to the fact that we have been concentrating upon the lower ages.

At the end of 1933 the percentage immunized in the infants' departments was as follows:—

A.W.	24.3	J.P.	63.1
B.P.	64.7	P.	43.1
B.	37.6	R.	35.5
D.	75.3	S.	58.8

At the end of 1934 the figures were as follows:—

A.W.	44.6	J.P.	58.0
B.P.	52.9	P.	50.0
B.	24.9	R.	33.8
D.	51.4	S.	52.3

It has been previously explained that artificial immunity is only gradually developed in the inoculated. It has been claimed for some of the immunizing materials—such as Alum Toxoid—that immunity can be obtained from one dose. As previously explained we have not used Alum Toxoid because of the risk of local reactions. In the case of Formol Toxoid and T.A.M. three injections of the prophylactic are needed to develop gradually an immunity against diphtheria. It is estimated that about 95% of the schick-positives become schick-negative in less than six months after inoculation.

In 1933, 8 cases occurred amongst those who had had one inoculation. Of these one died, two were severe, 3 were mild and 2 were carriers only.

In 1934, 4 cases occurred amongst those who had had one inoculation. All these were mild attacks.

In all these except three, the disease occurred within a month of the inoculation. In two the interval was five weeks, in the third it was 8 weeks. In the child who died she received the first dose on February 23rd, 1933, the case notified on March 17th and she died March 22nd.

Of the children who received 2 doses, six developed diphtheria in 1933 and 1 in 1934.

In 1933 one of the children died, 1 had a severe attack, one a moderately severe and 3 were mild. The 1934 case was a moderately severe attack.

In 1933, 12 cases were notified amongst children who had had three doses.

Four of these were carriers only, two were very mild, 4 were mild, and two were moderately severe. There were no deaths.

In only one of these had a schick-negative reaction been given. All the others occurred before they were post-schicked, although in one instance over seven months had elapsed since the third dose had been given.

There were also five cases in those who had given a schick-negative reaction. These were all mild cases. In 1934, five cases occurred amongst those who had had 3 doses, 4 of these has given a schick-negative reaction; the fifth contracted the disease eleven weeks after the third dose. They were all very mild cases.

What results can we hope for from this work? As far as we are concerned, at the end of six months after the last dose, three doses are for all practical purposes a protection against the disease, though it is not an absolute protection. We have given all the figures and we do not desire to exaggerate the results which can be obtained. Certain questions remain obscure. The schick test is the most usual method of distinguishing between immunity and susceptibility, and we cannot escape using the schick test for want of a better. It is impossible in the case of mass immunization to estimate the anti-toxin present in the blood, and even if we could, we should not know what exact amount would be necessary to avoid an attack. This would only give us a measure of one of the factors. But if the schick test is negative, the person concerned probably has at least 1/30 anti-toxin units per cubic centimetre of blood, and this should usually be a sufficient protection. But schick-negative children who showed an anti-toxin content of one of more anti-toxin units per c.c. have been said to develop diphtheria. It is also possible that a schick-negative who is immune from the milder form of diphth-

eria may suffer from the graver form, but experience has shown that even if an immunized child does develop diphtheria, the attack is usually a very mild one. This has been our experience. All the cases which occurred in immunized children in 1934, were very mild, and in the latter half of the year no immunized child has contracted the disease, even in a mild form.

### Tuberculosis.

82 cases of Pulmonary Tuberculosis and 22 cases of other forms of Tuberculosis were notified during the year.

There were 50 deaths from Pulmonary Tuberculosis and 12 deaths from other forms of Tuberculosis.

The death notification interval of the 50 patients who died of Pulmonary Tuberculosis in 1934 was :—

Information from Death Returns	.....	.....	.....	10
Died within 1 month after notification	.....	.....	.....	7
Died between 1 and 3 months after notification	.....	.....	.....	2
Died between 3 and 6 months after notification	.....	.....	.....	3
Died between 6 and 12 months after notification	.....	.....	.....	7
Died between 1 and 2 years after notification	.....	.....	.....	7
Died between 2 and 3 years after notification	.....	.....	.....	6
Died over 3 years after notification	.....	.....	.....	8

The following is a statement of the particulars appearing in the Register of cases of Tuberculosis on 31st December, 1934—

	<i>Pulmonary.</i>		<i>Non-Pulmonary.</i>		TOTAL
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	
Number of Cases of T.B. on the Register at the commencement of the year	162	161	37	27	387
Number of Cases notified for the first time during the year	34	30	14	8	86

Number of Cases previously removed from the register which have been restored thereto during the year	1	—	1	—	2
Number of Cases added to the Register other than by notification	5	12	1	—	18
Number of Cases removed from the Register during the year	50	60	22	15	147
Number of Cases remaining on the Register at the end of the year	152	143	31	20	346

In 1934, the Tuberculosis Officer examined 50 new cases of pulmonary tuberculosis and 6 new cases of non-pulmonary tuberculosis. Thirty-one patients were admitted to Sanatoria under the County Scheme and 20 were admitted to hospitals.

Age Periods	New Cases.				Deaths.			
	Respiratory.		Non-Respiratory		Respiratory.		Non-Respiratory	
	M.	F.	M.	F.	M.	F.	M.	F.
0- .....	—	—	—	—	—	—	—	—
1- .....	—	—	—	1	—	—	—	1
5- .....	1	2	5	2	—	1	3	1
15- .....	7	17	3	1	6	8	2	1
25- .....	9	13	2	1	4	6	—	—
35- .....	12	8	3	1	7	2	1	—
45- .....	7	1	—	1	4	2	1	1
55- .....	3	2	1	—	8	2	—	1
65 and upwards .....	—	—	1	—	—	—	—	—
Totals .....	39	43	15	7	29	21	7	5



## ISOLATION HOSPITAL.

718 cases were admitted during the year compared with 738 cases during 1932.

On January 1st, 1934, there were 64 cases in the hospital and on January 1st, 1935 there were 61.

The following is a list of the cases admitted for the different diseases.

	<i>Scarlet Fever.</i>	<i>Diphtheria.</i>	<i>Measles.</i>
Acton .....	194	83	69
Wembley .....	275	73	5
Other Outside Districts	4	14	1
TOTAL	718		

There were 16 deaths which were distributed as follows:—

	<i>Scarlet Fever.</i>	<i>Diphtheria.</i>	<i>Measles.</i>
Acton .....	2	6	3
Wembley .....	—	4	—
Other Outside District	—	—	1

## BACTERIOLOGICAL EXAMINATIONS.

(a) For Diphtheria	<i>Positive.</i>	<i>Negative.</i>
Total Examinations 1970 .....	165	1805
Sent by Medical Practitioners .....	61	506
do. (re-examinations) .....	1	10
Sent from Isolation Hospital .....	63	754
Convalescents (1st Swabs) .....	—	14
Contacts .....	22	263
do. (2nd examinations) .....	1	22
Carrier's Swab. ....	6	12
Precautionary Swabs .....	—	69
School Sore Throats .....	17	165

(b) For Ringworm.	<i>Positive.</i>	<i>Negative.</i>
Total Examinations--13	7	6

(c) For Tubercle.	<i>Positive.</i>	<i>Negative.</i>
Total Examinations—142	25	117

## MATERNITY AND CHILD WELFARE.

### Infantile Mortality.

Thirty-nine deaths occurred in infants under one year, corresponding to an infantile mortality of 41 per 1,000 births.

This is the lowest number of deaths under one year of age on record for the district.

There is a drop of 9 deaths from Premature Birth, but an increase of 4 in the deaths from Congenital Heart Disease.

Eighteen of the deaths occurred before the baby had reached the age of 1 month.

Twelve of the deaths were in the North East Ward, 9 in the North West, 3 in the South East and 15 in the South West Ward.

This is the lowest infantile mortality recorded in the district ; the next lowest was that of 1933, when it was 46 per 1,000 births. On no other occasion has the infantile mortality been below 50 per 1,000 births.

There were 3 more deaths in infants over 1 month, and 3 less in infants under one month.

If the Infantile Mortality tables for several years be examined, it will be seen that if further advance be made in infantile mortality it must be by the reduction of deaths under 1 month, the so-called neo-natal mortality. So far the factors which have played a part in bringing down the under-one-year rate have hitherto had much less effect upon the loss of life of infants under one month. The great reduction in infantile mortality has been effected in the period 1-12 months. It will be easily understood that the measures first adopted for Infant Welfare—such as health-visiting and its attendant activities—would have more effect upon the older babies than in those under the age of one month. It is upon the

older babies that the instruction on feeding, clothing, and other aspects of infant nurture would have most effect, a large proportion of the babies have already died before the health visitor has visited the home, or at any rate before her instructions could have had any effect. The chief if not the only method by which the neo-natal mortality can be reduced is by increased attention to ante-natal care and nurture. In a subsequent paragraph, the extension of this part of our Maternity and Child Welfare Scheme has been outlined, and we feel that this aspect of the work has an important bearing not only on the Maternal but also on the Infantile Mortality.

### Maternal Mortality.

Five deaths occurred in child bearing women, 2 from Puerperal Sepsis and 3 from other diseases or accidents of Parturition.

The cause of the first death was given as (a) Septicaemia (b) Septic abortion. The information of the conditions which obtained prior to the confinement was vague and not satisfactory as the husband had left the district when we made the inquiries and he could not be traced. The husband and wife had only recently come to Acton, and had not attended the Ante-Natal Clinic. They had two other children, and we were given to understand that the wife was very worried on account of the fact that she was again pregnant. The doctor who was called in found an incomplete abortion, and he advised her removal to a hospital. The wife at first refused, and she did not consent to removal for two days. She died 10 days after removal to hospital.

In one of the other cases, the patient had not been under the care of a doctor before her confinement. It was stated the patient was unaware that she was pregnant. No doctor or midwife had been engaged. In the three other cases, the patients were in comfortable circumstances, a doctor had been engaged for the confinement, and the patients had been under the care of the doctor throughout the confinement.

One of these died of Eclampsia, the second of Post-partrem nephritis, and the third was suffering from a long standing heart disease.

Circular 1433 was issued by the Ministry of Health in October, 1934, and reference was made to Circular 1167 of December 1930; and the accompanying Memorandum 156/M.C.W. on the subject of Maternal Mortality.

The Minister reviewed the action taken throughout the country to give effect to the suggestions in Memorandum 156 and

he recognised that on the whole there has been a widespread response. After citing instances in which the work has been done, he stated that in spite of developments during the past three years to improve and develop the maternity services, the maternal mortality has not yet begun to fall. In all areas there is probably need for more intensive efforts to educate women as to the importance of ante-natal supervision and to persuade them to make use of the facilities provided for this purpose.

It was suggested that each local authority should forthwith review the position in their area by reference to the suggestions made in Memorandum 156 and take such steps as are necessary to complete the local organisation and ensure its effective working. In particular he wished to urge the authorities of those areas in which the maternal mortality is persistently high to give consideration to further efforts to reduce the avoidable risks of child-bearing.

The Minister deemed it desirable that a special report on the subject should be made, showing to what extent effect has already been given to the suggestions made in the Memorandum, and in the recommendation of the Maternal Mortality Committee in their final report for 1932.

This report was submitted to the Child Welfare Committee in December and though consideration of the question was postponed to January and the suggestions made were not carried out last year, a summary of that report is now given.

### Maternal Mortality in Acton.

During the year there were five maternal deaths and the following table gives the maternal deaths in the past 10 years:—

<i>Year</i>	<i>Total Deaths</i>	<i>Deaths from Sepsis.</i>	<i>Deaths from other causes</i>	<i>Births.</i>
1925	5	4	1	1047
1926	5	2	3	1098
1927	4	3	1	1026
1928	4	2	2	1003
1929	3	1	2	1026
1930	4	2	2	1105
1931	5	4	1	1018
1932	7	3	4	970
1933	5	3	2	886
1934	5	2	3	943

It will be seen that the maternal mortality has been persistently high and has recently shown a slight tendency to rise.

### Ante-Natal Service.

Until the autumn of 1934, the ante-natal clinic was held at the School Clinic every other Wednesday morning by Dr. Bell, but towards the end of the year Dr. Howell attended on the other Wednesday morning, and her report is appended here.

In Memorandum 145, certain suggestions were made which we tried to some extent to carry out and our object in having a weekly clinic was to move further in that direction.

Memorandum 145 suggested that two kinds of ante-natal clinics should be established, namely: (a) the consulting clinic and (b) the clinic for routine examination. In every report great importance is laid upon the desirability that the doctor who attends at the confinement should also be associated with the ante-natal examination of the patient. When the agreement for maternity beds at the Central Middlesex County Hospital was concluded, this end was partly consummated. The expectant mother was asked to attend at the Council's ante-natal clinic, and if the conditions were found to be favourable for a natural confinement she was referred to the Medical Superintendent of the Hospital who arranged for her attendance at the ante-natal clinic held there. But these cases, do not of course, include all the confinements, and do not touch those sent up by the doctors and midwives.

In Memorandum 145 it was suggested that a patient should first attend at the 16th week of pregnancy, unless owing to trouble at a previous confinement she had been asked to attend earlier. At this visit a full medical and obstetrical history should be taken, and if she is prepared a physical examination should be made. This should include examination of the urine and an examination of the blood pressure as a standard for future reference. Dental treatment if found necessary on examination, should be arranged for. The pelvic measurements should be taken. Recently very much stress has been laid upon the blood pressure and the weights of the patient and it is suggested that these should be taken at each visit. It is advisable, for instance that the blood pressure be taken weekly during the last month, as a rise of pressure may be the first sign of a commencing toxæmia. From this time routine examinations should take place as follows:—At the 24th and 28th weeks, from then every fortnight until the 36th week, and thence weekly until she is confined. Under present conditions it would be impossible to carry out the work effectively, and it was decided that

an extension of the work could best be effected by starting an Examination Clinic and this has now been established and the following report by Dr. Howell gives an account of part of the work.

During the year 133 women attended the ordinary ante-natal clinic apart from those who were sent up to the consultation clinic.

All but 2 of these mothers intended entering Park Royal Hospital for the confinement, and one of these we persuaded to enter the hospital as there was an abnormality present which we felt could be more safely dealt with in an institution than in the home.

75 cases attended the consultation clinic and all were admitted to Park Royal. In addition 3 complicated cases of pregnancy were referred to the Acton Hospital and treated there.

The extra ante-natal clinic has given us far more time for general care and education of expectant mothers.

We have urged the treatment of some of the minor discomforts of pregnancy such as vomiting and constipation which are the bugbear of so many of the mothers.

Mothers are encouraged to come back to us in the post-natal period and many are making use of this opportunity.

Far more dental treatment of the expectant mother has been done during this year and every mother who needed it has been urged to have dental attention either at the clinic or from her own dentist.

We have been amazed at the number of cases in which dental treatment was urgently needed. Of the 133 women who attended the ordinary clinic 47 were badly in need of treatment and were referred to our own dental surgeon.

In several cases there was so much sepsis present in the mouth that practically all the teeth required extraction before we considered it safe for the woman to be confined in an institution. Altogether 35.3% of the mothers were in very great need of dental treatment and their average age was 26 years.

In dealing with this class we wonder whether more could not be done for these patients at an earlier age. All of them have passed through the school medical service, many of them too as children through the welfare clinic, yet there is a delusive belief that these mothers can learn in their few visits to the ante-natal clinic what they failed to learn during their educational period at school.

The hope of the future generation does not rest solely on the work done at the ante-natal clinic but on the continuity of care, and education in health matters from the child welfare centres and throughout school life.

Ensuring that the services of a trained midwife are available for all confinements.

The Council already pay the whole or part of a midwife's fee in necessitous cases, but the applications for midwives' fees are less numerous than they used to be. Formerly this fee was frequently paid, but recently the number of applications is much less. Probably this is due to the change which has occurred in the attitude of the expectant mothers to institutional confinement. Expectant mothers now take far more advantage of the facilities which have been provided for normal confinements in maternity hospitals. Possibly also the change over from the Board of Guardians to the Public Assistance Committee of the County Council may have had some influence in this respect.

### Maternity Beds.

The Council has an agreement with the Acton Hospital for abnormal cases. The arrangement with the Middlesex County Council for ordinary confinements is working satisfactorily. Necessitous cases are dealt with by the Public Assistance Committee. It is unnecessary at present to enter into the question of institutional treatment, but as the provision of a maternity home was discussed by the Committee before the agreement with the Middlesex County Council was entered into, it may be advisable to refer to the Final Report of the Departmental Committee on Maternal Mortality and Morbidity on this phase of the question. The Committee's report is definitely against the establishment of small maternity homes or even of special maternity Hospitals unless such a method is unavoidable. They believed that new maternity units should, where practicable, be provided in association with general hospitals rather than as isolated units. In expressing this opinion, they were in no way minimising the admirable work which has been done by many of these special hospitals, but they believed that in addition to the saving which may be effected in capital cost and in working expenses, a higher standard of obstetric practice can be obtained where the resources of a general hospital and the services of a specialist staff, non-obstetric as well as obstetric, can be called upon at any moment.

There is one condition in which the present scheme could be improved. We have in the agreement with Acton Hospital, provision for the admission for confinement during pregnancy where ante-natal examination has revealed abnormalities likely to require

Caesarian section, induction of labour or difficult forceps delivery. But in the past, this provision has not included the cases of toxæmia of pregnancy, and even if the resources of the Acton Hospital could enable it to cope with this class of patient, it is doubtful if the patients could not be better accommodated at the Central Middlesex County Hospital. There is no doubt as to the necessity of providing for all cases of toxæmia of pregnancy in an institution. It is rarely possible in a working class home to secure the rest, the rigid adherence to restrictions in diet or other treatment required. The disastrous results of an attempt to treat such patients at home were evident in many of the deaths investigated by the Departmental Committee.

There are other conditions which require institutional treatment, and with this object in view negotiations are being pursued with the Middlesex County Council.

During the year 209 cases were admitted under the agreement with the County Council to the Central Middlesex County Hospital.

#### **Puerperal Sepsis.**

The Council has an agreement with Queen Charlotte's Hospital Committee for the admission of cases of Puerperal Sepsis to the Isolation Block in Ravenscroft Park and 1 case was admitted during the year.

#### **Consultant in difficult or complicated cases.**

Although this aspect of the work appears to be the easiest to achieve, in actual working it is the most difficult, as the preventive aspect of the Committee's work is liable to be jeopardised if the services of a consultant can be easily obtained at the confinement. The work of the Committee must primarily be preventive in its character, and the ideal to be attained should be the discovery of cases which present difficulties at the confinement, during pregnancy through ante-natal supervision. Emergencies will always occur at confinements, but our object should be the reduction of such emergencies to a minimum and the surest way to achieve such a result should be through an extension of ante-natal supervision, and we have to consider whether the easy and prompt services of a consultant at a confinement would not militate against the success of our scheme as a whole.

#### **Provision of ancillaries.**

Among the ancillary services which may be provided are the following :—



(a)—STERILIZED MATERNITY OUTFITS for patients for whom either the doctor or the midwife considers that this provision is desirable. At one time the Council did provide sterilized maternity outfits, but for some reason or other, the demand for these went out of existence. When we did provide them, many difficulties arose in the return of these outfits. In many instances the articles were pawned. The Committee decided to ask for a deposit to cover the cost of the outfit. Possibly the inability to meet this outlay had something to do with the lack of demand. At any rate we found that there was no demand.

(b)—HOME HELPS—The Council also tried to meet the necessity of domestic assistance during the lying-in period. We were fortunate in securing the services of excellent helps, but the demand for these also ceased. It is unnecessary to enter into the cause of this non-demand; it was fully reported on when the provision was abandoned. The circumstances have not changed, and I do not think the provision of home help would prove successful.

(c)—SUPPLY OF MILK FOR EXPECTANT AND NURSING MOTHERS—

The Council does supply milk to expectant mothers, but I consider that this provision should be extended. At the present time in view of the wide spread depression, considerable attention is paid to the nutrition of the expectant mother, and the effect of malnutrition upon the mother and the baby. The researches of the Mellanbys have shown the probable effects of diet upon infection, and especially upon the incidence of Puerperal Pyrexia and Puerperal Fever, and even if all these premises are not proved there can be no doubt of the deleterious effects of malnutrition upon the expectant mother and baby.

(d)—LABORATORY FACILITIES FOR THE EXAMINATION OF PATHOLOGICAL MATERIAL SUBMITTED BY DOCTORS.

Any reasonable material sent by the doctors are now examined either by the Lister Institute or at some other similar institution.

These aspects of the work were considered by the Child Welfare Committee early in the new year, and certain proposals were made to the Ministry of Health, and the amended scheme will, I hope come into operation in 1935.

### Maternity Home.

The Council has an agreement with Middlesex County Council for the admission of maternity cases into Park Royal Hospital. The arrangements were reported fully in a previous report. During 1934, 209 cases were admitted under this agreement.

### Day Nursery.

The Nursery is situated in Bollo Bridge Road, and is open on five days a week.

The Nursery was open on 234 occasions, and 6,319 whole-day attendances were made.

There has been an improvement in the number of attendances this year.

### Child Welfare Centres.

There has been no change in the arrangements for the Child Welfare Centres since last year. Seven sessions are held weekly—4 in Avenue Road, 1 each in Steele Road Mission, John Perryn School and St. Gabriel's Hall.

### Nurse Children.

At the end of the year 1933, there were 52 children and at the end of the year 1934, there were 49 children on the register.

FOSTER CHILDREN.

No. as at 31st. Dec. 1933.	Notice of Reception of Children during 1934.	NOTICE OF REMOVAL TO :					Children Adopted	Died.	Children reached age of 9	No. as at 31st. Dec. 1934.
		Parents.	Another area with Foster Parent.	Another Foster Mother	Public Institution or Home.	Other causes.				
52	37	19	1	9	4	1	1	1	4	49

FOSTER MOTHERS.

No. as at 31st Dec., 1933.	Application for Registration during 1934.	Removed to another Area with child.	No longer a Foster Mother.	No. as at 31st. Dec., 1934
40	22	1	17	44

**TABLE I.**

**BIRTH-RATE, DEATH-RATE, AND ANALYSIS OF MORTALITY DURING THE YEAR 1934.**

The Mortality rates for England and Wales refer to the whole population, but for London and the towns to civilians only.

	Rate per 1,000 Total Population.		ANNUAL DEATH-RATE PER 1,000 POPULATION.										RATE PER 1,000 LIVE BIRTHS		PERCENTAGE OF TOTAL DEATHS		
	Live Births.	Still-births.	All Causes.	Enteric Fever.	Small-pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Violence.	Diarrhoea and Enteritis (under two years).	Total Deaths under one year.	Certified by Registered Medical Practitioners.	Inquest Cases.	Certified by Coroner after P.M. No Inquest.	Uncertified Causes of Death.
England and Wales .....	14.8	0.62	11.8	0.00	0.00	0.09	0.02	0.05	0.10	0.14	0.54	5.5	59	90.4	6.5	2.1	1.0
121 County Boroughs and Great Towns, including London .....	14.7	0.66	11.8	0.00	0.00	0.12	0.02	0.06	0.11	0.12	0.47	7.4	63	90.5	6.1	2.9	0.5
135 Smaller Towns Estimated Populations, 25,000-50,000) .....	15.0	0.67	11.3	0.00	0.00	0.07	0.02	0.04	0.09	0.14	0.42	3.6	53	91.2	6.1	1.6	1.1
London .....	13.2	0.50	11.9	0.00	0.00	0.20	0.02	0.07	0.11	0.12	0.56	12.6	67	87.7	6.3	6.0	0.0
Acton .....	13.6	0.45	10.5	0.01	0.00	0.16	0.01	0.03	0.1	0.07	0.3	7.4	41	92.2	4	3.7	0.01

The maternal mortality rates for England and Wales are as follows:—

	<i>Puerperal Sepsis.</i>	<i>Others.</i>	<i>Total.</i>
per 1,000 Live Births .....	2.03	2.57	4.60
per 1,000 Total Births .....	1.95	2.46	4.41

TABLE II.

## VITAL STATISTICS FOR THE WHOLE DISTRICT DURING 1934 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 in 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
1925	64,845	1047	16.15	446	6.88	18	241	80	76	669	10.32
1926	65,760	1098	16.70	422	6.42	15	250	60	55	657	9.99
1927	66,700	1026	15.60	445	6.67	21	280	62	60	704	10.55
1928	67,645	1003	14.83	479	7.08	29	244	55	55	694	10.26
1929	68,600	1026	14.96	540	7.87	21	307	85	83	826	12.04
1930	69,565	1105	15.88	440	6.33	31	284	56	50	693	9.96
1931	70,560	1018	14.43	456	6.46	35	321	62	61	742	10.52
1932	70,640	970	13.7	486	6.88	29	302	60	62	786	11.11
1933	70,300	886	12.6	492	6.99	31	329	41	46	788	11.2
1934	69,472	943	13.57	454	6.5	24	297	39	41	727	10.46

TABLE III.

AGES AT DEATH, AND WARD DISTRIBUTION OF DEATHS IN 1934.

Causes of Deaths.	AGE IN YEARS.									WARD DISTRIBUTION.			
	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	—	—	—	—	—	—
Measles .....	11	1	5	4	1	—	—	—	—	1	1	2	7
Scarlet Fever .....	1	—	—	—	1	—	—	—	—	—	1	—	—
Whooping Cough .....	2	—	1	1	—	—	—	—	—	1	1	—	—
Diphtheria .....	7	—	1	2	3	—	—	—	1	2	1	2	2
Influenza .....	5	—	—	1	—	—	1	1	2	1	1	1	2
Cerebro-spinal Fever .....	1	—	—	—	—	—	—	1	—	1	—	—	—
Phthisis .....	50	—	—	—	1	14	19	16	—	—	10	5	17
Other forms of Tuberculosis .....	12	—	1	—	4	3	1	3	—	5	2	3	2
Syphilis .....	2	—	—	—	—	—	—	2	—	—	—	1	1
G.P.I. & Tabes Dorsalis .....	2	—	—	—	—	—	—	1	1	1	—	—	1
Cancer .....	99	—	—	—	—	—	6	49	44	24	27	22	26
Diabetes .....	5	—	—	—	—	—	—	3	2	2	2	1	—
Cerebral Haemorrhage, &c. ....	43	—	—	—	—	—	2	12	29	14	7	10	12
Heart Disease .....	157	—	—	—	2	4	5	43	103	47	31	34	45
Aneurysm .....	2	—	—	—	—	—	—	1	1	—	—	1	1
Other Circulatory Diseases .....	44	—	—	—	—	—	—	7	37	10	10	9	15
Bronchitis .....	32	1	2	—	—	—	1	9	19	6	9	7	10
Pneumonia .....	38	4	2	2	2	1	6	12	9	7	15	5	11
Other Respiratory Diseases .....	3	—	—	—	—	—	—	1	2	1	1	—	1
Peptic Ulcer .....	10	—	—	—	—	—	2	6	2	3	3	2	2
Diarrhoea .....	7	7	—	—	—	—	—	—	—	2	2	1	2
Appendicitis .....	8	—	—	—	2	1	—	3	2	2	—	5	1
Cirrhosis of Liver .....	1	—	—	—	—	—	—	1	—	—	1	—	—
Other diseases of Liver .....	4	—	—	—	—	1	—	1	2	1	2	1	—
Other Digestive Diseases .....	4	—	—	1	—	—	1	1	1	—	1	1	2
Nephritis .....	24	—	—	—	1	—	1	8	14	5	7	4	8
Puerperal Sepsis .....	2	—	—	—	—	—	2	—	—	1	1	—	—
Other diseases, &c. of Parturition .....	3	—	—	—	—	2	1	—	—	1	1	—	1
Congenital debility, Prematurity, &c. ....	20	20	—	—	—	—	—	—	—	10	3	2	5
Senility .....	38	—	—	—	—	—	—	—	38	8	12	9	9
Suicide .....	8	—	—	—	—	—	2	5	1	3	1	2	2
Other deaths from violence .....	13	—	1	1	3	1	—	3	4	2	5	2	4
Other defined diseases .....	68	6	1	—	4	3	9	23	22	16	26	10	16
TOTALS	727	39	14	12	24	27	61	245	335	195	184	142	206

TABLE IV.

## INFANTILE MORTALITY, 1934.

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
Premature Birth .....	6	3	1	—	1	—	1	—	—	1	1	—	4
Congenital Debility .....	2	2	—	—	—	—	—	—	—	—	—	2	—
Congenital Heart Disease .....	5	3	—	1	—	—	—	—	1	3	1	—	1
Pyloric Stenosis .....	1	—	1	—	—	—	—	—	—	1	—	—	—
Congenital Atelectasis .....	1	1	—	—	—	—	—	—	—	1	—	—	—
Marasmus .....	4	—	—	—	—	3	1	—	—	3	1	—	—
Icterus Neonatorum .....	1	1	—	—	—	—	—	—	—	1	—	—	—
Prolonged Labour .....	1	1	—	—	—	—	—	—	—	—	1	—	—
Haemorrhage after circumcision .....	1	—	—	1	—	—	—	—	—	—	—	—	1
Measles .....	1	—	—	—	—	—	—	—	1	—	1	—	—
Diarrhoea .....	7	—	—	—	—	3	3	1	—	2	2	1	2
Bronchitis .....	1	—	—	—	—	1	—	—	—	—	—	—	1
Pneumonia .....	4	—	—	—	—	—	2	2	—	—	1	—	3
Volvulus .....	1	—	—	—	1	—	—	—	—	—	1	—	—
Acidosis .....	1	—	—	—	—	—	—	1	—	—	—	—	1
Streptococcal Meningitis .....	1	—	—	—	—	—	—	—	1	—	—	—	1
Acute Pulmonary Oedema .....	1	—	1	—	—	—	—	—	—	—	—	—	1
<b>TOTALS</b> .....	<b>39</b>	<b>11</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>7</b>	<b>7</b>	<b>4</b>	<b>3</b>	<b>12</b>	<b>9</b>	<b>3</b>	<b>15</b>

TABLE V.

## CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR, 1934.

Notifiable Disease.	Cases notified in whole District. At Ages—Years.								Ward Distribution.			
	At all Ages	under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	Over 65	North East	North West	South East	South West
Scarlet Fever .....	236	2	63	139	12	18	1	1	61	61	40	74
Diphtheria .....	86	—	21	55	7	2	1	—	21	16	17	32
Pneumonia .....	39	3	7	6	5	10	5	3	5	8	12	14
Erysipelas .....	21	—	—	—	3	9	8	1	6	7	3	5
Puerperal Pyrexia .....	4	—	—	—	2	2	—	—	1	2	—	1
Puerperal Fever .....	2	—	—	—	1	1	—	—	—	1	—	1
Ophthalmia Neonatorum .....	4	4	—	—	—	—	—	—	1	1	1	1
Meningitis .....	2	—	1	—	—	—	1	—	2	—	—	—
Paratyphoid .....	1	—	1	—	—	—	—	—	—	—	—	1
Typhoid .....	2	—	—	—	—	2	—	—	—	2	—	—
Tuberculosis (resp.) .....	82	—	—	3	24	42	13	—	20	21	13	28
Tuberculosis (other) .....	22	—	1	7	4	7	2	1	9	5	3	5
TOTALS .....	501	9	94	210	58	93	31	6	126	124	89	162



OPHTHALMIA NEONATORUM.

Cases.			Vision unimpaired.	Vision impaired.	Total Blindness.	Deaths.
Notified.	Treated.					
	At home.	In hospital.				
4	3	1	4	—	—	—

## CASES REMOVED TO HOSPITAL.

			<i>Total Notified.</i>
Scarlet Fever	.....	.....	193
Diphtheria	.....	.....	80
Pneumonia	.....	.....	15
Puerperal Fever	.....	.....	1
Puerperal Pyrexia	.....	.....	2
Erysipelas	.....	.....	9
Ophthalmia Neonatorum	.....	.....	1
Meningitis	.....	.....	2
Paratyphoid	.....	.....	1
Typhoid	.....	.....	2

TABLE 7.

## BIRTHS.

		<i>Male</i>	<i>Female.</i>	<i>Total.</i>
LIVE BIRTHS.				
Total	.....	483	460	943
Legitimate	.....	464	443	907
Illegitimate	.....	19	17	36
STILL BIRTHS.				
Total	.....	10	22	32
Legitimate	.....	10	22	32
Illegitimate	.....	—	—	—

## NOTIFIED LIVE BIRTHS.

## Ward Distribution.

	Total.	N. East.	N. West.	S. East.	S. West.
Total Births notified in the district	494	155	98	67	174
Notifications received from other districts	353	127	85	57	84

## NOTIFIED STILL BIRTHS.

Inside	9.	Outside	12	Total	21
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## NOTIFICATIONS WERE RECEIVED FROM :—

Doctors and Parents	636
Midwives	232

Table 8. INFANT WELFARE CENTRES, 1934.

Number of Centres provided and maintained by the Council  
 Total number of attendances at all centres during  
 the year :—

(a) by children under 1 year of age	9,033
(b) by children between 1 and 5 years of age	6,136

Average attendance of children per session .....	.....
Number of children who attended for the first time during the year :—	43
(a) under 1 year of age.....	690
(b) between 1 and 5 years of age .....	252
Percentage of notified live births represented by number of children who attended a centre for the first time during the year.....	81.46
Children treated at Dental Clinic .....	132
Children treated at Ophthalmic Clinic .....	7
Mothers treated at Ophthalmic Clinic .....	3.
Children operated on for enlarged tonsils and adenoids	1
Children operated on with X-Ray for Ringworm	—

**TABLE 9. ANTE-NATAL CLINIC.**

Number of Expectant Mothers who attended .....	275
Number of attendances made by Expectant Mothers	301
Mothers referred for Dental treatment at the Clinic	55
Mothers supplied with Dentures .....	18
Expectant Mothers to whom Dried Milk was supplied	23
Number of packets of Dried Milk supplied .....	193

**TABLE 10. INQUESTS.**

INQUESTS—30

Suicide .....	8	Knocked down by pedal cyclist .....	1
Knocked down by motor car	3	Accidentally drowned .....	1
Death at operation .....	3	Found drowned .....	1
Accidental fall .....	2	Accidentally striking his head against a brick wall	1
Heart Disease .....	2	Uraemia .....	1
Accidental Scalds .....	2	Hernia.....	1
Senility accelerated by accident .....	2	Acute Yellow Atrophy of Liver	1
Heart Disease accelerated by a fall .....	1		

CORONER'S CERTIFICATE AFTER POST-MORTEM WITHOUT INQUEST—27

Heart Disease .....	11	Pneumonia .....	2
Cerebral Haemorrhage .....	3	Hernia.....	1
Nephritis .....	2	Pulmonary Tuberculosis .....	1
Esophthalmic Goitre .....	1	Osteo-melitis .....	1
Puerperal Sepsis .....	1	Congenital Heart Disease	1
Cerebral Aneurysm .....	1	Cerebral Oedema .....	1
		Distended Stomach .....	1

## FACTORIES, WORKSHOPS AND WORKPLACES.

### 1.—*Inspection of Factories, Workshops and Workplaces including Inspections made by Sanitary Inspectors.*

Premises.	Inspections	Written Notices
(1)	(2)	(3)
Factories . . . . .	83	22
(Including Factory Laundries)		
Workshops . . . . .	412	7
(Including Workshop Laundries)		
Workplaces . . . . .	20	Nil
(Other than Outworkers' Premises)		
Total . . . . .	515	29

### 2.—*Defects found in Factories, Workshops and Workplaces.*

#### Nuisances under the Public Health Acts :—

Particulars.	Found.	Remedied.
(1)	(2)	(3)
Want of Cleanliness . . . . .	26	26
Want of Ventilation . . . . .	Nil	Nil
Overcrowding . . . . .	Nil	Nil
Want of drainage of Floors . . . . .	Nil	Nil
Other Nuisances . . . . .	9	9

#### Sanitary Accommodation :—

Insufficient . . . . .	2	2
Unsuitable or defective . . . . .	38	38
Not separate for sexes . . . . .	Nil	Nil

#### Offences under the Factory and Workshop Acts :—

Illegal Occupation of underground		
Bakehouses . . . . .	Nil	Nil
Other offences . . . . .	Nil	Nil
Total . . . . .	75	75

### 3.—*Outwork in unwholesome premises, Section 108* Nil.

## STAFF.

- 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).
- NANCY G. HOWELL, M.R.C.S., L.R.C.P., D.P.H., Assistant Medical Officer of Health and School Medical Officer.
- P. H. SLATER, L.D.S., School Dentist.
- M. W. KINCH, M.R.San.I., Cert. of Royal Sanitary Institute; holds Meat and Smoke Certificates; Chief Sanitary Inspector (Inspector under Diseases of Animals Acts and the Rag Flock Act).
- J. J. JENKINS, Cert. of Royal Sanitary Institute; holds Meat and Smoke Certificates, Sanitary Inspector (Inspector under Fabrics Misdescription Act).
- E. W. BROOKS. Cert. of Royal Sanitary Institute, Sanitary Inspector.
- J. J. MATTHEWS, Cert. of Royal Sanitary Institute; holds Meat Certificate, Sanitary Inspector.
- Miss A. COOKSEY, A.R.San.I., Certificate of Royal Sanitary Institute, Health Visitor.
- Miss J. WELSH, Certificate of Royal Sanitary Institute, C.M.B., Health Visitor.
- Miss B. G. SORLIE, S.R.N., Certificate of Royal Sanitary Institute, C.M.B., H.V. Diploma, Health Visitor and School Nurse.
- Miss A. WOOSNAM, S.R.N., C.M.B., Health Visitor and School Nurse.
- Miss B. C. BROUGHTON, S.R.N., C.M.B., H.V. Diploma, Health Visitor and School Nurse.
- H. L. HACKER,\* Chief Clerk.

Miss G. OVERALL\* Clerk.

Miss V. E. ARNOLD.\* Clerk.

Miss D. E. BEACON, Clerk.

Miss A. KENT.\* Clerk.

---

Miss M. J. GILFILLAN,\* S.R.N., C.M.B., Matron, Isolation Hospital.

---

Miss F. A. CAVENDISH, Matron, Day Nursery.

---

G. BAKER,\* Disinfector.

A. C. MEPHAM,\* Asst. Disinfector and Mortuary Keeper.

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NOTE.—To the salaries of all the above officials excepting those marked with an asterisk, contribution is made under the Local Government Act, 1929.

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I wish to express my appreciation and thanks to all the members of the Public Health Department for their excellent co-operation during the year,

I am,

Your obedient Servant,

D. J. THOMAS,

*Medical Officer of Health.*

# ANNUAL REPORT

OF THE

School Medical Officer

FOR THE YEAR 1934.

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MUNICIPAL OFFICES,

ACTON, W.3.

*To the Chairman and Members of  
the Education Committee.*

LADIES AND GENTLEMEN,

We beg to submit the following report upon the schools and school children of the Education Authority for the year 1934.

As in former years the subject matter has been arranged as far as possible in tabular form. The Tables at the end of the Report are those issued by the Board of Education.

In arranging these records of the year's work, we are able to look on the Public Health Services as a whole and to attempt to assess the value of these services to our children generally. One

is apt to look at the Welfare infant as the future school child and to view the entrant as a school leaver. The general condition of these sections of the school population is a fairly good indication of the effectiveness of the Health Services.

Speaking broadly, the condition of the school entrant is satisfactory although we find a variation in the condition in the different districts which is markedly dependent upon the attendance of mothers and children at the Welfares in the pre-school days. For example, in one school in quite a poor district, we found that out of 25 children inspected in one morning, 15 had perfect teeth, the general nutrition was very good, and the clothing on the whole, sensible. On each visit we remark on the excellent condition of the entrants at this school. At another school in the same district where the average income is about the same, the condition of the entrants is not nearly as good and the proportion who have previously attended the Welfares is usually low.

At this stage of school life an effort is made to train the child in healthy bodily habits with splendid results.

We have very little complaint to make about the children in the junior departments of the schools. In this age group the children are usually looked after by the mother and are quite well kept.

School leavers, however, are not nearly as satisfactory. At every inspection in this group far too much time is taken up by a discussion on personal hygiene. One cannot say that uncleanliness is found but far too often there is a lack of personal fastidiousness, which by this age the children should have acquired. In most of the schools, it is quite common, excluding those cases where the conditions are due to lack of means, to find that perhaps 2 or 3 only, out of 25 or 30 girls ever brush their teeth, that clothing is unsuitable, that posture is bad and the general air is that of personal carelessness. It is in this section of the school community too, that there are most refusals for dental treatment.

The unchallengeable conclusion that we are forced to is that our children are not leaving school brimming with the health and vigour that should be theirs, considering the resources that the Public Authority has put at their command. This is a grave statement but a statement based not only upon impressions formed at successive medical inspections but unfortunately borne out by statistics.

The weak link in our services is not difficult to find.



Medical inspections are carried out systematically, advice is given to the parent and child, defects are remedied, and the following-up of cases is rigorously carried out. The fault is not there. It is obviously due to a lack of a defined responsibility for physical or bodily education at this stage of school life.

We know that these children are taught a certain amount of drill or dancing and this may or may not have a permanent effect upon the child. How often though, does the child receive any lessons or training in personal hygiene, a matter which is going to affect the whole of his or her subsequent life?

When week after week one sees these girls at an inspection, and notices that the skin is not as clean as it should be, the under-clothing not clean although the girl is quite old enough to wash it herself, and that the teeth are in a dirty condition, seldom if ever brushed, one can only assume that practical hygiene is not taught, or at least, not pressed.

There is undoubtedly a lack of balance between mental and bodily education and until this is remedied and we take the whole of the child and his interests into consideration, we cannot, as a medical and educational body be said to fulfil our purpose.

The environmental improvement in the surroundings of the children is far too frequently negatived by superstition about many matters and education of the children and a determined effort only can break this superstition. For instance, when one suggests to a mother that the girl is not as clean as she ought to be, the mother replies that in her opinion too frequent bathing is weakening. This type of statement is by no means confined to the poorer mothers. In other cases, in discussing the diet of these growing girls, one frequently finds that most unsuitable and unbalanced food is being demanded by the girl. Time and again mothers remark that they would be grateful if the girl were taught at school how to look after herself because she pays no attention to the parents' advice. The mother usually has younger children to look after and expects a girl of 12 and over to look after herself.

These facts are surely convincing enough to urge the necessity for the teaching of practical hygiene in our schools. The average healthy child is interested in the subject but the interest is liable to wane unless she is encouraged by her teachers and stimulated by the competitive spirit among her fellows. Herd instinct is snobbish and among school children this is especially true.

We have the firmest belief that if children at this most impressionable time of their lives are made to care for and to value their bodies their chances of becoming good and healthy citizens will be increased.

PUBLIC ELEMENTARY SCHOOLS WITHIN THE DISTRICT WITH  
ACCOMMODATION.

<i>Name of School.</i>	<i>Dept.</i>	<i>Accommo- dation.</i>	<i>Avg. monthly No. on Register</i>	<i>Average attendance</i>
Acton Wells	..... Senior	320	283	258
	..... Junior	364	417	379
	..... Infants'	364	369	296
Beaumont Park	..... Senior Girls'	450	208	187
	..... Junior Girls'	450	264	243
	..... Infants'	400	239	200
Berrymede	..... Junior Boys'	640	498	452
	..... Junior Girls'	542	427	385
	..... Infants'	450	325	269
Central	.....	480	426	399
Derwentwater	..... Junior	441	431	401
	..... Infants'	350	275	219
John Perryn	..... Senior	360	258	229
	..... Junior	288	303	276
	..... Infants'	336	294	253
Priory	..... Senior Boys'	500	378	341
	..... Senior Girls'	499	387	333
	..... Infants'	400	285	233
Rothschild	..... Junior Boys'	450	235	218
	..... Infants'	400	275	233
Southfield	..... Senior Boys'	415	235	214
	..... Junior	382	338	312
	..... Infants'	350	219	179
Turnham Green R.C.	Mixed	327	246	211
Acton Council Special	(M.D.)	68	42	36
		10026	7657	6756

AVERAGE HEIGHT WITHOUT SHOES AND AVERAGE WEIGHT WITHOUT  
CLOTHES.

ANTHROPIOMETRIC COMMITTEE, 1929.

MALES.

FEMALES.

<i>Age last birthday.</i>	<i>Height in ins.</i>	<i>Weight in lbs.</i>	<i>Height in ins.</i>	<i>Weight in lbs.</i>
3	36.9	32.9	36.6	31.5
4	39.2	35.9	38.4	33.7
5	41.4	38.7	41.1	37.5
6	43.	41.3	42.8	40.1
7	45.4	45.4	45.1	44.1
8	47.8	51.	47.5	49.4
9	49.2	54.8	48.9	52.6
10	51.3	59.6	51.2	59.8
11	52.7	64.6	52.8	63.9
12	55.	71.6	55.6	73.9
13	56.2	76.5	56.9	79.
14	58.	86.1	58.9	88.2
15	61.8	99.3	62.3	106.8

TABLE SHOWING HEIGHTS AND WEIGHTS AT DIFFERENT AGES.

ENTRANTS (BOYS)	No. Examined.	YEARS OF AGE.											
		3—4			4—5			5—6			6—7		
		No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.	No.	Height No.	Weight lbs.
Acton Wells Infants' .....	49	1	41.8	38.3	24	41.	39.8	14	43.8	42.8	10	46.1	46.5
Beaumont Park Infants' .....	42	17	37.1	34.5	14	41.2	38.8	9	44.4	44.1	2	46.7	48.1
Berrymede Infants' .....	60	28	37.3	34.4	19	40.	37.8	10	42.9	42.8	3	46.2	49.3
Derwentwater Infants' .....	77	.....	.....	.....	32	41.2	41.1	34	42.6	41.9	11	46.4	51.5
John Perryn Infants' .....	31	.....	.....	.....	13	40.5	37.9	16	42.1	41.8	2	45.3	47.9
Priory Infants' .....	52	.....	.....	.....	28	41.	39.2	18	43.3	42.4	6	46.7	49.4
Rothschild Infants' .....	57	9	37.9	34.5	24	41.4	39.8	21	43	41.4	3	45.7	43.8
Southfield Infants' .....	63	.....	.....	.....	22	41.1	38.3	29	43.8	43.9	12	45.4	47.5
Roman Catholic .....	8	.....	.....	.....	.....	.....	.....	8	43.7	43.2	.....	.....	.....
	439	55			176			159			49		
(GIRLS)													
Acton Wells Infants' .....	58	.....	.....	.....	19	40.5	38.8	32	43.6	43.4	7	45.9	54.4
Beaumont Park Infants' .....	49	23	36.8	32.2	7	40.9	38.3	14	43	42.3	5	44.3	42.9
Berrymede Infants' .....	58	25	37.5	34.1	15	40.2	37.2	14	41.5	38.6	4	47	50.4
Derwentwater Infants' .....	56	.....	.....	.....	29	40.8	38.4	19	45.6	45.8	8	45.1	46.6
John Perryn Infants' .....	38	.....	.....	.....	17	41.3	40.2	16	43.	41.6	5	45.9	47.1
Priory Infants' .....	44	1	39.3	34.3	19	40.4	37.1	23	42.9	39.4	1	45.3	49
Rothschild Infants' .....	50	9	37.3	35.3	16	40.5	38.4	20	42.5	39.6	5	46.2	46.1
Southfield Infants' .....	41	.....	.....	.....	16	40.4	36.9	19	43.3	40.1	6	46.9	46.9
Roman Catholic .....	12	.....	.....	.....	3	40.1	37.4	6	43.	42.8	3	45	44.3
	406	58			141			163			44		

TABLE SHOWING HEIGHTS AND WEIGHTS AT DIFFERENT AGES

INTERMEDIATES (GIRLS)	No. Examined.	YEARS OF AGE.								
		7—8			8—9			9—10		
		No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.
Acton Wells Junior	25	2	50.3	56.7	23	52.2	58.3	.....	.....	.....
Acton Wells Infants'	36	25	48.3	52.1	11	54.6	55.4	.....	.....	.....
Beaumont Park Jnr.	75	47	48.7	52.2	28	48.6	51.8	.....	.....	.....
Beaumont Park Infnts.	3	3	46.5	51.3	—	—	.....	.....	.....	.....
Berrymede Jnr. Girls'	97	60	47.9	51.9	37	48.3	52.9	.....	.....	.....
Berrymede Infnts.	5	5	48.2	51.5	.....	.....	.....	.....	.....	.....
Derwentwater Jnr. ....	41	20	48.8	52.8	21	49.5	54.1	.....	.....	.....
Derwentwater Infnts.'	4	4	48.3	50.9	.....	.....	.....	.....	.....	.....
John Perryn Jnr. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
John Perryn Infnts.'	39	17	48.6	52.1	22	48.6	53.4	.....	.....	.....
Priory Infants'	5	5	46.5	46.3	.....	.....	.....	.....	.....	.....
Rothschild Infants'	4	4	47.4	48.4	.....	.....	.....	.....	.....	.....
Southfield Junior	26	15	48.6	53.3	11	49.3	52.5	.....	.....	.....
Southfield Infants'	4	4	50.2	62.2	.....	.....	.....	.....	.....	.....
Roman Catholic	11	2	49.5	53.6	9	49.9	56.1	.....	.....	.....
	375	213			162					

TABLE SHOWING HEIGHTS AND WEIGHTS AT DIFFERENT AGES.

INTERMEDIATES (BOYS)	No. Examined.	YEARS OF AGE.								
		7—8			8—9			9—10		
		No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.
Acton Wells Junior	9	1	51.8	62	7	50.2	57.9	1	54.3	65
Acton Wells Infnts.'	48	29	49.1	54.6	19	49.5	55.4	.....	.....	.....
Beaumont Pk. Infnts.'	1	1	45	47.1	.....	.....	.....	.....	.....	.....
Berrymede Jnr. Boys'	143	96	49	54.2	46	48.5	53.8	1	57	78
Berrymede Infants'	6	6	49.8	54	.....	.....	.....	.....	.....	.....
Derwentwater Jnr. ....	45	29	50.1	58.1	16	50.8	58	.....	.....	.....
Derwentwater Infnts.'	5	5	48.6	51.9	.....	.....	.....	.....	.....	.....
John Perryn Infnts. ....	51	26	48.7	53.7	25	49.2	54.9	.....	.....	.....
John Perryn Junior	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Priory Infants'	4	4	47.1	49	.....	.....	.....	.....	.....	.....
Rothschild Junior	50	27	49.5	53.1	23	48.6	54.3	.....	.....	.....
Rothschild Infants'	2	2	48.8	53.8	.....	.....	.....	.....	.....	.....
Southfield Junior	47	31	45.7	56.3	16	49.7	58.1	.....	.....	.....
Southfield Infants'	2	2	49	53.3	.....	.....	.....	.....	.....	.....
Roman Catholic	14	5	50.5	57.6	8	49.1	52.7	1	49.3	59.3
	427	264			160			3		

TABLE SHOWING HEIGHTS AND WEIGHTS AT DIFFERENT AGES

LEAVERS (BOYS)	No. Examined.	YEARS OF AGE.								
		12—13			13—14			14—15		
		No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.
Acton Wells Senior	51	51	58.2	83	.....	.....	.....	.....	.....	.....
Central .....	59	59	58.9	85.1	.....	.....	.....	.....	.....	.....
John Perryn Senior	49	46	58.4	83.1	3	59.8	98.5	.....	.....	.....
Priory Boys'	110	110	57	78.6	.....	.....	.....	.....	.....	.....
Southfield Snr.Boys'	90	83	57.8	83.7	7	59.1	86.8	.....	.....	.....
Roman Catholic .....	10	10	59	85.3	.....	.....	.....	.....	.....	.....
	369	359			10					
(GIRLS)										
Acton Wells Snr.	51	49	58.8	85.4	2	62.7	97.6	.....	.....	.....
Beaum't Pk. Snr. ....	74	74	57.3	80.6	.....	.....	.....	.....	.....	.....
Central .....	66	64	59.4	84.9	2	64.1	101.5	.....	.....	.....
John Perryn Snr. ....	44	41	58.1	80.7	3	60.2	81.2	.....	.....	.....
Priory Girls' .....	144	136	58.1	82	8	61.7	93.1	.....	.....	.....
Roman Catholic .....	15	13	58.1	82.8	2	62.1	111.9	.....	.....	.....
	394	377			17					

### Tonsils and Adenoids Report.

38 children were operated on during the year for removal of Tonsils and Adenoids under the Authority's scheme. Of these 26 were referred to the Clinic for recurrent attacks of tonsillitis and there was some enlargement of the glands in the neck. In 2 of these cases there was also some rheumatic infection. In 8 cases the operation was performed because unhealthy tonsil and adenoid tissue was associated with discharging ears. 3 children were operated on because the unhealthy condition of the nose and throat was probably responsible for deafness. In one child the tonsils were so much enlarged that they definitely caused obstruction and were the cause of chronic cough.

### Provision of Meals.

During the latter part of the year, the number of children who were recommended for school feeding increased considerably. This was to be expected at the beginning of the Autumn Term as signs of malnutrition are always more obvious during the cold

weather and parents are therefore more likely to apply for meals, and teachers are more likely to urge them to do so in order to avoid illness and suffering during the winter months.

It will be remembered that when we commenced school feeding we used the height for weight standard as an indication of adequate nutrition. We soon found this wanting and decided to increase the scope of the scheme to include children who showed evidence of malnutrition as distinct from under-nourishment.

It will therefore be found that we have certain children attending the Centres who are actually not very much below weight or may even be up to normal, but who show signs of defective nutrition such as anaemia, lethargy, etc.

It frequently happens also that home circumstances are such that children are sent to school having had little or no breakfast, and in these cases although the weight may be normal, the child is granted free meals. For example, a child who weighed one lb. more than the average weight for his height, stated that his breakfast recently had consisted of bread soaked in tea.

It has been our experience in dealing with these children to find that the general condition begins to improve in about 2 weeks time from the commencement of meals. The improvement is often marked and is noticeable to the class teachers. One of the Head Teachers, in discussing the matter said that she was impressed by the way in which children who were restless, inattentive and apathetic about their work, began after being fed at school to be more restful, to concentrate on their work more and to be less of a nuisance to their teacher.

The teaching staff give us every support in our efforts on behalf of these children and in many cases suggest a period of rest at school for certain bad cases, or else see that rest is obtained when we have recommended such a course.

We have been particularly fortunate in our results, and in going through the weight cards of all children, some of whom have been fed since the inception of the scheme in 1932, it was found that in no case has a child failed to gain satisfactorily in weight and height

For the sake of interest a table is given below showing the progress of 125 children who have been selected because they have all attended a Centre for 2 months or more, and so have been weighed at least twice at monthly intervals. These children are all receiving free meals and milk at present.

In the first column, the length of time the child has attended Centre is given, in the 2nd column the number of pounds gained in that time, and in the 3rd column is shown the number of pounds by which the child falls short of the average weight for its height.

In some cases the gain in weight is considerable although in many cases the 3rd column shows that the child still has far to go in order to reach a normal average.

We expected to find some loss of weight in children during the Summer holidays. Actually, one child lost  $1\frac{1}{2}$  lbs., two remained stationary and all the rest gained to some extent.

In view of the fact that many of our children on commencing meals show signs of gross malnourishment, it is surprising how little absence there is once the feeding has commenced.

This may be explained by the fact that parents are anxious not to keep the child away if possible when a free dinner can be obtained, but this is not the whole story. It is striking how little infectious disease there has been among the children although we have weathered an epidemic of measles and a fairly severe epidemic of scarlet fever. It certainly appears as though this mid-morning milk and mid-day meal, given at the time when the child is among his school fellows and therefore more likely to be exposed to infection, has something to do with the low incidence of illness.

A typical weekly menu is shown below :—

MONDAY.	Brown Stew, dumplings, potatoes. Semolina Pudding.
TUESDAY.	Baked stuffed herrings, potatoes, tomatoes. Stewed fruit and ground rice.
WEDNESDAY.	Roast Beef, batter, potatoes, greens. Steamed suet pudding.
THURSDAY.	Shepherds Pie, potatoes, sprouts. Bread Pudding.
FRIDAY.	Rabbit stew, bread, potatoes. Apple dumplings and custard.

<i>Months of attendance at Centre.</i>	<i>Amt. gained.</i>	<i>Amt. still below.</i>	<i>Months of attendance at Centre.</i>	<i>Amt. gained.</i>	<i>Amt. still below.</i>
24	15 lbs.	111 lbs.	5	4	5
12	7	5	12	7	6
1	1.5	8.3	20	10	5.5
24	10	10	11	6.5	2
12	10	17	9	7.5	Normal
5	5	20	12	3	6
7	1.5	2	11	6	2.5
2	2	4.5	20	16	5.5
2	3	1	18	8	8
12	10	3.5	12	5	5
12	7	6	20	10	3
5	9	Normal	23	5	2
11	5	4	12	7	Normal
10	6	2	20	15	7.5
12	7.5	5	20	10	Normal
24	10	5	20	21	Normal
4	2.5	2	20	15	3.5
11	6	6	12	7	5
3	1.5	3	18	12	Normal
2	3	Normal	20	10	Normal
24	20	Normal	20	12	7
11	6	2.5	12	9	1.5
20	16	5.5	12	9	6.5
18	8	3	9	1	16
12	5	5	14	24.5	20
25	10	2	27	23	Normal
23	5	2	12	5.5	8
12	7	2	2	2	2.5
20	15	7.5	6	1.1	12.5
20	10	Normal	18	10	2.5
20	21	Normal	2	6.5	13.5
22	15	3.5	12	6	8.2
12	7	5	10	4.5	18
18	12	Normal	7	4.5	3.5
20	10	Normal	2	6	1.5
20	12	7	4	3	4
12	9	1.5	5	4.5	2.5
12	9	6.5	9	6	2.5
9	1	16	12	9	Normal
14	24.5	20	12	4	7
6	7	7.5	4	3	9.2
11	6	9	24	15	8.5



<i>Months of attendance at Centre.</i>	<i>Amt. gained.</i>	<i>Amt. still below.</i>	<i>Months of attendance at Centre.</i>	<i>Amt. gained.</i>	<i>Amt. still below.</i>
11	10	3			
6	5	3			
4	3	18			
4	3	Normal			
5	5	3			
24	10	4			
6	7	7.5			
11	6	9			
11	10	3			
5	4	5			
12	7	6			
24	14	5			
14	12.5	16			
24	16	10			
24	9	7			
24	8	6			
8	8	2			
4	2.8	2			
4	4	8			
4	3.5	7.8			
8	4.5	4			
24	17	Normal			
24	11.5	3			
20	15	4			
4	3	Normal			
26	12.5	3			
6	2.5	2			
22	10	3			
6	2.5	3			
7	2.5	3			
16	4	1			
4	4.5	3.5			
5	3	2			
12	19	4.5			
4	5	1.5			
3	3.5	13.5			
24	13	7			
4	7	16			
7	3	1			
6	4.3	4.5			
10	5	8			

At the 31st December, there were 283 children on the feeding list. Of these, 204 were receiving milk and meals, 76 were receiving milk only, and 3 were receiving meals only.

A total of 28, 152 meals and 48,060 bottles of milk were provided during the year.

### Report on Aural Cases.

During 1934, 81 children attended the Clinic for some ear condition.

We have worked along the same lines as in the previous two years. Parents and teachers have been urged to send the children to the Clinic on the first suspicions of earache or ear trouble of any kind, and in this way we have been able to get our cases early at a time when we can do most for them.

There has been a good deal of home visiting of these ear cases by the School Nurses and the results have well repaid the work.

A discussion of the types of cases which attend the Clinic is interesting and will perhaps indicate the lines along which further improvement in this branch of the School Medical Service could be made.

11 cases came up complaining of earache or deafness which was found to be due solely to impacted wax. All the symptoms cleared up after suitable treatment.

In 2 cases there was furunculosis of the meatus which cleared up in about a week.

18 children came up complaining of severe earache. In 4 of these, the drum was bulging, there was a high temperature and perforation of the drumhead occurred. The children were excluded from school and referred to their own doctor. In all cases there was recovery with a healed drum. In 3 of the children there was fulness of the drum and the temperature was raised. The children were excluded from school and the homes visited. All cleared up without perforation of the drumhead. In the other 11 cases of this group there was some redness of the drum with pain but no temperature. The children were kept under observation and all recovered without any perforation.

37 children already had discharging ears on the first visit to the clinic, but all were early cases. We still carry out our treat-

ment in which the child is taught to do a simple routine toilet of the meatus daily, and three times a week he visits the School Nurse to ensure that our instructions are being carried out. All these cases recovered with a healed drumhead and sound hearing.

There remain 13 cases of chronic ear disease and it is these cases which constitute our most urgent problem. In many cases the child could be cured if our advice were taken and suitable treatment obtained, but these children are becoming deaf while actually under our observation. All of them come from homes where there is obvious neglect, all have been visited time and again by the school nurses, and in most of the cases by the N.S.P.C.C. Inspector but still nothing is done.

A few notes on the cases will perhaps make the situation clear.

W.F. 13 years old. Otorrhoea for about 6 years. Referred to Hospital nearly 3 years ago. Surgeon suggested daily treatment at hospital for 3 weeks and would consider operation at the end of that time. Child visited hospital 2 or 3 times, then "had no time to go." Parents visited and child started again for 2 evenings. Constant visits from Nurse but refused to attend. Child progressively more deaf in both ears. N.S.P.C.C. in November. Double mastoid operation performed, but deafness so marked that it is doubtful whether she will be employable on leaving school.

V.F. Sister of above. Intermittent ear discharge. Attends Clinic only when fetched. Needs minor operation to ear but parents refused to take her to hospital. N.S.P.C.C. visited in November. Attended hospital and is to be admitted. Deafness progressive.

O.M. Intermittent ear discharge. Slight deafness. Parents refuse hospital treatment. Admitted to Isolation hospital with Scarlet fever. Ear dry now.

R. Chronic ear discharge. Needs tonsils and adenoids operation. Parents visited twice, nothing done.

W. Chronic left otorrhoea. Generally neglected. Tonsils and adenoids enlarged. Almost whole of drumhead digested. Visited twice, becoming deaf on left side.

- M. Referred to N.S.P.C.C. twice. Chronic ear discharge due chiefly to dirt.
- S.W. Congenital V.D. Now being treated after 2 years urging. Probably nerve deafness also present.
- M. Intermittent discharge, wholly neglect. Some deafness.
- C. Intermittent discharge, wholly neglect.
- T. Large perforation. Neglected. Parents refuse hospital treatment.
- E.Y. Pouring ear discharge. Neglected. Sent to Isleworth.
- C.B. Mentally defective. Very neglected. Visited by the N.S.P.C.C. with very little effect. Becoming deaf.
- L.B. Profuse otorrhoea. Parents seen and referred to N.S.P.C.C. Still neglected. Condition made worse by dirt.

In addition to the above cases, there are 8 cases of deafness apart from middle ear discharge.

In 2 of the cases the condition is probably aggravated by diseased tonsils and adenoids, but in the other 6 cases there is no obvious cause for the deafness.

### Report on Speech Training Classes.

The classes for stammering children have been held at the Centre twice a week on Mondays and Thursdays. 35 Children (30 boys and 5 girls) have attended regularly and punctually. The children have been divided, according to age into 4 classes which last an hour each.

One boy has been discharged as cured, 4 children left school during the Autumn Term, all were improved by their training.

13 Children have made considerable progress, and the remaining 17 are making progress to the satisfaction of both Miss Clark and their Head Teachers.

## RETURN OF EXCEPTIONAL CHILDREN.

On Table 3 will be found a return of all the exceptional children in the district.

### Multiple Defects.

One mentally deficient boy suffering from multiple tuberculosis of bones is at the Stanmore Branch of the Royal National Orthopaedic Hospital.

A second boy who is a cripple and an imbecile was sent away from Stoke Park Colony to a Sanatorium, and is now at home.

A girl who is blind and mentally defective and who also suffers from fits, is at home.

The fourth case is a girl who suffers from birth palsy and slight epilepsy. She attends an elementary school.

### Partially Sighted Children.

Two boys attend the Kingwood Road School for the Partially Blind, one girl is at elementary school, but attends the Central Ophthalmic Hospital regularly, and one boy suffering from very high myopia is at a private school.

### Deaf Children.

Two boys and two girls attend the Ackmar Road Special School, and a young boy aged 5 is at an elementary school.

### Mentally Defective Children.

Twenty-three boys and nineteen girls are on the roll of the Acton Special School for Mental Defectives.

### Epileptic Children.

One girl suffering from severe epilepsy has returned to the Lingfield Colony, and a boy who was withdrawn from there is being taught at home. A girl aged 6 has been in Maida Vale Hospital but is now at home and excluded from school attendance.

### Tuberculous Children.

Three girls suffering from pulmonary tuberculosis are at Harefield Sanatorium.

One boy suffering from abdominal tuberculosis is in Hospital at Margate, and another boy with a tubercular hip attends for out-patient treatment. One boy is at the Treloar Home, Alton, another is in Great Ormond Street Hospital. One boy who has had tubercular tissue removed from his leg attends West Middlesex Hospital twice weekly for electrical treatment. A girl with a tubercular hip is at the Stanmore Branch of the Royal National Orthopaedic Hospital, and a girl with a tubercular spine is in the West Middlesex Hospital.

### **Crippled Children.**

One girl is in a Home at St. Leonards. A boy attends the Faroe Road Special School. Two boys and a girl are at elementary schools. One girl is in the Orthopaedic Hospital, and another in the Metropolitan Hospital. One boy is at home awaiting admission to Stanmore, and a girl has recently been discharged from the Royal Sea Bathing Home at Margate, which she still attends for out-patient treatment.

### **Heart Disease.**

One boy is at St. John's Open Air School, Woodford Bridge, Essex, and another at the Edgar Lee Heart Home. Two boys are in public elementary schools. One boy is at home waiting admission to the Edgar Lee Home, and a girl is excluded from school attendance and is under medical attention at home.

### **REPORT ON OPHTHALMIC CLINIC.**

The work of the Ophthalmic Clinic went on regularly throughout the year 1934.

At the school medical examinations and at the daily Minor Ailment Clinic 404 children were found to be suffering from defects of vision or other eye trouble, and these were referred to the Ophthalmic Clinic.

Of this number, 34 were found to require no special attention, 36 refused treatment or left the district, and 16 obtained glasses privately.

Glasses were prescribed and supplied to 318 school children during the year.

8 Cases of external eye diseases received continuous treatment at the Clinic, and 2 of these were referred to Hospitals for in-patient treatment.

From the Welfare Clinics, 6 mothers and 15 babies were referred for examination. 3 Mothers and 7 babies were supplied with glasses, and 6 babies were kept under observation at intervals of 3 months.

The foregoing is the last report of Dr. Grace Banham who resigned in November 1934, her post as Ophthalmic Surgeon to the Education Committee.

Dr. Banham had held the post for about 25 years, and was appointed soon after the initiation of Medical Inspection of schools. She had by her skill and kindness gained the confidence of all the parents.

We have pleasure in paying this tribute to her excellent work amongst the children, and her resignation was accepted by the Committee with the utmost regret ; but it was inevitable as she had retired from practice and was leaving the district. She had seen the growth of the School Medical Service and she had devoted her great talents to the work without stint.

Dr. Clifton was appointed to the post and we desire to welcome him and trust that he will find the work congenial. We feel sure that he will give good service to the Committee.

## REPORT ON DENTAL CLINIC.

During the year there has again been an increase in the proportion of conservative work done at the Clinic, the number of fillings of permanent teeth having risen from 1960 to 2158.

There has been an increase in the number of children referred from the Maternity & Child Welfare Centres, the actual figures are given below.

Number of mothers examined	.....	60
Number of mothers referred for treatment	....	60
Number of children examined	.....	148
Number of children referred for treatment	.....	132
Number of mothers treated	.....	55
Number of children treated	.....	132
Number of temporary teeth filled	.....	20
Number of temporary teeth extracted	.....	319
Number of permanent teeth filled	.....	36
Number of permanent teeth extracted	.....	442

Number of permanent dressings	.....	.....	38
Number of temporary dressings	.....	.....	36
Number of general anaesthetics given	.....	.....	210
Number of attendances made	.....	.....	348
Number of dentures supplied	.....	.....	18

Arrangements have now been made for part-time assistance to deal with arrears of work in 1935.

Much valuable work is done by the Head Teachers in the schools, and we wish to thank them for their help.

### UNCLEANLINESS TABLE.

Sch.	Date.	No. exam.	Very few nits A.	Few nits. B.	Many nits. C.	Vermin D.	Total Percentage Unclean.
			%	%	%	%	%
1.	July	121	.....	.....	.....	.....	.....
	September	151	.66	1.32	.....	.....	1.98
2.	July	121	.83	2.5	.....	.....	3.3
	September	93	1.07	3.2	.....	1.07	5.3
3.	July	172	.....	.....	.....	.5	.5
	September	177	.56	.56	.....	.....	1.1
4.	July	177	1.1	3.4	.....	.....	4.5
	September	192	2.1	2.6	.....	.....	4.7
5.	July	346	.58	2.	.....	.....	2.6
	September	263	1.5	.8	.....	.4	2.7
6.	July	190	6.8	2.6	.....	.....	9.4
	September	240	9.1	2.9	.....	.83	12.9
7.	July	232	8.1	4.3	.....	.43	12.9
	September	229	7.8	4.8	.....	.....	12.6
8.	July	201	4.5	3.	.....	1.4	9.
	September	195	5.1	2.1	.....	.....	7.2
9.	July	448	4.5	.....	.....	.2	4.7
	September	412	3.4	.....	.....	1.2	4.6
10.	July	399	7.76	2.5	.....	.75	11.
	September	375	11.73	1.86	.....	.26	13.8
11.	July	292	6.5	.7	.....	.7	7.9
	September	255	9.4	.....	.....	.78	10.2



Sch.	Date.	No. exam.	Very few nits. A.	Few nits. B.	Many nits. C.	Vermin. D.	Total Percentage Unclean.
12.	July	141	.....	.....	.....	.....	.....
	September	160	.....	.....	.....	.....	.....
13.	July	122	.81	1.6	.81	.....	3.2
	September	153	.....	1.3	.....	.....	1.3
14.	July	214	.....	1.8	.93	.....	2.8
	September	200	.5	2.5	.....	.5	3.5
15.	July	212	3.7	4.7	.47	.....	8.9
	September	206	1.9	2.4	2.4	.....	6.7
16.	July	234	3.4	2.56	.85	.....	6.8
	September	210	.95	1.9	2.38	.....	5.23
17.	July	122	.....	.....	.....	.....	.....
	September	117	.....	.....	.....	.....	.....
18.	July	111	2.7	.....	.....	.....	2.7
	September	116	2.5	.....	.....	1.7	4.3
19.	July	151	.....	.....	.....	.....	.....
	September	148	.....	.....	.....	.....	.....
20.	July	148	4.7	.67	.....	.....	5.4
	September	122	4.1	.....	.....	.81	4.9
21.	July	300	3.3	.7	.....	.3	4.3
	September	237	1.6	.....	.....	.4	2.1
22.	July	321	.62	.....	.....	.....	.62
	September	385	1.5	.25	.....	.....	1.8
23.	July	268	4.5	.75	.....	.....	5.2
	September	258	1.9	1.2	.....	.....	3.1
24.	July	250	4.8	.4	.....	.4	5.6
	September	232	4.3	1.3	.....	1.3	6.9
25.	July	181	.....	.6	.....	.6	1.12
	September	217	.....	.....	.....	.9	.9
26.	July	281	2.1	3.2	.....	5.	10.3
	September	239	5.9	5.	.....	.4	11.3
27.	July	201	.99	.5	.....	.....	1.49
	September	214	.5	1.4	.....	.....	1.9
28.	July	177	.....	.....	.....	.6	.6
	September	144	.7	.7	.....	.7	2.1
29.	July	150	1.33	1.33	.....	.....	2.7
	September	141	.7	2.8	.....	.....	3.5

Sch.	Date.	No. exam.	Very few nits. A.	Few nits. B.	Many nits. C.	Vermin C.	Total Percentage Unclean.
30.	July	217	1.38	.5	—	—	1.8
	September	185	1.1	.5	—	—	1.6
31.	July	121	—	—	.82	—	.82
	September	118	.84	—	.84	—	2.5
32.	July	93	6.4	10.75	10.75	1.07	29.03
	September	89	4.5	16.8	2.24	2.24	25.8
33.	July	38	13.2	—	—	—	13.2
	September	32	15.5	—	—	—	15.5

### INFECTIOUS DISEASES.

A discussion on Diphtheria and immunisation in the schools will be found in the Public Health section of the Report. Below we give the figures for Schick testing and immunisation in the various schools for the year.

School	Schick Tested.	Positive re-actors.	Number of attendances for 1st dose.	2nd.	3rd.
A.W.S.	—	—	—	—	—
A.W.J.	15	7	4	3	4
A.W.I.	1	—	137	134	123
B.P.S.G.	2	—	—	—	—
B.P.J.G.	4	2	2	1	—
B.P.I.	1	—	26	33	33
B.J.B.	1	—	1	2	3
B.J.G.	1	—	2	1	—
B.I.	1	1	56	63	56
Central	76	40	40	40	31
D.J.	3	2	3	2	2
D.I.	—	—	98	96	85
J.P.S.	—	—	—	—	—
J.P.J.	15	8	5	1	1
J.P.I.	8	3	114	110	105
P.B.	—	—	—	—	—
P.G.	2	1	1	1	1
P.I.	1	—	61	77	88
R.J.	2	2	6	3	2
R.I.	—	—	45	48	36
S.S.B.	1	—	—	—	—

S.J.	—	—	1	1	1
S.I.	1	—	66	75	66
R.C.	5	2	12	41	37
Other Schools	21	18	19	20	21
Infant Welfare	—	—	174	181	213
<b>Total</b>	<b>161</b>	<b>86</b>	<b>875</b>	<b>933</b>	<b>908</b>

In addition, 465 children were Schick tested after inoculation, and of these 459 were found to be negative.

6 were still positive and were given a fourth dose.

There were 59 cases of Diphtheria in school children this number being distributed as follows:—

Acton Wells	.....	8	John Perryn	.....	10
Beaumont Park	.....	5	Priory	.....	12
Berrymede	.....	8	Rothschild	.....	11
Central	.....	1	Southfield	.....	2
Derwentwater	.....	1	Roman Catholic		1

### Scarlet Fever.

There were 122 cases of Scarlet Fever in the schools, the distribution being as follows:—

Acton Wells	.....	10	John Perryn	.....	10
Beaumont Park	.....	16	Priory	.....	19
Berrymede	.....	25	Rothschild	.....	9
Central	.....	1	Southfield	.....	13
Derwentwater	.....	16	Roman Catholic		3

Fifty-five Diphtheria patients and 167 contacts were seen at the Office, and 138 Scarlet Fever patients and 260 contacts were also examined before their return to school.

TABLE SHOWING THE NUMBER OF CHILDREN EMPLOYED OUTSIDE SCHOOL HOURS FOR THE YEAR ENDING 31st DECEMBER, 1934.

SCHOOL.	REGISTERED OCCUPATIONS.				TOTALS. 12—14
	Acton.		In other Districts.		
	Ages. 12—13	13—14	Ages. 12—13	13—14	
Acton County .....	7	7	—	.....	14
Acton Wells .....	2	26	.....	.....	28
Beaumont Park.....	.....	.....	.....	.....	.....
Central .....	6	15	.....	.....	21
John Perryn .....	2	3	.....	.....	5
Priory .....	17	58	.....	.....	75
Roman Catholic .....	3	2	.....	.....	5
Southfield .....	7	25	.....	.....	32
<b>TOTALS</b> .....	<b>44</b>	<b>136</b>		.....	<b>180</b>

TABLE SHOWING THE NUMBER OF CHILDREN ATTENDING ACTON SCHOOLS EMPLOYED IN THE VARIOUS REGISTERED OCCUPATIONS ON 31st DECEMBER, 1934.

SCHOOL.	Delivering goods or parcels.		Delivering Newspapers.		Delivering milk.		TOTALS.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Acton County .....	5	—	5	—	4	—	14	—
Acton Wells.....	3	—	16	2	7	—	26	2
Beaumont Park .....	—	—	—	—	—	—	—	—
Central .....	9	—	10	—	2	—	21	—
John Perryn .....	2	—	2	—	1	—	5	—
Priory .....	48	—	21	—	6	—	75	—
Roman Catholic .....	3	—	1	—	1	—	5	—
Southfield .....	16	—	12	—	4	—	32	—
TOTALS .....	86	—	67	2	25	—	178	2

TABLE SHOWING THE DISTRIBUTION OF ALL CHILDREN EMPLOYED DURING THE PERIOD  
1st JANUARY; 1934 to 31st DECEMBER; 1934.

SCHOOL.	BOYS.									GIRLS.		
	County	Acton Wells	Central	John Ferryn	Priory	Roman Catholic	Southfield	Others	Totals	Acton Wells	Beaumont Park	Totals
1. REGISTERED OCCUPATIONS :—												
(a) Delivering Newspapers .....	7	28	21	3	44	2	26	7	138	2	1	3
(b) Delivering Milk .....	6	8	3	2	14	2	8	4	47	.....	.....	.....
(c) Carrying or Delivering goods or parcels .....	7	6	15	3	90	5	30	8	164	.....	.....	.....
2. EMPLOYED IN OTHER AREAS :—												
(a) Carrying or delivering goods or parcels .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(b) Delivering Newspapers .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(c) Delivering Milk .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
TOTALS .....	20	42	39	8	148	9	64	19	349	2	1	3
CORRESPONDING FIGURES FOR 1933 .....	20	38	39	8	145	7	63	17	337		1	1

## SWIMMING INSTRUCTION—SEASON 1934.

The School Swimming Season opened on the 7th May, 1934, and provision was made for 54 classes, 32 for boys and 22 for girls. Of these, 49 classes were held in school hours whilst one class for boys and four classes for girls were held in periods immediately before or after normal school periods. All the instruction was given by the teaching staff of the schools concerned.

The season normally ends on the 30th September, but, as in previous years, one or two small classes continue to attend the Baths during the winter months for instruction and practice in life-saving.

The Acton Education Committee continues to award certificates to boys and girls who can swim 25 yards down the length of the bath without interruption, pause or rest, and Acton scholars also compete for the certificates of the London Schools Swimming Association and the Royal Life Saving Association, as under :—

### Swimming.

1st Class, 100 yards	} conditions as for Acton certificates
2nd Class, 50 yards	

### Life Saving.

#### Elementary and Advanced.

There are in the schools at the present time 1307 scholars (563 boys and 644 girls) who can swim (as against 1126 at the end of last season) and 330 boys and 304 girls in the schools learned to swim during the 1934 season (against 848 last year). It must be borne in mind, however, that of the 190 scholars who left at the summer vacation to enter secondary schools a great number had learned to swim by that date.

The following is a statistical return relating to the season's work. :—

	<i>Year.</i>	<i>Boys</i>	<i>Girls</i>	<i>Total.</i>
No. of classes per week allocated	1934	32	22	54
	1933	31	21	52
Total No. of attendances made	1934	12375	7911	20286
	1933	13682	8631	22313

<i>Certificates gained.</i>	<i>Year 1934</i>			<i>Year 1933</i>		
	<i>Boys</i>	<i>Girls</i>	<i>Total</i>	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Acton Education Committee	264	204	468	349	247	596
L.S.S.A. 1st Class	145	118	263	240	153	393
	184	149	333	301	206	507
Life Saving, Elem.	20	14	34	33	82	115
	23	—	23	25	63	88

### VISITS PAID BY SCHOOL NURSES.

The following Table gives the number of home visits paid by the Nurses during the year. The visits have been divided into school distribution.

Acton Wells	.....	192	Priory	.....	204
Beaumont Park	.....	214	Rothschild	.....	217
Berrymede	.....	531	Southfield	.....	213
Central	.....	5	Roman Catholic		12
Derwentwater	.....	210	Special School		6
John Perryn	.....	162			
			Total		1966

### EXAMINATIONS OF TEACHERS AND OFFICE STAFF.

7 Candidates were examined during the year. ,



## CONVALESCENT HOMES AND COUNTRY HOLIDAYS

Arrangements were made for 46 children to attend holiday camps and hostels during the Summer Season. One girl was sent to the Winter School of Recovery, Bexhill, for a period of 3 months, and two boys were sent for periods of 6 weeks each.

## MOTHCRAFT CLASSES.

The following table shows the number of classes sent from each school to the Day Nursery. ,,

Priory	.....	6	Beaumont Park	5
Central	.....	5	Acton Wells	5
John Perryn	.....	5	Roman Catholic	1
				—
				27
				—

## RETURN OF MEDICAL INSPECTIONS.

TABLE I.

### A.—ROUTINE MEDICAL INSPECTIONS.

Number of Inspections in the prescribed Groups :—

Entrants	.....	.....	.....	.....	845
Second Age Group	.....	.....	.....	.....	802
Third Age Group	.....	.....	.....	.....	763
				TOTAL	2410
					=====

Number of other Routine Inspections ..... —

### B.—OTHER INSPECTIONS.

Number of Special Inspections	.....	.....	.....	1805
Number of Re-Inspections	.....	.....	.....	1490
			TOTAL	3295
				=====

TABLE II.

A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED  
31ST DECEMBER, 1934.

DEFECT OR DISEASE.	ROUTINE. INSPECTIONS.		SPECIAL INSPECTIONS.	
	No. of Defects.		No. of Defects.	
	Requiring Treatment	Requiring to be kept under observation, but not requiring Treat- ment.	Requiring Treatment	Requiring to be kept under observation, but not requiring Treat- ment.
(1)	(2)	(3)	(4)	(5)
Malnutrition .....	6	14	225	7
<i>Skin :—</i>				
Ringworm :				
Scalp .....	1	—	12	—
Body .....	—	—	26	—
Scabies .....	1	—	19	—
Impetigo .....	4	—	167	—
Other Diseases (Non-Tuberculous)	8	1	51	—
<i>Eye :</i>				
Blepharitis .....	11	—	98	—
Conjunctivitis .....	1	—	15	—
Keratitis .....	—	—	2	—
Corneal Opacities .....	—	—	3	—
Defective Vision (excluding Squint)	108	3	158	—
Squint .....	4	3	11	1
Other Conditions .....	1	—	40	—
<i>Ear :</i>				
Defective Hearing .....	1	1	1	1
Otitis Media.....	7	—	47	—
Other Ear Diseases .....	—	1	64	—
<i>Nose and Throat :</i>				
Chronic Tonsillitis only .....	—	—	22	1
Adenoids only .....	1	1	3	—
Chronic Tonsillitis and Adenoids	10	13	8	2
Other Conditions .....	—	2	—	136
Enlarged Cervical Glands (Non- Tuberculous) .....	—	65	—	1
Defective Speech .....	2	1	17	—

DEFECT OR DISEASE.	Routine Inspections.		Special Inspections.	
	No. of Defects.		No. of Defects.	
	Requiring Treatment	Requiring to be kept under observation, but not requiring Treatment	Requiring Treatment.	Requiring to be kept under observation, but not requiring Treatment.
(1)	(2)	(3)	(4)	(5)
<i>Heart and Circulation :</i>				
Heart Disease :				
Organic .....	—	10	1	2
Functional .....	—	13	3	—
Anaemia .....	—	10	1	—
<i>Lungs :</i>				
Bronchitis .....	—	2	—	—
Other Non-Tuberculous Diseases .....	1	3	—	1
<i>Tuberculosis :</i>				
Pulmonary :				
Definite .....	—	—	—	—
Suspected .....	—	—	1	—
Non-Pulmonary :				
Glands .....	—	—	3	—
Bones and Joints .....	—	—	2	—
Skin .....	—	—	—	—
Other Forms .....	—	—	1	—
<i>Nervous System :</i>				
Epilepsy .....	—	1	—	—
Chorea .....	2	—	—	1
Other Conditions .....	—	—	—	—
<i>Deformities :</i>				
Rickets .....	3	8	—	—
Spinal Curvature .....	1	—	—	—
Other Forms .....	2	4	—	—
Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)	11	26	699	2

B. NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

GROUP (1)	NUMBER OF CHILDREN	
	Inspected (2)	Found to require Treatment. (3)
<b>PRESCRIBED GROUPS :—</b>		
Entrants .....	845	32
Second Age Group .....	802	63
Third Age Group .....	763	62
Total (Prescribed Groups) .....	2410	157
Other Routine Inspections .....	—	—

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

**CHILDREN SUFFERING FROM MULTIPLE DEFECTS**

TOTAL 4.

**BLIND CHILDREN.**

At Certified Schools for the Blind.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
—	—	—	—	—

**PARTIALLY BLIND CHILDREN.**

At Certified Schools for the Blind.	At Certified Schools for the partially Blind.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	2	1	1	—	4

## DEAF CHILDREN.

At Certified Schools for the Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
4	—	—	—	4

## PARTIALLY DEAF CHILDREN.

At Certified Schools for the Deaf.	At Certified Schools for the Partially Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	—	1	—	—	1

## MENTALLY DEFECTIVE CHILDREN.

## Feeble-Minded Children.

At Certified Schools for Mentally Defective Children.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
42	—	—	—	42

## EPILEPTIC CHILDREN.

## Children suffering from severe Epilepsy.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
1	—	—	2	3

## PHYSICALLY DEFECTIVE CHILDREN.

## A TUBERCULOUS CHILDREN.

## 1.—CHILDREN SUFFERING FROM PULMONARY TUBERCULOSIS,

(Including pleura and intra-thoracic glands)

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	—	3	—	3

## II.—CHILDREN SUFFERING FROM NON-PULMONARY TUBERCULOSIS

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	—	5	2	7

## B. DELICATE CHILDREN.

(ie) Whose general health renders it desirable that they should be specially selected for admission to an Open Air School.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	—	—	—	—

### C. CRIPPLED CHILDREN.

(ie) (Other than those diagnosed as tuberculous and in need of treatment for that disease) who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
2	3	2	2	9

### D. CHILDREN WITH HEART DISEASE.

(ie) Children whose defect is so severe as to necessitate the provision of educational facilities other than those of the Public Elementary School.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
2	2	—	2	6

TABLE IV.

RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31ST DECEMBER, 1934.

*Treatment Table.*

GROUP I—MINOR AILMENTS (excluding Uncleanliness, for which see Group VI.)

DISEASE OR DEFECT.	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise	Total.
(1)	(2)	(3)	(4)
<b>SKIN :</b>			
Ringworm-Scalp—			
(i.) X-Ray Treatment.	4	—	4
(ii.) Other Treatment.	—	8	8
Ringworm-Body	26	—	26
Scabies	19	—	19
Impetigo	164	3	167
Other skin disease	51	—	51
<b>MINOR EYE DEFECTS :</b>			
(External and other, but excluding cases falling in Group II.)	103	10	113
<b>MINOR EAR DEFECTS</b>	106	5	111
<b>MISCELLANEOUS</b>			
(e.g., minor injuries, bruises, sores, chilblains, &c.)	658	41	699
<b>TOTAL</b>	1131	67	1198

GROUP II.—DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments—Group I.)

DEFECT OR DISEASE.	No. of Defects dealt with.			
	Under the Authority's Scheme	Submitted to refraction by private practitioner or at hospital, apart from the Authority's Scheme	Otherwise	Total.
(1)	(2)	(3)	(4)	(5)
Errors of Refraction (including Squint)	404	16	—	420
Other Defect or Disease of the Eyes (excluding those recorded in Group I.) —	8	—	—	8
<b>Total</b> .....	<b>412</b>	<b>16</b>	<b>—</b>	<b>428</b>

Total number of children for whom spectacles were prescribed—

(a) Under the Authority's Scheme	.....	.....	.....	.....	318
(b) Otherwise	.....	.....	.....	.....	16

Total number of children who obtained or received spectacles—

(a) Under the Authority's Scheme	.....	.....	.....	.....	318
(b) Otherwise	.....	.....	.....	.....	16

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.  
NUMBER OF DEFECTS.

Received Operative Treatment.												Received other forms of Treatment	Total number treated
Under the Authority's Scheme, in Clinic or Hospital				By Private Practitioner or Hospital, apart from the Authority's Scheme				Total					
(1)				(2)				(3)				(4)	(5)
1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.	(4)	(5)
17	4	17	—	2	—	—	—	19	4	17	—	—	40

(1)—Tonsils only. (2)—Adenoids only. (3)—Tonsils and Adenoids.  
(4)—Other defects of the Nose and Throat.



GROUP IV.—ORTHOPAEDIC AND POSTURAL DEFECTS.

	(1) Under the Authority's Scheme.			(2) Otherwise.			Total No. Treated.
	Residential Treatment with Education. (i)	Residential Treatment without Education. (ii)	Non- Residential Treatment at an Orthopaedic Clinic. (iii)	Residential Treatment with Education. (i)	Residential Treatment without Education. (ii)	Non- Residential Treatment at an Orthopaedic Clinic. (iii)	
No. of Children Treated.	—	—	—	—	—	2	2

## GROUP V.—DENTAL DEFECTS.

(1) Number of Children who were :—	(2) Half-days devoted to :—		
	Inspection	.....	44
	Treatment	.....	418
(a) Inspected by the Dentist :		Total	462
Aged :	(3) Attendances made by children for treatment	.....	3993
{ 5— 686	(4) Fillings :—		
{ 6— 662	Permanent teeth	.....	2158
{ 7— 746	Temporary teeth	.....	48
{ 8— 878		Total	2206
Routine Age Groups { 9— 757	(5) Extractions :—		
{ 10— 834	Permanent teeth	.....	658
{ 11— 725	Temporary teeth	.....	3664
{ 12— 709		Total	4322
{ 13— 863	(6) Administrations of general anaesthetics for extractions		1909
{ 14— 256	(7) Other operations :—		
Total	Permanent teeth	.....	286
	Temporary teeth	.....	71
Specials		Total	357
Grand Total			
(b) Found to require treatment			
(c) Actually treated			

## GROUP VI.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

Average number of visits per school made during the year by the School Nurses.....	.....	.....	.....	.....	12
Total number of examinations of children in the Schools by School Nurses	.....	.....	.....	.....	29116
Number of individual children found unclean :—					
Vermin and Nits	.....	.....	.....	.....	107
Slightly infested	.....	.....	.....	.....	609
Number of children cleansed under arrangements made by the Local Education Authority	.....	.....	.....	.....	15
Number of cases in which legal proceedings were taken :—					
(a) Under the Education Act, 1921	.....	.....	.....	.....	—
(b) Under School Attendance Byelaws	.....	.....	.....	.....	—

STATEMENT OF THE NUMBER OF CHILDREN NOTIFIED DURING THE YEAR ENDED 31st DECEMBER, 1934, BY THE LOCAL EDUCATION AUTHORITY TO THE LOCAL MENTAL DEFICIENCY AUTHORITY.

Total number of children notified ..... 6

*Analysis of the above Total.*

DIAGNOSIS.		Boys.	Girls.
1.	(i) Children incapable of receiving benefit or further benefit from instruction in a Special School :		
	(a) Idiots	1	—
	(b) Imbeciles	—	1
	(c) Others	—	—
	(ii) Children unable to be instructed in a Special School without detriment to the interest of other children :		
	(a) Moral defectives	—	—
	(b) Others	—	—
2.	Feeble minded children notified on leaving a Special School on or before attaining the age of 16	4	—
3.	Feeble-minded children notified under Article 3, <i>i.e.</i> , "special circumstances" cases	—	—
4.	Children who in addition to being mentally defective were blind or deaf	—	—
GRAND TOTAL		5	1

We are,

Your obedient Servants,

D. J. THOMAS.

N. G. HOWELL.