

## **[Report of the Medical Officer of Health for Croydon].**

### **Contributors**

Croydon (London, England). County Borough.

### **Publication/Creation**

[1934?]

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County Borough of Croydon.



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ANNUAL REPORT

OF THE

**MEDICAL OFFICER OF HEALTH**

AND

**SCHOOL MEDICAL OFFICER**

*For the Year 1933*

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OSCAR M. HOLDEN, M.D., D.P.H.

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CROYDON:

Printed by the Croydon Times Ltd., 104, High Street.

**PUBLIC HEALTH COMMITTEE.**

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NOVEMBER, 1932—1933.

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THE WORSHIPFUL THE MAYOR (Alderman W. Peet, J.P.)

Alderman H. J. MORLAND, M.A., J.P. (Chairman).

Councillor Mrs. ROBERTS (Vice-Chairman).

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Councillor George LEWIN.

Councillor W. H. PARRY.

Councillor Major F. W. REES, L.R.I.B.A.

Councillor H. REGAN.

Councillor Mrs. SQUIRE.

For purposes of Maternity and Child Welfare—  
Mesdames HICKS, HORN, LEECH, LEWIS, and  
SOUTHWELL.

**COUNTY BOROUGH OF CROYDON**

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**ANNUAL REPORT**

OF THE

**MEDICAL OFFICER OF HEALTH**

AND

**SCHOOL MEDICAL OFFICER**For the Year 1933.

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*To the Chairman and Members of the Public Health Committee.*

LADIES AND GENTLEMEN,

I have the honour to present herewith my Sixth Annual Report, being the thirty-fourth of the series, on the health of Croydon. The general arrangement follows that of the last report.

The contents have been compiled in compliance with Circular 1346 of the Ministry of Health, dated 2nd October, 1933, and the report is an ordinary, not a survey report.

**VITAL STATISTICS.**

The Birth Rate showed a further decrease and reached the lowest figure yet recorded, whilst the Death Rate showed a slight rise over 1932. It remained, however, considerably below that for the whole of England and Wales. The steadily diminishing birth-rate is leading to a gradual rise in the average age of the population, and in consequence any further reduction in the death-rate is unlikely. A small rise in the death-rate is a natural corollary and has no practical bearing on the state of health of the town.

It is satisfactory to record a further diminution in the infant mortality rate, the figure for 1933 being the lowest yet recorded. This rate is usually taken as being the truest reflection of the general healthiness of a district, and Croydon has one of the lowest infantile mortality rates among the large towns. In view of the town's changing character from being largely residential to industrialisation, the continued reduction in the loss of infant life is gratifying.

The common infectious diseases showed an increase in incidence, but their mortality remained as low as in 1932. Infectious diseases exhibit more or less cyclical waves of incidence, and so far as Scarlet Fever and Diphtheria are concerned there seem to be definite indications of a commencement of a wave of higher incidence. Measles exhibits a two-yearly cycle, and in 1933 the peak of the wave occurred during the first half of the year. Influenza was not troublesome.

The report, being divided into sections, presents the statistical details of each phase of the work under the appropriate heading. Additional information has been incorporated dealing with the extensions contemplated and already commenced at Mayday Hospital. The prominent place taken by Slum Clearance in the public eye has warranted a statement of the Council's proposals with respect to the five-years programme which was required to be submitted to the Minister of Health in September. When considering this programme it should be remembered that, with certain of the areas which have not as yet been the subject of my representation, the figures are only approximate. Additionally, it may be found necessary to include areas not already included, or, on the other hand, it may be found more expeditious to deal with certain areas, or parts of areas, in a different manner to that suggested. The great problem at the present is concerned rather with the re-housing of displaced tenants, than with the representation of Slum Areas or individual unfit houses. It is unpractical to bring forward clearance proposals until adequate provision has been made for re-housing persons displaced. Another of the

difficulties experienced has been with overcrowding in large houses which are divided into tenements. This is becoming more prevalent, and it is not possible to do anything effective under present housing legislation.

A section has been devoted to the Obstetric Service conducted by Officers of the Council. This scheme is one of the most comprehensive in operation and fulfils practically all the fundamental requirements of an adequate maternity service, as formulated in the final report of the Departmental Committee of the Ministry of Health on Maternal Mortality. Its influence on maternal mortality and morbidity in Croydon will depend upon the use made of its facilities by that section of the population for whom it is intended.

The figures given, and the scope of the sections detailed indicate to what an extent the Public Health Service has become an integral part of the civic economy. There are few aspects in the life of citizens which are not, in some way or other, concerned in its activities. As the density of population increases it becomes more than ever imperative to maintain a high level of sanitation and of efficiency if the present position of the Public Health is to be maintained. Lack of interest in, and ignorance of, the duties of health authorities, are the greatest obstacles to further progress and a proper valuation of the value of the services which they maintain. It is better, and in the end more economical, to prevent than to cure. This object must always be kept in mind, and it will be fatal to success if the curative functions, which have been transferred to Health Authorities under the Local Government Act, are allowed to overshadow the original function of prevention.

May I tender my thanks to the Chairman and Members of the Committee, the Chairman and Members of the Mental Deficiency Committee, the Housing Committee, and the various Sub-Committees for the sympathetic consideration they have given to proposals submitted to them and for the interest they have taken in the work of the department.

The staff of the department have carried out their duties in a satisfactory manner, and especially I would like to mention the Deputy Medical Officer of Health, Dr. W. B. Watson, whose continued co-operation at all times has been of great value; the Chief Sanitary Inspector, Mr. R. J. Jackson, and the clerical staff, whose duties are steadily increasing.

I am,

Yours faithfully,

OSCAR M. HOLDEN.

*Medical Officer of Health.*

## CONTENTS.

## A.—PUBLIC HEALTH REPORT.

	PAGE		PAGE
Acts, Adoptive ... ..	54	Laboratory Work ... ..	119, 121
Ambulance Service ... ..	16	Local Acts ... ..	54
Amusement Houses ... ..	72	Local Government Act ... ..	18
Animals, Keeping of ... ..	72	Lodging Houses, Common ... ..	70
Ante-natal Clinic ... ..	171	Massage Clinic ... ..	212, 232
Aerodrome ... ..	235	Maternity Homes ... ..	202
Babies Help Committee ... ..	216	Maternity Homes, Registration ... ..	202
Bacteriological Examination ... ..	121	Mayday Hospital ... ..	19
Bakehouses ... ..	68	Measles ... ..	101
Births ... ..	44	Meat Inspection ... ..	78
Blind Persons ... ..	219	Medical Help Records ... ..	200
Borough Hospital ... ..	108	Meteorology ... ..	43
Bye-laws and Regulations ... ..	55	Mental Deficiency ... ..	221
Cancer ... ..	97	Midwives ... ..	199
Chicken Pox ... ..	102	Midwives Act, Section 14 ... ..	202
Contacts, Tuberculosis ... ..	143	Milk, Provision of ... ..	210
Cowkeepers ... ..	85	Milk, Tuberculous ... ..	87
Croydon Nursing Service ... ..	143	Milkshops ... ..	85
Children Acts ... ..	218	Mortality in Child-birth ... ..	164
Convalescence ... ..	216	Mothers' and Infants' Welfare Asso- ciation ... ..	163
Coombe Cliff Convalescent Hospital	217	Mumps ... ..	103
Crèche ... ..	217	Neo-natal Deaths ... ..	193
Dairies, Cowsheds and Milkshops ... ..	85	Notification of Births Acts ... ..	163
Deaths ... ..	49, 51	Nuisances ... ..	57
Dental Treatment—M. & C.W. ... ..	213	Nursing Arrangements ... ..	143
Diphtheria ... ..	101	"    Homes ... ..	202
Disinfection ... ..	73	Observation Nursery ... ..	211
Dispensary, Tuberculosis ... ..	124	Obstetrical Unit ... ..	166
Dried Milk ... ..	210	Occupation Centre (Grange Wood)	226
Drainage and Sewage ... ..	12	Offensive Trades ... ..	71
Enteric Fever ... ..	116	Ophthalmia Neonatorum ... ..	182
Expectant Mothers ... ..	171	Orthopaedic Department ... ..	228
Factories & Workshops Acts ... ..	67	Overcrowding ... ..	66
Fertilisers & Feeding Stuffs Act ... ..	73	Poisons & Pharmacy Act ... ..	73
Foods, Inspection of ... ..	82	Poor Law Relief ... ..	16
Food & Drugs Acts, Sale of ... ..	92	Population ... ..	53
Foster-Mothers ... ..	218	Post-natal Clinic ... ..	187
Foster-Children ... ..	218	Public Laboratory ... ..	121
Gynaecological Clinic ... ..	187	Puerperal Sepsis and Pyrexia	116, 165
Health Visitors, Work of ... ..	209	Rag Flock Acts ... ..	72
Home Nursing ... ..	143	Rats & Mice (Destruction) Act ... ..	74
Homework ... ..	68	Rent Restriction Acts ... ..	62
Hospitals ... ..	13	Rivers and Streams ... ..	12
Hospital, St. Mary's (Maternity) ... ..	189	Sanatorium, Cheam ... ..	155
Houses Let in Lodgings ... ..	71	Sanatoria, Treatment in ... ..	139
Housing ... ..	65	Sanitary Administration ... ..	54
Housing Act, 1930 ... ..	62	Sanitary Certificates... ..	61
Illegitimacy ... ..	9	Sanitary Inspectors, Work of ... ..	55
Infant Welfare Clinics, Municipal	163, 203	Scarlet Fever ... ..	100
"    "    "    Voluntary	163, 203	Schools ... ..	73
Infant Mortality ... ..	193	St. Christopher's Special School ... ..	224
Infectious Diseases ... ..	100, 116	Shop Hours Acts ... ..	69



	PAGE		PAGE
Slaughterhouses ... ..	78	Unmarried Mothers ... ..	190, 217
Social Conditions ... ..	11	Ultra-Violet Light ... ..	232
Smoke Observations ... ..	72		
Sputum, Examination ... ..	137	Vaccination ... ..	122
Staff ... ..	7	Venereal Diseases ... ..	157
Still-births ... ..	191	Verminous Persons ... ..	74
St. Mary's Maternity Hospital ...	189	Veterinary Inspection ... ..	85
		Vital Statistics ... ..	9, 44
Tuberculosis—After Care ... ..	146		
"    Contacts ... ..	143	Watercourses ... ..	73
"    Deaths ... ..	128	Water Supply ... ..	11
"    Dental Treatment ... ..	147	Whooping Cough ... ..	101
"    Notifications ... ..	125	Workplaces ... ..	67
"    Home Nursing ... ..	144	Workshops ... ..	68
"    Home Visits ... ..	143		
"    Tables ... ..	147	X-ray Examination ... ..	124, 138
"    Pneumothorax ... ..	124, 155		
"    Institutional Treatment ...	139		

## B.—SCHOOL MEDICAL REPORT.

	PAGE		PAGE
Accommodation ... ..	241	Juvenile Employment ... ..	28
Adenoids ... ..	229, 263	Lungs, Diseases of ... ..	248
Blind Children ... ..	284	Malnutrition ... ..	244
Cleansing of Children ... ..	244	Massage Clinic ... ..	265
Clinics ... ..	237, 262	Meals, Provision of ... ..	286
Clothing and Footgear ... ..	244	Mentally Defective Children ...	285
Committee ... ..	236	Milk, etc., Provision of ... ..	286
Cost ... ..	240	Minor Ailments ... ..	262
Crippling Defects ... ..	265		
		Open-air Classes ... ..	284
Deaths ... ..	256	Orthopaedic Work ... ..	265
Deaf Children ... ..	284	Orthodontic Service ... ..	276
Defective Children ... ..	285		
Deformities ... ..	250	Physical Training ... ..	287
Dental Disease ... ..	251	Physically Defective Children ...	285
Dental Treatment ... ..	266		
Domestic Subjects ... ..	290	Remedial Exercises ... ..	265
		Rheumatism clinic ... ..	280
Ear Clinic ... ..	277	Schick Test ... ..	259
Ear Disease ... ..	250	School Camps ... ..	285
Epileptic Children ... ..	284	Schools, Special ... ..	285
Exclusions ... ..	257	Secondary Schools ... ..	290
Eye Clinic ... ..	265	Skin Affections ... ..	250
Eye Disease ... ..	250	Speech... ..	250
		Staff ... ..	236
Following up ... ..	261	Statistical Tables ... ..	293
		Surveys, Uncleanliness ... ..	244
Health Visitors, Work of ... ..	261		
Heights and Weights ... ..	246	Tonsils, Enlarged ... ..	229, 263
		Treatment ... ..	262
Infectious Diseases ... ..	256	Tuberculosis ... ..	248
Inspection Clinic ... ..	264		
Inspections, Routine ... ..	242	Uncleanliness ... ..	244
Inspections, Special ... ..	242	Vision Defective ... ..	251

## STAFF OF THE HEALTH DEPARTMENT.

The staff of the Public Health Department on the 31st December, 1933, was as follows:—

### Medical Staff.—

#### (a) *Whole-time* :—

- Oscar M. Holden, M.D., D.P.H., Medical Officer of Health, School Medical Officer, and Medical Officer under the Mental Deficiency Acts, etc.
- Wm. B. Watson, L.R.C.P., L.R.C.S., D.P.H., Deputy Medical Officer of Health, Deputy School Medical Officer and Medical Officer under the Mental Deficiency Acts.
- J. C. McMillan, M.B., Ch.B., B.A.O., B.Sc., D.P.H., Assistant Medical Officer of Health for Tuberculosis.
- A. L. Gunn, M.D., F.R.C.S., B.Sc., M.C.O.G., Assistant Medical Officer of Health for Obstetrics.
- B. Anthony Dormer, M.B., B.S., D.P.H., B.Hy., Assistant Medical Officer of Health and Assistant School Medical Officer.
- Olive B. Falk, M.B., B.S., Assistant Medical Officer, Maternity and Child Welfare, and School Medical Officer.
- Iris A. Jenkin-Lloyd, M.R.C.S., L.R.C.P., D.P.H., Assistant Medical Officer, Maternity and Child Welfare, and School Medical Officer.
- J. Todesco, M.D., M.R.C.S., L.R.C.P., D.P.H., Resident Medical Superintendent, Borough (Fever) Hospital.
- R. C. Poyser, M.R.C.S., L.R.C.P., Resident Medical Superintendent, Croydon Borough Sanatorium.
- H. W. Southgate, M.B., B.S., B.Sc., Pathologist.

#### (b) *Part-time* :—

- J. R. Draper, B.A., M.B., Medical Inspector of Aliens, Assistant M.O. M.C.W. and S.M.S.
- Mary McDougall, M.B., C.M., Assistant Medical Officer, Maternity and Child Welfare.
- L. Ruth Dimond, M.B., Ch.B., Assistant Medical Officer, Maternity and Child Welfare.
- J. S. Bookless, B.A., M.B., F.R.C.S.—Ophthalmic Surgeon (School Medical Service).
- Rota of 4 local medical practitioners for surgical treatment of tonsils and adenoids.

### Dental Staff.—

- Senior Dental Surgeon: J. F. Pilbeam, L.D.S.
- Assistant Dental Surgeons: J. K. R. Bryce, L.D.S., K. C. B. Webster, L.D.S.

### Inspectors.—

- R. J. Jackson, M.R.S.I., A.M.I.S.E., M.S.I.A., Chief Sanitary Inspector.
- F. F. Fulker, A.R.S.I., A.I.S.E., M.S.I.A., Deputy Chief Inspector.
- 14 District Sanitary Inspectors.
- In addition, there are 4 disinfectors, 1 rat-catcher, and 5 assistants to the Sanitary Inspectors.

### Health Visiting Staff.—

- 19 District Health Visitors; 2 Special Visitors; 1 Tuberculosis Nurse; 1 Clinic Nurse; 1 Almoner and 3 Dental Attendants.
- Also 2 whole-time Masseuses and Remedial Gymnasts.

### Clerical Staff.—

- Twenty-four full-time clerks.

### Veterinary Inspector (Part-time).—

- Peter R. A. Thrall, O.B.E., M.R.C.V.S.

### Analyst (Part-time).—

- Edward Hinks, B.Sc., F.I.C., F.C.S.

**Transferred Officers under Local Government Act, 1929.—****MAYDAY HOSPITAL—**

Arnold Gilray, M.B., Ch.B. (N.Z.), Medical Superintendent.  
 John Joseph Walsh, M.B., Ch.B., F.R.C.S. (Eng.), Assistant Medical Superintendent.  
 Edmund Trafford Clifton, M.R.C.S., L.R.C.P., Assistant Medical Officer.  
 Allan Ernest Treweek, M.R.C.S., L.R.C.P., L.D.S., Assistant Medical Officer.

**District Medical Officers.—**

William Vaudrey Braddon, M.B., Ch.B., L.S.A.  
 Ernest Philip Chennells, M.B., M.R.C.S., L.R.C.P.  
 Thomas Archibald Dukes, M.B., B.Sc., M.R.C.S., L.R.C.P.  
 Henry Fleming Hamilton, M.B., Ch.B., F.R.C.S.  
 Charles Aloysius McGuire, M.B., Ch.B.  
 Alan Pride, M.D.  
 Stewart Septimus Simmons, M.R.C.S., L.R.C.P.  
 Austin Stafford, L.R.C.P.I. & L.M., L.R.C.S.I. & L.M.

**Public Vaccinators.—**

William Vaudrey Braddon, M.B., Ch.B., L.S.A.  
 Patrick Francis O'Hagan, L.R.C.P., L.R.C.S.  
 Walter Hugh Montgomery Smith, M.R.C.S., L.R.C.P.  
 Harold Trafford, M.R.C.S., L.R.C.P.  
 Sydney Duke Turner, M.D., D.P.H.  
 Gilbert Charrington Wellish, M.B., Ch.M., F.R.C.S.

**Vaccination Officer.—**

Gerald H. Huggins, Cert. R.S.I.

**Mayday Hospital, Croydon Borough Hospital, Croydon Borough Sanatorium, Sick Nursery, Coombe Cliff Convalescent Home and 6, Morland Road.**

**Nursing and Domestic Staffs.**

*SUMMARY OF VITAL STATISTICS FOR 1933.*

Area 12,617 acres.

Population (Census 1931), 233,115. Population (estimated middle of 1933), 239,950.

Number of Inhabited Houses (1931 Census), 56,429.

Rateable Value (1st April, 1933), £2,070,619.

Product of a Penny Rate (1932-3), £8,064.

Rate in the £ (1932-33), 9/10.

Gross expenditure on Health Services (administered by Medical Officer of Health)	£110,631	18	5
Income on Health Services (including transfers)	£7,486	19	11
Net expenditure on Health Services	£103,144	18	6

Expressed as a Penny Rate, 12.79 pence in the pound.

Live Births—	M.	F.	Total.
Legitimate	1,556	1,459	3,015
Illegitimate	74	58	132

Birth-rate per 1,000 of the estimated resident population, 13.2.

Still Births—92. Rate per 1,000 total (live and still) births, 28.3.

Deaths—2,721. Death-rate per 1,000 of the estimated resident population, 11.3.

Deaths from diseases and accidents of pregnancy and child-birth: From sepsis, 7; other causes, 5.

Death-rate of Infants under one year of age:—

All infants per 1,000 live births	47
Legitimate infants per 1,000 legitimate live births	43
Illegitimate infants per 1,000 illegitimate live births	144

Deaths from Measles (all ages) ... ..	13
"  "  Whooping Cough (all ages) ...	3
"  "  Diarrhœa (under 2 years of age) ...	19
"  "  Diphtheria (all ages) ... ..	17
	Per 1,000 of the population.
Deaths from diseases of Cardiac and Circulatory System (including Cerebral Hæmorrhage) ... ..	3.69
"  "  diseases of the Respiratory System (including Tuberculosis) ...	2.28
"  "  diseases of Renal System ... ..	0.51
"  "  diseases of Digestive System ...	0.68
"  "  Suicide and Accidents ... ..	0.42
"  "  Old Age ... ..	0.41

## SECTION I.

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### SOCIAL CONDITIONS, HOSPITAL ACCOMMODATION AND VITAL STATISTICS.

Croydon is largely a dormitory town, but is becoming increasingly industrialised. The chief industries are iron foundries (bell casting), engineering and building. The London Terminal Aerodrome is within the County Borough boundary.

Croydon is an aggregation of townships, each of which shows its own characteristics. Bad housing conditions are met with in various districts, and there are individual streets in nearly every ward in which the standard of house property is low, when compared with the average type of residential streets. Various miscellaneous industrial undertakings are scattered throughout the Borough. This is a matter of some moment. There is at present no power to prohibit factories being placed anywhere in areas which are not scheduled under Town Planning. As Town Planning deals with immediate and future development, it does not affect old-established areas, and the proximity of factories to residential areas has caused complaints from time to time.

The population is growing rapidly. The increase of population revealed in the 1931 census was 21.8% on that for 1921. This is the highest rate of increase for any town having a population of over 100,000 at the 1921 census.

The 1931 Census gave a total enumerated population of 233,115. The estimated population middle of 1933 is 239,950. In the 1931 Census returns 5.59 was the average number of rooms per dwelling and 1.16 the average number of families in each dwelling, which gives 1.27 rooms per person. In 1931, 3.35% of the population was living more than two persons per room, a decrease of nearly 1% on the 1921 Census. A special report was made by the Medical Officer of Health during the year, upon the Census figures, in which comparisons with other towns of similar size were set forth. From these figures Croydon is by no means badly situated.

#### **Water.**

The water supply is drawn from deep wells in the chalk. These wells are situated at Surrey Street, Stroud Green, Waddon, Selhurst, and Addington. A portion of the northern side of the Borough obtains water supplies from the Metropolitan Water Board.

I am indebted to the Borough Engineer, Mr. G. F. Carter, for the following information:—

A constant supply of water was maintained throughout the year, and has been satisfactory both in quality and quantity. Monthly analyses of the water were made at the five pumping stations, and in many cases at more frequent intervals. The Corporation's wells are all in the chalk, and a sample analysis is as follows:—

Clear and bright.  
 Hardness—Temporary, 16.8 deg.  
 „ Permanent, 3.7 deg.  
 No B. Coli in 100 c.c.  
 No Streptococci.  
 No acid in 100 c.c.

The supply during the year was from the

Corporation's Wells	... ..	2,247,541,827
Metropolitan Water Board in Bulk		568,568,000
		<hr/>
		2,816,109,827 gallons.
		<hr/>

The low rainfall caused some anxiety but at no time during the year was it necessary to curtail the supply.

This works out, on an average population basis of 247,000 (1933), at a consumption of 31.23 gallons per diem per head.

#### **Rivers and Streams.**

There are only small streams or ditches. These have been kept in a good state.

#### **Drainage and Sewage.**

Extensions of the sewerage system have been made to keep pace with the growth of the Borough, in particular in the new area of Addington which was added to the Borough in 1928. Over £36,000 has been expended in main sewers and surface water drains and a further loan for £23,580 for additional sewage work in the Borough is being sought. At the sewage disposal works at Beddington, three Activated Sludge plants are in operation dealing with 3½ to 5 million gallons per day.

### **Closet Accommodation.**

All the buildings are provided with water closets connected to a proper sewerage system excepting a few cases of houses and bungalows situate in remote positions, in which the sewage goes to cesspits. Owing to topographical reasons, certain large houses in Upper Norwood have their own sewage purification plants.

### **Scavenging.**

Complete and up-to-date methods are in operation for scavenging and refuse disposal. There are two Refuse Destructors, and at one of these a new Salvage Plant has been constructed for separating paper, tins, etc., before passing to the furnaces.

### **Hospitals Provided or Subsidised by the Local Authority.**

#### **(1) Tuberculosis.**

*Borough Sanatorium, North Cheam.*

93 beds are provided for the treatment of early, intermediate and advanced cases.

#### **(2) Maternity.**

*St. Mary's Hospital, St. James' Road, Croydon.*

This Hospital is conducted under the auspices of the Croydon Mothers' and Infants' Welfare Association. Thirty-two beds (with cots attached) are provided. The Hospital receives an annual subsidy of £4,500 from the Council as 30 of the beds are reserved for cases referred by them. The Local Authority collects patients' fees which amounted approximately to £1,600.

#### **(3) Children.**

*(a) Observation Nursery, Lodge Road.*

These premises occupy the upper storey of the buildings erected by the Council. Accommodation is provided for 14 sick children under 5 years of age, and a ward for the reception of two nursing mothers.

*(b) 6, Morland Road.*

This is a small house for low grade mentally defective boys. It contains 20 beds which have been fully occupied throughout the year.



(c) *Coombe Cliff Convalescent Hospital.*

This Home was opened in November, 1930, for the reception of infants and children convalescing from acute illnesses. It is available for any child resident in the Borough and approved as suitable. The majority of the cases are referred from the Public Health and School Medical Departments, but cases have also been admitted from Mayday and other Hospitals and at the request of private medical practitioners.

(4) **Fever.**

*The Borough Hospital, Purley Way.*

The nominal accommodation is for 220 patients. Cases of all the notifiable infectious diseases are admitted other than tuberculosis.

(5) **Small Pox.**

The Croydon and District Joint Small Pox Hospital Board's Hospital is now used as the Borough Sanatorium. Arrangements have been made with the Surrey County Council to receive into their Clandon Hospital cases of small pox arising in Croydon.

**Other Hospitals.**

*Croydon General Hospital.*

A voluntary institution at which the Council holds four clinics conducted mainly by members of the staff of the Hospital. These are: (a) Tonsils and Adenoids Clinic; (b) Orthopædic Clinic; (c) Venereal Diseases Clinic; (d) Ultra-Violet Ray Clinic. The Council's Pathological and Bacteriological Laboratory is also within the curtilage of the Hospital; the buildings being provided by the Hospital; the staff, equipment, etc., by the Corporation.

I am indebted to the Secretary, Mr. G. H. Dams, for the following information:—

<i>Male Beds</i>	...	36 surgical
		19 medical
<i>Female Beds</i>	...	34 surgical
		19 medical
<i>Children's Beds</i>		22

A total of 130 beds.

The number of in-patients treated during 1933 was 2,576; the average stay of each in hospital being 16.5 days. The number of out-patient attendances, including casualties, was 125,754. The bed accommodation remained unchanged, but the work is well in hand for the addition of 65 beds and it is hoped to open these in June, 1934.

#### *Mayday Hospital.*

The institution provides the following accommodation:—

<i>Male Beds</i> ...	Surgical	32
	Medical	64
	Tuberculosis	32
	Mental	32
<i>Female Beds</i> ...	Surgical	32
	Medical	128
	Tuberculosis	32
	Mental	32
<i>Children's Beds</i> ...		60
<i>Maternity Beds</i> ...	22 with 14 cots additionally.	
<b>Total</b> ...		<b>466 beds.</b>

#### *The Purley and District War Memorial Hospital.*

This is situated on the Brighton Road close to the boundary between Croydon and Purley. It is supported entirely by voluntary aid and offers the following provision:—

*Males* (surgical and medical) 10 beds; *Female* (surgical and medical) 20 beds; *Children* 8 beds; *Maternity* 6 beds; together with 6 private wards; a total of 50 beds.

#### *The Norwood and District Cottage Hospital.*

*Males* (surgical and medical) 15 beds; *Female* (surgical and medical) 15 beds. In addition there are two private wards; a total of 32 beds.

#### *Provision for Unmarried Mothers, Illegitimate Infants and Homeless Children.*

Provision is made at Mayday Hospital and at various Children's Homes. Unmarried mothers are admitted to Mayday Hospital; and to St. Mary's Hospital for the first confinement only, as well as to a maternity home at Norwood, established by the Free Church Council. Two other Voluntary Institutions also offer facilities for unmarried mothers, namely, The Mission of

Hope, Birdhurst Lodge, and the Rescue and Preventive Home, 34, Morland Road, Croydon. The Mission of Hope also receives illegitimate children from various districts, as a preliminary to establishing them with foster mothers or adopting parents. The Babies Help Committee of the Croydon Mothers' and Infants' Welfare Association is especially concerned with individual cases of unmarried mothers and their children.

*The National Society for the Prevention of Cruelty to Children.*

This Society, through their Inspector, Mr. Brown, has helped the department in various ways. During the year 21 cases were dealt with. The reasons for reference were: neglect to obtain medical or dental attention, 15; for miscellaneous reasons, 6.

### AMBULANCE FACILITIES

(1) Two Motor Ambulances are provided by the Council for the removal of infectious cases from the Borough and Penge.

(2) For non-infectious, surgical or medical cases—

(a) Three motor ambulances provided by the Council operating from the Chief Fire Station, Park Lane.

(b) Three motor ambulances operating from the Addiscombe Division of the St. John's Ambulance Brigade.

### POOR LAW RELIEF.

No. of residents in Croydon County Borough Area in receipt of outdoor poor relief on the

1st January, 1933	3,891 persons ;	1,442 cases (including able-
1st July, 1933 ...	3,863 ,,	1,431 ,, ,, bodied).
1st January, 1934	4,089 ,,	1,545 ,, ,,

Number of Croydon poor persons relieved in the Mayday Hospital on 1st January, 1934, and in the Queen's Road Homes on the same date—

Mayday Hospital	... 144
Queen's Road Homes	... 425

Expenditure on Out-relief to Croydon cases during the 12 months ended 30th September, 1933:—

Half-year ended 31st March, 1933 ...	£27,558 19 11
Half-year ended 30th Sept., 1933 ...	£26,266 18 7

## QUEEN'S ROAD HOMES.

This is an Institution maintained under the Poor Law Act.

*Beds available for Sick, Maternity and Mental Cases—*

(a) For Men	...	...	50
(b) For Women	...	...	50
			100

Table showing the classification of the accommodation and the number of beds occupied on the 31st December, 1933—

CLASSIFICATION	Number of Wards.	Men.		Women.		Children (under 16 yrs of age)		Total.	
		Pro-	Occu- -vied. pied.	Pro-	Occu- -vied. pied.	Pro-	Occu- -vied. pied.	Pro-	Occu- -vied. pied.
Chronic Sick	4	50	48	50	48			100	96
Infirm ...	11	99	95	115	87			214	182
Other ...		183	124	193	109	71	33	447	266
Total ...		332	267	358	244	71	33	761	544

### IN-PATIENTS.

Total number of admissions (including infants born in hospital): 87.

Total number of deaths: 71.

Total number of discharges (including infants born in hospital): 19.

Duration of stay of patients—

(a) Four weeks or less: 14.

(b) Exceeding four weeks but under thirteen weeks: 11.

(c) Thirteen weeks or more: 65.

Number of beds occupied—

(a) Average during the year: 95.

(b) Highest: 100.

(c) Lowest: 92 (on 9th February, 1933).

*Classification of In-Patients who were discharged from or who died in the Institution during the year ended 31st December, 1933—*

DISEASE GROUPS.	Men and Women.	
	Dis- charged.	Died.
Malignant disease ... ..	—	1

Rheumatism—

Non-articular manifestations of so-called "rheumatism" (muscular rheumatism, fibrositis, lumbago and sciatica) ... ..	—	3
---	---	---

Mental diseases—							
Senile Dementia	...	...	...	...	...	—	1
Senile Decay	...	...	...	...	...	18	52
Disease of the Nervous System and Sense Organs	...	...	...	...	...	—	1
"    "    Respiratory System	...	...	...	...	...	—	3
Other diseases	...	...	...	...	...	1	10
						—	—
					Totals	19	71
						—	—

### THE LOCAL GOVERNMENT ACT, 1929

In Croydon the delegated duties under this Act comprise the carrying out of the duties under the Children's Acts and the Vaccination Acts, for which the Public Health Committee is now responsible. In addition modified arrangements were made in connection with Maternity, Tuberculosis, and Mentally Deficient patients.

The Mayday Hospital was appropriated by the Public Health Committee under Section 137 of the Public Health Act, 1875, on April 1st, 1932.

The cessation of the percentage grants from the Ministry of Health and the substitution of block grants affected the social services far more than any other sphere of the Council's work. As indicated in the various relevant portions of this report, the voluntary agencies carrying out work of public health interest now receive assistance direct from the Council, which was formerly given by the Ministry of Health. The grants were originally fixed for a three year period, and were revised and renewed for a further four years as from April 1st, 1933.

The grants for the last four years have been as follows:—

#### *Croydon Mothers' and Infants'*

##### *Welfare Association—*

	1930/31.	1931/2.	1932/3.	1933/4.
	£	£	£	£
(a) Hostel (net)	... 2,700	3,600	2,350*	4,500
(b) Infant Welfare				
Centres	... 700	700	750	850
(c) Convalescence	... 300	350	400	500
(d) Care-work (Un-married mothers)	100	100	100	150
(e) Home Helps	... 50	75	100	100
	£3,850	£4,825	£3,700	£6,100*

*Other Grants—*

	£	£	£	£
The Retreat, Ross				
Road ...	787	650	650	650
Wilford Road Crèche.	100	100	100	100
Croydon Rescue and Preventive Assoc.	—	100	100	100
“The Shrubberies” ...	—	—	—	230
	<hr/>	<hr/>	<hr/>	<hr/>
	£4,737	£5,675	£4,550	£7,180
	<hr/>	<hr/>	<hr/>	<hr/>

\*Originally fixed at £3,600 and reduction of £1,250 agreed to by Association.  
†Less Hostel Contributions.

**MAYDAY HOSPITAL.**

This Public Assistance Hospital was, as already stated, appropriated by the Public Health Committee on April 1st, 1932, and is now administered as part of the public health services of the Council.

The medical staffing of the Hospital remains the same, viz:— a medical superintendent, 3 other resident medical staff and 7 visiting staff.

The nursing staff consists of Matron; 20 sisters (including 2 X-Ray), 13 trained nurses (including 2 ambulance nurses), 7 assistant nurses, 66 probationer nurses and 6 male attendants.

The Specialist services supplied comprise Ophthalmic, Dental, Radiological, Orthopaedic, Ear, Nose and Throat and Tuberculosis.

Beds available for sick, maternity, and mental cases on 31st December, 1933:—

(a) For Men	...	...	...	...	160
(b) For Women	...	...	...	...	246
(c) For Children (under 16 years of age)					60

**Local Government Act, 1929.**

It is the duty of a local authority under the provisions of the above named Act to see that the reasonable hospital needs of their community are satisfied, though they need not meet the need entirely themselves.

In order to ascertain the position with regard to any future extensions contemplated by the voluntary institutions in the town, a Conference was called between the local authority's representatives and those of the three voluntary hospitals in Croydon. Of the three hospitals only the Croydon General Hospital contemplated extending their accommodation. This extension has now materialised and makes provision for 65 additional beds so that there are at the present time in Croydon in general or cottage hospitals 246 medical and 150 surgical beds for adults, 83 beds for children, and the 65 beds which have not yet actually been put into use at the Croydon General Hospital. The Voluntary Hospitals admit cases from outside the Borough to a very considerable extent; in fact the Purley War Memorial Hospital is to a much greater extent a Purley Hospital than a Croydon hospital although situated on the Croydon side of the boundary between Croydon and Purley. In addition to general medical and surgical and other beds, Mayday Hospital provides 128 beds for cases not ordinarily admitted to a general hospital, but for whom there is no alternative provision in the Borough at the present time, e.g., cases of tuberculosis and mental cases.

The population of Croydon is growing rapidly, averaging an increase of 3,000 to 4,000 persons per annum. At the last census the increase was 22% over the census of 1921. When Mayday Hospital was established in 1885 the population of Croydon was estimated at 88,800 and of the other parishes of the then Croydon Union at 41,200, a population of approximately 130,000. It is now 239,950 for Croydon alone, while the number of beds provided in the hospital remains the same as in 1885, except for the addition of 40 beds for children. On a basis of four hospital beds per 1,000 population the number of general hospital beds in Croydon should be 960; it is at present 479. The proximity of London, with its numerous large Voluntary Hospitals, relieves somewhat a position which would otherwise be perturbing. An aggravation of the need is the present day tendency for more and more people to seek institutional treatment, possibly on account of (a) lack of facilities at home or (b) the rising complexity and expense of medical treatment.

As the administration of the Hospital was delegated to the Public Health Committee on the 1st April, 1932, the Hospital should be in a position to admit any inhabitant of Croydon seeking admission on account of illness, in addition to the public assistance cases which must be admitted. The demand for beds other than

through the Public Assistance Committee will steadily increase. If insufficient beds are available either (a) patients who should properly be treated in hospital must be turned away, or (b) there must be gross overcrowding of the hospital, a circumstance strongly against the best interests of the patients and the proper administration of the Institution. In addition to the steady influx of chronic cases from the Public Assistance Committee through relieving officers there is a decided increase in the number of acute cases admitted on the order of the Medical Officer of Health or the Medical Superintendent. These latter cases now constitute nearly two-thirds of the whole. When the limits of accommodation are reached it is the latter cases that will have to be turned down, as none of the other hospitals in the area can meet the need, working as they are already at their full capacity.

Each of the twelve main wards at Mayday Hospital has on floor area recognised in hospital practice, six beds too many, but the present bed accommodation at Mayday Hospital, namely, 466, is on this overcrowded basis. With excess, over and above the bed accommodation, amounting at times to as many as 100 patients, the already overcrowded conditions are much aggravated.

For a general hospital the number of chronic cases in Mayday Hospital is high. This is owing to the lack of sufficient accommodation in the chronic wards in the Queen's Road Homes. The consequent lessened rate of turn-over ties down the number of beds which could otherwise be used for a succession of cases. The original idea was to build a hospital block for chronic cases at Queen's Road. This proposal was not proceeded with, however, owing to the events of August, 1931, but it was agreed that the Mayday Hospital should be extended in accordance with the original plan, with one extra ward block for acute cases, and that for the present the chronic cases should be retained there.

A summary of the extensions contemplated to the Mayday Hospital is as follows, viz:—

A three storey block, consisting of three wards of twenty beds each and six side wards of one bed each on the women's side. The wards could be used for acute medical and surgical cases, and some of the existing wards be reserved for the chronic sick whom it was originally thought might be transferred to a new block at the Queen's Road Homes. The demand for beds on the female side is much greater than on the male side. At present one of the wards on the male side is occupied by females.



A new Maternity Block—this will be a two storey building to contain 40 beds. This is considered to be an urgent matter as the existing maternity block is inadequate in accommodation and obsolete in arrangement and structural equipment.

The present maternity block will be adapted to form a gynaecological block. By this arrangement the maternity block and the gynaecological block would be contiguous and would form one obstetrical unit. This block, which will contain twenty beds, will free one of the wards now used for gynaecological cases, for general medical or surgical purposes.

A one storey pavilion block for infants and young children, on lines similar to those of the two now existing. This block will be the same size as the existing blocks, namely 20 beds. The three blocks will then form a subsidiary children's hospital of sixty beds. The erection of this block will enable the Observation Nursery in Lodge Road to be discontinued. On account of its small size this institution is costly to maintain. The premises it now occupies could be utilised for the purpose of child welfare and school clinics for which more commodious accommodation is very urgently required.

A new receiving ward block at the Hospital Main entrance in Eridge Road. This block will contain ten single bedded cubicle wards, five for males and five for females, with a doctor's room, nurses duty room, store room and the necessary sanitary arrangements. At present there is no proper receiving block and its provision is of importance, more especially in preventing outbreaks of infectious disease in the Hospital, and for the better allocation of patients to various wards.

The present Receiving Block will be converted into a special departments block and will be enlarged. In any general hospital the provision of modern X-Ray plant for diagnostic and therapeutic purposes; clinical laboratory facilities; orthopædic, dental, ophthalmic, massage, diathermy and remedial departments is essential. The facilities which exist are quite inadequate.

An Observation Block for acute mental cases, of sixteen beds.

Each of the ten existing day rooms will be converted into a four bedded and a one bedded ward with bath room and sink room accommodation, and provision of day room recesses to existing wards will be provided.

Under these extensions there will be available:—

Four blocks of 75 beds each ... ..	300 beds.
One block of 66 beds ... ..	66 „
One maternity block of 40 beds ... ..	40 „
One gynaecological block ... ..	20 „
Conversion of present day rooms ... ..	50 „
	<hr/>
	476
	<hr/>

In addition there would be:—

Three children's blocks of 20 beds each ..	60 beds.
Receiving block ... ..	10 „
Mental observation block ... ..	16 „
	<hr/>
	86
	<hr/>
A total bed accommodation of all kinds of	562 beds.
	<hr/>

This accommodation should be divided:—

*Male beds ... ..	175 beds.
*Female beds ... ..	301 „ including 50 maternity beds.
Children's beds ... ..	60 „

\*Not including Receiving Block and Mental Observation Block.

In addition to the purely medical and surgical aspects, it was found that the whole of the heating arrangements throughout the hospital were inefficient and this has necessitated the installation of a complete modern hot water heating system, together with a central boiler and engine house.

The order in which the extensions and alterations at Mayday Hospital will be carried out is as follows:—

Firstly, the Boiler House together with the whole of the new heating system. This is already well in hand. Before the heating system, however, is completed the new ward block will be begun.

The new ward block must be completed and ready for occupation before any alterations to the heating in the other ward blocks can be commenced, otherwise the hospital's work would be seriously disorganised. In a hospital which is working above its full capacity it is obvious to close down a block containing 75 beds is impracticable. On the other hand, the alterations to the old ward blocks and the installation of new heating in those blocks cannot be carried out if they are occupied.

The erection of the new maternity block at the same time is necessary as the present maternity block is quite inadequate. In addition, the erection of this block would release the present maternity block for use for other purposes, and the excess of patients disturbed owing to the alterations to the old blocks and who cannot be accommodated in the new block would be accommodated in the present **maternity block**.

Following on this primary group the new nurses' home will be commenced as the previous group is nearing completion and before the erection of the second group. No new staff will be immediately necessary during the erection of the new ward block, nor for some time after that block is completed, as the total accommodation of the hospital will not be materially increased. When the maternity block is finished the accommodation of the hospital will be increased by 40 beds. This will necessitate a small preliminary increase in staff.

The second group of buildings to be erected, or to which structural alterations will be made, are the old ward blocks, together with the conversion of the day rooms into side wards, and the building out of day room recesses, the children's block, the new admission block, the waiting rooms for patients' relatives and the adaptation of the present admission and X-Ray block as a special departments block. By the time that these latter works are nearing completion there should be available the full contemplated extra accommodation in the new nurses' home.

Owing to the existing X-ray plant showing serious defects and the probability that it requires extensive and costly repairs, it has been decided to bring forward the erection of the new X-ray department and installation of new plant, so that this will be put in hand shortly.

TABLE I.

Table shewing the Classification of the accommodation for the sick and the number of beds occupied on the 31st December, 1933—

## ALL CASES.

Classification of Wards. (1)	Number of Wards. (2)	BEDS							
		MEN		WOMEN		CHILDREN (under 16 years of age)		Total	
		Pro-vided. (3)	Occu- -pied (4)	Pro-vided (5)	Occu- -pied (6)	Pro-vided (7)	Occu- -pied (8)	Pro-vided (9)	Occu- -pied (10)
1. Medical ... ..	2	32	31	32	34	...	...	64	65
2. Surgical ... ..	2	32	27	32	34	...	...	64	61
3. Chronic sick ... ..	3	32	37	64	73	...	...	96	110
4. Children ... ..	2*	...	...	...	...	70	63	70	63
5. Venereal ... ..	...	...	1	...	2	...	...	...	3
6. Tuberculosis ... ..	2	32	21	32	13	...	...	64	34
7. Isolation ... ..	...	...	...	...	...	...	...	...	...
8. Maternity ... ..	1	...	...	22	14	...	13†	22	27
9. Mental ... ..	2	32	38	32	31	...	...	64	69
10. Gynaecological ... ..	1	...	...	32	20	...	..	32	20
<b>TOTAL</b>	<b>15</b>	<b>160</b>	<b>155</b>	<b>246</b>	<b>221</b>	<b>70</b>	<b>76</b>	<b>476</b>	<b>452</b>

\* Plus 4 day-rooms attached to adult wards. † Infants.

TABLE II

Statistics relating to the Year ended 31st December, 1933.

## IN-PATIENTS.

	CROYDON.
1.—Total number of admissions (including infants born in hospital) ... ..	3899
2.—Number of women confined in hospital ... ..	424
3.—Number of live births ... ..	395
4.—Number of still births ... ..	29
5.—Number of deaths among the newly born ( <i>i.e.</i> , under 4 weeks of age) ... ..	15
6.—Total number of deaths of children under one year ... ..	45
7.—Total number of maternal deaths ... ..	7
8.—Total number of deaths ... ..	672
9.—Number of patients discharged ... ..	3224
10.—Duration of stay of patients included in 8 and 9 above :	
(a) Four weeks or less ... ..	2396
(b) Exceeding 4 weeks, but under 13 weeks ... ..	1169
(c) Exceeding 13 weeks ... ..	331
11.—Number of beds occupied :	
(a) Average during the year ... ..	450
(b) Highest (on 24-1-33) ... ..	527
(c) Lowest (on 15-9-33) ... ..	385
12.—Number of surgical operations under general anaesthetic (excluding dental operations) ... ..	677
13.—Number of abdominal sections ... ..	299

OUT-PATIENTS : Nil.

TABLE III.

*Classification of In-Patients who were Discharged from or who Died in the Institution during the year ended 31st December, 1933.*

DISEASE GROUPS.	Children (under 16 years of age).		Men and Women.	
	Discharged	Died	Discharged	Died
A.—Acute infectious disease..	25	—	19	—
B.—Influenza ... ..	7	1	33	7
C.—Tuberculosis: Pulmonary	2	3	59	46
Non-pulmonary ... ..	4	3	9	2
D.—Malignant disease ...	—	—	34	79
E.—Rheumatism—				
(1) Acute rheumatism (rheumatic fever) together with sub-acute rheumatism and chorea ...	13	1	25	11
(2) Non-articular manifestations of so-called "rheumatism" (muscular rheumatism, fibrositis, lumbago and sciatica) ...	—	—	17	1
(3) Chronic arthritis ...	—	—	36	—
F.—Venereal disease ...	2	1	29	1
G.—Puerperal pyrexia ...	—	—	20	—
H.—Puerperal fever—				
(a) Women confined in the hospital ...	—	—	1	1
(b) Admitted from outside	—	—	—	—
I.—Other diseases and accidents connected with pregnancy and childbirth	—	—	188	5
J.—Mental diseases—				
(a) Senile dementia ...	8	—	263	15
(b) Other ... ..	—	—	—	—
K.—Senile decay ... ..	—	—	46	40
L.—Accidental injury and violence ... ..	39	1	147	17
In respect of cases not included above :				
M.—Disease of the Nervous System & Sense Organs.	29	—	69	8
N. ,, Respiratory ,, ...	89	18	130	106
O. ,, Circulatory ,, ...	7	6	130	176
P. ,, Digestive ,, ...	137	16	309	32
Q. ,, Genito-urinary ...	10	3	173	30
R.—Disease of the Skin ...	54	4	68	10
S.—Other diseases ...	38	1	86	6
T.—Mothers and infants discharged from Maternity Wards and not included in above figures—				
Mothers ... ..	—	—	446	6
Infants ... ..	380	15	—	—
U.—Any persons not falling under any of the above headings ... ..	43	—	—	—
<b>Totals ...</b>	<b>887</b>	<b>73</b>	<b>2337</b>	<b>599</b>

The following details, kindly supplied by the Medical Superintendent, Dr. A. Gilray, refer to patients treated during the year.

TABLE IV.

Diagnoses in Cases Treated	MEDICAL.				SURGICAL.				TOTAL
	Cured	Re-lieved	Unre-lieved	Died	Cured	Re-lieved	Unre-lieved	Died	
A. ALIMENTARY SYSTEM.									
Colic ... ..	1	1	—	—	—	—	—	—	2
Stomatitis ... ..	4	—	—	—	—	—	—	—	4
Enteritis ... ..	34	5	1	9	—	—	—	—	49
Hernia ... ..	—	—	—	—	20	7	2	4	33
Appendicitis ... ..	—	—	—	—	146	7	3	7	163
Peritonitis ... ..	—	—	—	—	3	—	—	3	6
Constipation... ..	14	5	—	—	—	—	—	—	19
Fistula in ano ... ..	—	—	—	—	3	—	—	—	3
Haemorrhoids ... ..	—	—	—	—	5	5	—	—	10
Gastric and Duodenal Ulcer	8	11	5	8	6	—	1	1	40
Gastritis ... ..	7	4	1	—	—	—	—	—	12
Intussusception ... ..	—	—	—	—	2	—	—	—	2
Dyspepsia ... ..	4	—	—	—	—	—	—	—	4
Cholecystitis... ..	—	—	—	—	6	13	1	1	21
Intestinal Obstruction ... ..	—	—	—	—	1	—	—	3	4
Pyorrhoea ... ..	—	—	—	—	7	4	—	—	11
Colitis ... ..	2	1	—	1	—	—	—	—	4
Jaundice ... ..	6	1	—	2	—	—	—	—	9
Abdominal Pain (? Cause) ... ..	—	1	—	—	—	—	—	—	1
Hare Lip and Cleft Palate	—	—	—	—	—	—	1	—	1
Diverticulitis ... ..	—	—	—	—	—	—	—	1	1
Pancreatic cyst ... ..	—	—	—	—	1	—	—	—	1
Abdominal Tumour ... ..	—	—	—	—	—	1	—	—	1
Colelithiasis ... ..	—	—	—	—	—	1	—	1	2
Prolapse of Rectum ... ..	—	—	—	—	1	1	—	—	2
Ischio-rectal abscess ... ..	—	—	—	—	1	—	—	—	1
Cirrhosis of Liver ... ..	—	1	—	1	—	—	—	—	2

Diagnoses in Cases Treated	MEDICAL.				SURGICAL.				TOTAL
	<i>Cured</i>	<i>Re-lieved</i>	<i>Unre-lieved</i>	<i>Died</i>	<i>Cured</i>	<i>Re-lieved</i>	<i>Unre-lieved</i>	<i>Died</i>	
Coeliac Disease ... ..	1	—	—	—	—	—	—	—	1
Pyloric Stenosis ... ..	—	—	—	—	1	—	—	1	2
Collapse ... ..	3	1	—	—	—	—	—	—	4
Diabetes ... ..	3	11	2	7	—	—	—	—	23
General Debility ... ..	2	9	—	2	—	—	—	—	13
Malnutrition... ..	3	—	—	—	—	—	—	—	3
Marasmus ... ..	3	1	—	2	—	—	—	—	6
Rectal Polypus ... ..	—	—	—	—	1	—	—	—	1
TOTALS GROUP A ...	95	52	9	32	204	39	8	22	461
G. BONES AND JOINTS.									
Rheumatoid Arthritis ...	5	17	5	—	—	—	—	—	27
Osteo Arthritis ... ..	—	4	2	—	—	—	—	—	6
Infective Arthritis ... ..	—	—	—	—	2	3	1	—	6
Villous Arthritis ... ..	—	1	—	—	—	—	—	—	1
Acute Rheumatism ... ..	21	11	1	12	—	—	—	—	45
Muscular Rheumatism ...	—	2	—	—	—	—	—	—	2
Osteo Myelitis ... ..	—	—	—	—	7	2	1	—	10
Bursitis ... ..	—	—	—	—	6	—	—	—	6
Sciatica ... ..	2	1	—	—	—	—	—	—	3
Synovitis ... ..	3	—	—	—	—	—	—	—	3
Pleurodynia ... ..	2	—	—	—	—	—	—	—	2
Tenosynovitis ... ..	—	—	—	—	1	—	—	—	1
Talipes Varus ... ..	—	—	—	—	—	—	1	—	1
Spina Bifida ... ..	—	—	—	—	—	—	—	1	1
Lumbago ... ..	—	1	—	—	—	—	—	—	1
Pes Planus ... ..	—	—	—	—	—	1	—	—	1
Myositis ... ..	2	—	—	—	—	—	—	—	2
Fibrositis ... ..	—	—	1	—	—	—	—	—	1
Bilateral Hallux Valgus ...	—	—	—	—	—	1	—	—	1
Hammer Toes ... ..	—	—	—	—	—	1	—	—	1
TOTALS GROUP G ...	35	37	9	12	16	8	3	1	121

Diagnoses in Cases Treated	MEDICAL.				SURGICAL.				TOTAL
	<i>Cured</i>	<i>Re-lieved</i>	<i>Unre-lieved</i>	<i>Died</i>	<i>Cured</i>	<i>Re-lieved</i>	<i>Unre-lieved</i>	<i>Died</i>	
C. CIRCULATORY SYSTEM.									
Myocarditis ... ..	4	15	6	27	—	—	—	—	52
Arterio-Sclerosis ... ..	2	10	4	52	—	—	—	—	68
Mitral Disease ... ..	1	4	—	1	—	—	—	—	6
Mitral Stenosis ... ..	2	14	—	1	—	—	—	—	17
Myocardial Degeneration ...	—	13	1	49	—	—	—	—	63
Auricular Fibrillation ...	—	4	—	4	—	—	—	—	8
Rupture of Aorta ... ..	—	—	—	1	—	—	—	—	1
Cerebral Haemorrhage ...	—	8	—	14	—	—	—	—	22
Mitral Regurgitation ...	—	—	—	2	—	—	—	—	2
Angina Pectoris ... ..	1	3	—	1	—	—	—	—	5
Mitral Incompetence ...	—	1	—	3	—	—	—	—	4
Phlebitis ... ..	6	2	1	3	—	—	—	—	12
Valvular Disease ... ..	—	6	—	1	—	—	—	—	7
Disseminated Sclerosis ...	—	1	—	4	—	—	—	—	5
Cerebral thrombosis ...	—	2	—	7	—	—	—	—	9
Aortic Regurgitation ...	—	2	—	—	—	—	—	—	2
Varicose Veins ... ..	2	—	—	—	—	—	—	—	2
Endocarditis ... ..	1	3	1	2	—	—	—	—	7
Pericardial Effusion ...	—	1	—	—	—	—	—	—	1
Heart Block ... ..	—	1	—	—	—	—	—	—	1
Congenital Heart Disease ...	—	1	1	1	—	—	—	—	3
Stokes Adams Disease ...	—	1	—	—	—	—	—	—	1
Cardiospasm... ..	1	—	—	—	—	—	—	—	1
Aneurysm ... ..	—	—	1	1	—	—	—	—	2
Hodgkins Disease ... ..	—	—	—	1	—	—	—	—	1
Hyperpiesia ... ..	—	3	—	—	—	—	—	—	3
Hypertension ... ..	—	1	—	—	—	—	—	—	1
Anaemia ... ..	4	6	—	2	—	—	—	—	12
Septicaemia ... ..	2	—	—	5	—	—	—	—	7
TOTALS GROUP C. ...	26	102	15	182	—	—	—	—	325



Diagnoses in Cases Treated	MEDICAL.				SURGICAL.				TOTAL
	Cured	Re-lieved	Unre-lieved	Died	Cured	Re-lieved	Unre-lieved	Died	
M. CANCER.									
<i>Carcinoma of—</i>									
Axilla ... ..	—	—	—	—	—	—	—	1	1
Bladder ... ..	—	—	—	—	—	—	2	3	5
Brain ... ..	—	—	—	—	—	—	—	1	1
Breast ... ..	—	—	—	—	—	1	3	13	17
Bowel ... ..	—	—	—	—	6	1	2	13	22
Cervix ... ..	—	—	—	—	—	1	1	2	4
Glands ... ..	—	—	—	—	—	—	—	1	1
Larynx ... ..	—	—	—	—	—	—	—	1	1
Lip ... ..	—	—	—	—	—	—	—	1	1
Liver ... ..	—	—	—	—	—	—	—	2	2
Lung ... ..	—	—	—	—	—	—	—	1	1
Kidney ... ..	—	—	—	—	—	—	—	1	1
Mouth ... ..	—	—	—	—	—	—	—	2	2
Neck ... ..	—	—	—	—	—	—	1	—	1
Oesophagus ... ..	—	—	—	—	—	—	—	1	1
Ovaries ... ..	—	—	—	—	1	—	1	1	3
Pancreas ... ..	—	—	—	—	—	—	—	1	1
Pelvis ... ..	—	—	—	—	—	—	1	2	3
Prostate ... ..	—	—	—	—	—	—	—	4	4
Sternum ... ..	—	—	—	—	—	1	—	—	1
Stomach ... ..	—	—	—	—	1	1	5	20	27
Supra-renal ... ..	—	—	—	—	—	—	—	1	1
Tongue ... ..	—	—	—	—	—	—	1	2	3
Spine ... ..	—	—	—	—	—	—	1	2	3
Skin ... ..	—	—	—	—	—	—	—	1	1
Testis ... ..	—	—	—	—	—	—	—	1	1
Uterus ... ..	—	—	—	—	1	3	2	6	12
Vulvae ... ..	—	—	—	—	—	—	—	1	1
Epithelioma of Skin ... ..	—	—	—	—	—	—	1	—	1
Rodent Ulcer of Face	—	—	—	—	—	—	—	1	1
TOTALS GROUP M. ...	—	—	—	—	9	8	21	86	124

Diagnoses in Cases Treated	MEDICAL.				SURGICAL.				TOTAL
	Cured	Re-lieved	Unre-lieved	Died	Cured	Re-lieved	Unre-lieved	Died	
F. GYNAECOLOGICAL.									
Ovarian Abscess ... ..	—	—	—	—	—	1	—	—	1
Ovarian Cyst ... ..	—	—	—	—	7	—	—	—	7
Acute Salpingitis ... ..	—	—	—	—	6	3	—	—	9
Chronic Salpingo-Oophoritis	—	—	—	—	7	2	—	—	9
Pyosalpinx ... ..	—	—	—	—	1	—	—	—	1
Tuberculous Salpingitis ...	—	—	—	—	—	1	—	—	1
Tubo-Ovarian Cyst ... ..	—	—	—	—	1	—	—	—	1
Chronic Metritis ... ..	—	—	—	—	9	—	—	—	9
Chronic Endometritis ... ..	—	—	—	—	4	—	—	—	4
Chronic Cervicitis ... ..	—	—	—	—	14	2	—	—	16
Erosion of the Cervix ... ..	—	—	—	—	1	—	—	—	1
Subinvolution ... ..	—	—	—	—	4	1	—	—	5
Deficient Pelvic Floor and Prolapse ... ..	—	—	—	1	15	2	—	—	18
Uterine Fibromyoma ... ..	—	—	—	—	3	—	—	—	3
Cervical Polypus ... ..	—	—	—	—	1	—	—	—	1
Acute Vaginitis ... ..	—	—	—	—	—	2	—	—	2
Vaginal Cyst ... ..	—	—	—	—	1	—	—	—	1
Rigid Hymen ... ..	—	—	—	—	3	—	—	—	3
Urethral Caruncle ... ..	—	—	—	—	—	2	—	—	2
Bartholin's Cyst ... ..	—	—	—	—	1	—	—	—	1
Bartholin's Abscess... ..	—	—	—	—	1	—	—	—	1
Amenorrhoea ... ..	—	—	—	—	—	—	1	—	1
Dysmenorrhoea ... ..	—	—	—	—	—	1	—	—	1
Metrorrhagia ... ..	—	—	—	—	—	1	—	—	1
Menopausal neurosis ... ..	—	1	—	—	—	—	—	—	1
Sterility ... ..	—	—	—	—	1	3	—	—	4
Hyperemesis Gravidarum ...	5	—	—	1	—	—	—	—	6
Retroverted Gravid Uterus	—	—	—	—	1	2	—	—	3
Abortion ... ..	—	—	—	—	112	2	—	—	114



Diagnoses in Cases Treated	MEDICAL.				SURGICAL.				TOTAL
	Cured	Re-lieved	Unre-lieved	Died	Cured	Re-lieved	Unre-lieved	Died	
Asthma ... ..	1	11	2	6	—	—	—	—	20
Pleurisy ... ..	10	2	1	3	—	—	—	—	16
Pneumonia ... ..	100	13	3	73	—	—	—	—	189
Tracheitis ... ..	—	1	—	—	—	—	—	—	1
TOTALS GROUP B. ...	176	94	13	132	—	—	—	—	415
E. GENITO-URINARY SYSTEM.									
Cystitis ... ..	—	—	—	—	6	4	1	1	12
Pyelonephritis ... ..	—	—	—	8	—	—	—	—	8
Pyonephrosis ... ..	—	—	—	—	1	1	—	—	2
Uraemia ... ..	—	—	—	9	—	—	—	—	9
Nephritis ... ..	11	9	3	12	—	—	—	—	35
Retention of Urine ...	—	—	—	—	1	6	1	3	11
Renal Calculi ... ..	—	—	—	—	1	2	1	—	4
Hydro-nephrosis ... ..	—	1	—	—	—	—	—	—	1
Pyelitis ... ..	6	6	2	—	—	—	—	—	14
Renal Glycosuria ... ..	—	1	—	—	—	—	—	—	1
Epididymo-orchitis ...	—	—	—	—	1	2	—	—	3
Ureteric Calculi ... ..	—	—	—	—	1	3	—	—	4
Urethral Stricture ... ..	—	—	—	—	2	4	—	1	7
Haematuria ... ..	—	—	2	—	—	1	—	—	3
Enlarged Prostate ... ..	—	—	—	—	2	16	—	10	28
Sepsis of Penis ... ..	—	—	—	—	—	1	—	—	1
Mobile Kidney ... ..	—	—	—	1	—	—	—	—	1
Oxaluria ... ..	1	—	—	—	—	—	—	—	1
Perinephric Abscess ...	—	—	—	—	1	—	—	—	1
TOTALS GROUP E. ...	18	17	7	30	16	40	3	15	146

Diagnoses in Cases Treated	MEDICAL.				SURGICAL.				TOTAL
	Cured	Re-lieved	Unre-lieved	Died	Cured	Re-lieved	Unre-lieved	Died	
<b>H. SKIN.</b>									
Cellulitis ... ..	—	—	—	—	8	1	—	—	9
Boils ... ..	8	—	—	—	—	—	—	—	8
Scabies ... ..	7	—	—	—	—	—	—	—	7
Impetigo ... ..	33	2	—	—	—	—	—	—	35
Pediculi Capitis ... ..	2	—	—	—	—	—	—	—	2
Dermatitis ... ..	27	6	2	3	—	—	—	—	38
Scalds and Burns ... ..	—	—	—	—	8	5	—	1	14
Ulcers ... ..	—	—	—	—	14	7	2	3	26
Eczema ... ..	5	2	1	—	—	—	—	—	8
Abscesses ... ..	—	—	—	—	11	2	—	—	13
Seborrhoea ... ..	—	2	—	—	—	—	—	—	2
Herpes Labialis ... ..	1	—	—	—	—	—	—	—	1
Urticaria ... ..	1	—	—	—	—	—	—	—	1
Carbuncle ... ..	—	—	—	—	4	—	—	—	4
Ringworm ... ..	4	—	—	—	—	—	—	—	4
Whitlow ... ..	—	—	—	—	1	—	—	—	1
Herpes Zoster ... ..	1	—	—	—	—	—	—	—	1
Cheiopompholyx ... ..	1	—	—	—	—	—	—	—	1
Alopaecia ... ..	1	—	—	—	—	—	—	—	1
Insect Bite ... ..	1	—	—	—	—	—	—	—	1
<b>TOTALS GROUP H.</b> ...	<b>92</b>	<b>12</b>	<b>3</b>	<b>3</b>	<b>46</b>	<b>15</b>	<b>2</b>	<b>4</b>	<b>177</b>
<b>Q. VENEREAL DISEASE.</b>									
Gonorrhoea ... ..	—	—	—	—	1	6	—	—	7
Syphilis ... ..	—	—	—	—	1	22	3	3	29
<b>TOTALS GROUP Q.</b> ...	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>28</b>	<b>3</b>	<b>3</b>	<b>36</b>

Diagnoses in Cases Treated	MEDICAL.				SURGICAL.				TOTAL
	Cured	Re-lieved	Unre-lieved	Died	Cured	Re-lieved	Unre-lieved	Died	
<b>K. INFECTIOUS AND CONTAGIOUS DISEASES.</b>									
Influenza ... ..	34	5	—	8	—	—	—	—	47
Measles ... ..	—	—	2	—	—	—	—	—	2
Whooping Cough ... ..	—	1	4	—	—	—	—	—	5
Meningococcal Meningitis ...	—	—	1	1	—	—	—	—	2
Cerebro-spinal Fever ...	—	—	1	—	—	—	—	—	1
Erysipelas ... ..	1	2	9	2	—	—	—	—	14
Mumps ... ..	—	—	1	—	—	—	—	—	1
Diphtheria ... ..	—	—	6	—	—	—	—	—	6
Scarlet Fever ... ..	—	—	7	—	—	—	—	—	7
Typhoid ... ..	—	1	1	—	—	—	—	—	2
Dysentery ... ..	—	7	1	—	—	—	—	—	8
Chicken Pox... ..	1	—	1	—	—	—	—	—	2
Infantile Paralysis ...	—	—	1	—	—	—	—	—	1
TOTALS GROUP K. ...	36	16	35	11	—	—	—	—	98
<b>D. CENTRAL NERVOUS SYSTEM.</b>									
Hemiplegia ... ..	—	10	—	10	—	—	—	—	20
Hysteria ... ..	5	5	—	—	—	—	—	—	10
Neuritis ... ..	1	2	—	1	—	—	—	—	4
Teething ... ..	2	—	—	—	—	—	—	—	2
Neurosis ... ..	1	3	—	—	—	—	—	—	4
Neurasthenia ... ..	1	12	3	—	—	—	—	—	16
Paralysis Agitans ... ..	—	—	3	2	—	—	—	—	5
Chorea ... ..	3	1	—	—	—	—	—	—	4
Paraplegia ... ..	—	—	1	—	—	—	—	—	1
Meningitis ... ..	—	—	—	3	—	—	—	—	3
Tabes Dorsalis ... ..	—	—	—	1	—	—	—	—	1
Infantile Diplegia ... ..	—	1	—	—	—	—	—	—	1

Diagnoses in Cases Treated	MEDICAL.				SURGICAL.				TOTAL
	Cured	Re-lieved	Unre-lieved	Died	Cured	Re-lieved	Unre-lieved	Died	
Syringomyelia ... ..	—	1	—	—	—	—	—	—	1
Post Encephalitic Parkinsonian ... ..	—	1	—	—	—	—	—	—	1
Neuralgia ... ..	—	1	—	—	—	—	—	—	1
Convulsions ... ..	1	1	—	—	—	—	—	—	2
Juvenile Tabes ... ..	—	2	—	—	—	—	—	—	2
<b>TOTALS GROUP D. ...</b>	<b>14</b>	<b>40</b>	<b>7</b>	<b>17</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>78</b>
<b>J. EAR, NOSE AND THROAT.</b>									
Mastoiditis ... ..	—	—	—	—	14	1	1	—	16
Meatitis ... ..	—	—	—	—	—	1	—	—	1
Meatal Boil ... ..	—	—	—	—	1	—	—	—	1
Menier's Disease ... ..	—	2	—	—	—	—	—	—	2
Otitis Media ... ..	—	—	—	—	25	6	—	1	32
Sinusitis ... ..	—	—	—	—	1	—	—	—	1
Acute Rhinitis ... ..	—	—	—	1	—	—	—	—	1
Epistaxis ... ..	2	—	—	—	—	—	—	—	2
Enlarged Tonsils ... ..	—	—	—	—	51	6	—	—	57
Tonsillitis ... ..	15	6	—	—	—	—	—	—	21
Quinsy ... ..	—	—	—	—	3	—	—	—	3
<b>TOTALS GROUP D. ...</b>	<b>17</b>	<b>8</b>	<b>—</b>	<b>1</b>	<b>95</b>	<b>14</b>	<b>1</b>	<b>1</b>	<b>137</b>
<b>L. GENERAL.</b>									
Adenitis ... ..	13	1	2	—	18	—	—	1	35
Adenomatous Goitre ... ..	—	—	—	—	1	—	—	—	1
Exophthalmic Goitre ... ..	—	1	2	1	—	—	—	—	4
Hyperthyroidism ... ..	—	1	—	—	—	—	—	—	1
Lymphangitis ... ..	1	—	1	—	—	—	—	—	2

Diagnoses in Cases Treated	MEDICAL.				SURGICAL.				TOTAL
	Cured	Re-lieved	Unre-lieved	Died	Cured	Re-lieved	Unre-lieved	Died	
Lymphatic Leukaemia ...	—	—	1	—	—	—	—	—	1
Simple Tumour ...	—	—	—	—	1	—	—	—	1
Ganglion ...	—	—	—	—	1	—	—	—	1
Contusion ...	—	—	—	—	24	—	—	—	24
Dislocations ...	—	—	—	—	—	2	—	—	2
Fractured Limbs ...	—	—	—	—	46	21	5	2	74
Fractured Skull ...	—	—	—	—	17	4	—	3	24
Fractured Jaw ...	—	—	—	—	—	1	—	—	1
Foreign Body Swallowed ...	—	—	—	—	5	1	—	—	6
Concussion ...	—	—	—	—	56	7	3	—	66
Abrasions ...	—	—	—	—	13	2	—	—	15
Sprains ...	—	—	—	—	3	1	—	—	4
Minor Injuries ...	—	—	—	—	4	1	—	—	5
Shock ...	—	—	—	—	1	—	—	—	1
Lacerations ...	—	—	—	—	19	6	2	—	27
Poisoning ...	6	1	—	3	—	—	—	—	10
TOTALS GROUP L. ...	20	4	6	4	209	46	10	6	305
N. TUBERCULOSIS.									
Lungs ...	2	51	10	44	—	—	—	—	107
Bowel ...	—	—	—	—	—	2	—	—	2
Meninges ...	—	—	—	5	—	—	—	—	5
Spine ...	—	—	—	—	1	7	—	—	8
Epididymo-orchitis ...	—	—	—	—	1	—	—	—	1
Peritonitis ...	—	—	—	—	—	1	1	1	3
Pleurisy ...	—	1	—	—	—	—	—	—	1
Kidneys ...	—	—	—	—	—	1	—	—	1
Bladder ...	—	—	—	—	—	1	—	—	1
Salpingitis ...	—	—	—	—	—	2	—	—	2
Glands ...	—	1	—	—	—	—	—	—	1
Arthritis ...	—	—	—	—	1	—	—	—	1
TOTALS GROUP N. ...	2	53	10	49	3	14	1	1	133



Diagnoses in Cases Treated	MEDICAL.				SURGICAL.				TOTAL	
	Cured	Re-lieved	Unre-lieved	Died	Cured	Re-lieved	Unre-lieved	Died		
<b>P. MENTAL.</b>										
Alcoholism ... ..	—	4	—	—	—	—	—	—	—	4
Epilepsy ... ..	—	13	12	2	—	—	—	—	—	27
Petit Mal ... ..	1	—	—	—	—	—	—	—	—	1
Mental Deficients ... ..	—	3	9	1	—	—	—	—	—	13
Loss of Memory ... ..	—	1	—	—	—	—	—	—	—	1
Cerebral Tumour ... ..	—	—	2	—	—	—	—	—	—	2
Certified and sent to Mental Hospital ... ..	—	—	142	1	—	—	—	—	—	143
Cases not Certified ... ..	3	81	20	4	—	—	—	—	—	108
Senile Decay ... ..	—	32	13	60	—	—	—	—	—	105
<b>TOTALS GROUP P.</b> ...	<b>4</b>	<b>134</b>	<b>198</b>	<b>68</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>404</b>
<b>O. MATERNITY ... ..</b>										
Births ... ..	—	—	—	—	448	—	—	—	2	450
Births ... ..	—	—	—	—	385	—	—	—	23	408
<b>TOTAL GROUP O.</b> ...	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>833</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>25</b>	<b>858</b>
<b>TOTALS OF ALL CASES TREATED</b> ...	<b>559</b>	<b>581</b>	<b>315</b>	<b>546</b>	<b>1639</b>	<b>239</b>	<b>53</b>	<b>168</b>	<b>168</b>	<b>4100</b>

The total death rate of the Hospital during the year was 174 per 1,000 i.e. one patient out of every 5.8 patients admitted died.

## OPERATIONS PERFORMED IN THE MAYDAY HOSPITAL DURING THE YEAR.

## OBSTETRICAL.

	<i>Operation Performed.</i>	<i>Number.</i>
Forceps delivery	... ..	21
Breech extraction	... ..	4
Internal version	... ..	6
Embryotomy	... ..	3
Manual removal of placenta	... ..	4
Vaginal packing	... ..	2
Anaesthesia for examination, external version, etc.	... ..	5
Abortion, evacuation of uterus	... ..	23
Abortion, evacuation of uterus and glycerine drainage	... ..	47
Induction of abortion	... ..	2
Abdominal hysterotomy and sterilisation	... ..	3
For ectopic gestation	... ..	3
Caesarean section	... ..	4
Caesarean hysterectomy	... ..	2
Surgical induction of labour	... ..	11
Drainage of puerperal peritonitis	... ..	1

## GYNAECOLOGICAL.

Excision of urethral caruncle	... ..	2
Excision of Bartholins cyst	... ..	2
Excision of vaginal cyst	... ..	1
Plastic hymenectomy	... ..	3
Perineorrhaphy	... ..	6
Anterior and posterior colporrhaphy	... ..	2
Anterior and posterior colporrhaphy and amputation of cervix	... ..	7
Amputation of cervix	... ..	8
Trachelorrhaphy	... ..	1
Removal of cervical polypus and exploration of uterus	... ..	1
Removal of tissue for section	... ..	6
Dilatation of cervix	... ..	3
Dilatation of curettage	... ..	2
Glycerine drainage for subinvolution	... ..	3
Exploration of uterus	... ..	2
Ovariectomy	... ..	7
Laparotomy for ovarian carcinoma	... ..	2
Myomectomy	... ..	2
Wertheims hysterectomy	... ..	2
Total hysterectomy	... ..	13
Sub-total hysterectomy	... ..	8
Sterilisation	... ..	3
Salpingectomy	... ..	1
Salpingography	... ..	1
Laparotomy for tuberculous salpingitis	... ..	1
Salpingo-oophorectomy	... ..	7
Examination under anaesthesia, etc.	... ..	15

## EAR, NOSE AND THROAT.

Removal of nasal polyp	... ..	1
Removal of tonsils	... ..	51
Removal of adenoids	... ..	34
Mastoidectomy	... ..	15
Exposure of mastoid antrum	... ..	1
Nasal examination	... ..	1
Sub mucous resection of nasal septum	... ..	2
Myringotomy	... ..	1
Paracentesis of ear	... ..	1

*Operation Performed.* *Number.*

**EYE.**

Iridectomy ... ..	2
Evisceration of eye ... ..	1

**BONES AND JOINTS.**

Drainage for acute purulent arthritis ... ..	1
Drainage for sinus beneath knee ... ..	1
Reduction of fractured limbs ... ..	3
Application of caliper ... ..	1
Application of plasters ... ..	14
Resetting of fractures ... ..	2
Transfixion pins through tibia ... ..	6
Transfixion pins through os calcis ... ..	2
Arthrodesis ... ..	2
For Osteo myelitis ... ..	2
Wiring of fractured patella ... ..	1
Manipulation of limbs ... ..	6
Amputation of limbs ... ..	2
Bone graft ... ..	1
Sequestrectomy ... ..	4

**ABDOMINAL.***Operation Performed.**Number.*

Appendicectomy ... ..	150
Drainage of appendix abscess ... ..	13
Drainage for general peritonitis ... ..	3
Gastro-jejunoscopy ... ..	5
Ruptured rectus abdominis ... ..	1
Paracentesis abdominis ... ..	4
Cholecystectomy ... ..	12
Intussusception ... ..	1
Sigmoidoscopy ... ..	2
Laparotomy ... ..	14
Suture of perforated duodenal ulcer ... ..	6
Suture of perforated gastric ulcer ... ..	1
Colostomy ... ..	4
Caecostomy ... ..	2
Ligature of haemorrhoids ... ..	2
Excision of haemorrhoids ... ..	3
Rectal examination ... ..	1
Pancreatic cyst ... ..	1
Closure of faecal fistula ... ..	1
Resection of colon ... ..	2
Repair of ventral hernia ... ..	1
Repair of anal fissure ... ..	1
Radical cure of strangulated hernia ... ..	6
Herniotomy ... ..	13
Removal of rectal polyp ... ..	1
Partial gastrectomy ... ..	1
Enterostomy ... ..	2

**GENITO-URINARY.**

	<i>Operation Performed.</i>	<i>Number.</i>
Drainage for pyonephrosis	... ..	1
Pyelo-nephrolithotomy	... ..	1
Nephrectomy	... ..	2
Cystoscopy	... ..	44
Pyelography	... ..	7
Cystostomy	... ..	3
Dilatation of urethral stricture	... ..	14
Supra pubic puncture	... ..	1
Supra pubic prostatectomy	... ..	3
Circumcision	... ..	14
Insertion of catheter	... ..	2
Tapping of hydrocele	... ..	3
Orchidectomy	... ..	2

**MISCELLANEOUS.**

Injection of anti-tetanic serum	... ..	1
For cellulitis of arm	... ..	1
Paracentesis thoracis	... ..	7
Incisions (abscesses, whitlows, etc.)	... ..	116
Removal of toe nail	... ..	1
Removal of F.B.	... ..	2
Excision of rodent ulcer	... ..	1
Excision of ganglion, cysts, glands, etc.	... ..	13
Plastic operation on toes	... ..	1
Sutures	... ..	11
A.P. induction	... ..	6
A.P. refills	... ..	12
Lumbar puncture	... ..	18
Exploration and aspiration of chest	... ..	50
Cleansing of burns	... ..	1
Tannic acid treatment for scalds	... ..	1
Rib resections	... ..	16
Skin graft	... ..	2
Partial thyroidectomy	... ..	1
Lung puncture	... ..	1
Blood transfusion	... ..	2
Number of patients who had teeth extracted	... ..	263

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 1,287
 

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## RADIOLOGICAL DEPARTMENT.

### NUMBER OF X-RAY FILMS TAKEN DURING THE YEAR 1933.

Spine	...	...	...	...	...	...	...	...	103
Long bones	...	...	...	...	...	...	...	...	273
Pelvis	...	...	...	...	...	...	...	...	8
Skulls	...	...	...	...	...	...	...	...	156
Chests (including lungs)	...	...	...	...	...	...	...	...	294
Barium Meals	...	...	...	...	...	...	...	...	172
Barium Enemata	...	...	...	...	...	...	...	...	23
Urinary Tracts	...	...	...	...	...	...	...	...	148
Gall-bladder	...	...	...	...	...	...	...	...	44
Teeth	...	...	...	...	...	...	...	...	21
Abdominal (? F. B.)	...	...	...	...	...	...	...	...	13
Maternity Cases	...	...	...	...	...	...	...	...	146
TOTAL									1,401

## MASSAGE DEPARTMENT.

### NUMBER OF TREATMENTS GIVEN DURING THE YEAR 1933.

Massage	...	...	...	...	...	...	...	...	4,913
Exercises	...	...	...	...	...	...	...	...	3,720
Radiant Heat	...	...	...	...	...	...	...	...	1,256
Electrical Treatments	...	...	...	...	...	...	...	...	922
Diathermy	...	...	...	...	...	...	...	...	644
Ultra-Violet-Light	...	...	...	...	...	...	...	...	427
TOTAL									11,882
No. of patients treated by the Eye Specialist									101

TABLE V.  
METEOROLOGICAL RECORD.

Months.	Air Temperature in Degrees Fahrenheit.			Rainfall Total.		Bright Sunshine.	
	Means of		Mean of A. & B.			Hrs. per day.	
	A. Max.	B. Min.		Daily	Mean		
January ... ..	°F. 41.3	°F. 33.7	°F. 37.5	in. 1.79	mm. 45	hrs. 1.52	18
February ... ..	45.3	36.9	41.1	2.63	67	2.11	21
March ... ..	55.0	38.3	46.7	3.09	79	6.04	51
April ... ..	58.1	41.1	49.6	0.67	17	5.72	41
May ... ..	63.9	47.0	55.5	2.80	71	5.21	34
June ... ..	70.8	51.8	61.3	1.73	44	8.53	52
July ... ..	74.7	56.9	65.8	1.80	46	7.71	48
August ... ..	76.0	57.0	66.5	0.78	20	8.14	56
September ... ..	69.0	52.8	60.9	2.52	64	6.33	50
October ... ..	57.8	46.1	51.9	1.89	48	3.55	33
November ... ..	47.3	39.0	43.1	1.08	27	1.21	14
December ... ..	37.7	30.5	34.1	0.40	10	0.90	11
Means and Totals for Year	58.1	44.3	51.2	21.16	537	4.76	39

The observations were made at the Aerodrome, which is 217 feet above mean sea level.

## VITAL STATISTICS.

*Marriages.*—The number of marriages solemnised was 2,244, compared with 2,134 in 1932; 2,212 in 1931; 2,112 in 1930; 1,982 in 1929; and 1,874 in 1928. The marriage rate was 9 per 1,000 of the population; 993 were solemnised in Established Churches, 242 in other places of worship, 1,007 in the Register Office; one ceremony was performed under Jewish ritual, and one under ritual of the Society of Friends.

*Births.*—The births registered were 3,015 legitimate and 132 illegitimate. The birth-rate consequently was 13.2. For England and Wales the rate was 14.4, and in the 118 Great Towns it was 14.4.

The illegitimate births in Croydon were 4.2% of the total, compared with 4.9% in 1932, 4.8% in 1931, 5.1% in 1930, 4.8% in 1929, and 4.4% in 1928.

The total male births numbered 1,630, the female 1,517 being a proportion of 1,074 males to 1,000 females.

The subjoined table gives the vital statistics for the Wards in the Town. It is seen that the Wards with the highest birth-rates were Waddon (16.5), Whitehorse Manor (16.2) and Thornton Heath (15.2).

Those with the lowest were: Norbury and East (7.8), South (8.9), Upper Norwood (9.7), and Central (9.8).

*Deaths.*—The deaths numbered 2,721, compared with 2,556 in 1932. For 1933 the death-rate was 11.3. For 1932 it was 10.8. The death-rate for England and Wales was 12.3, and for the 118 Great Towns 12.2. For London the death-rate was 12.2. The male death-rate was 11.6, the female 11.1 for the Borough.

There were 166 inquests held by Coroners in respect of Croydon residents during 1933, and 132 findings by Coroners after post-mortem examination without inquest.

Wards with the highest death-rates were: South (14.2), South Norwood (13.7), Whitehorse Manor and Waddon (13.3), and Addiscombe (13.1); lowest in Norbury (8.3), Bensham Manor (9.2), East (9.5), and Thornton Heath (9.8).

*Natural Increase.*—The excess of births over deaths was 426, or 1.8 per 1,000 of the population. A comparison with previous years is given below.

Immigration is playing a larger part than natural increase in the rapid increase of population. In the nature of things this is a difficult factor to estimate with any accuracy and in time leads to deductions based on total population being only approximate. In such a rapidly growing district, a five-yearly census is most necessary if statistics are to be reasonably accurate.



TABLE VI.

WARDS.	Estimated Population.	Births.	Deaths.	Birth Rate.	Death Rate.	Deaths under 1 year per 1,000 Births.	Death Rate from Six Zymotic Diseases (excluding Diarrhoea)	Death Rate from Diarrhoea.	Death Rate from Bronchitis and Pneumonia.	Death Rate from Pulmonary Tuberculosis.	Death Rate from Non-Pulmonary Tuberculosis.	Death Rate from Heart and Circulation Diseases.	Death Rate from Nervous Diseases.	Death Rate from Cancer.	Estimated persons per acre (1933).	Natural Increase or Decrease of Population.
Upper Norwood	22380	216	239	9.7	10.7	57	0.13	0.04	1.56	0.53	0.09	3.75	0.45	1.60	20.1	-23
Norbury ...	15993	125	133	7.8	8.3	30	0.06	...	0.94	0.56	0.06	2.44	0.31	1.38	29.2	-8
West Thornton	20066	259	209	12.9	10.4	33	0.15	0.10	1.15	0.69	0.05	3.64	0.35	1.20	42.2	50
Bensham Manor	16084	201	148	12.5	9.2	19	0.19	0.19	0.99	0.49	—	3.29	0.25	1.18	49.8	53
Thornton Heath	15615	235	153	15.0	9.8	44	0.06	0.13	1.41	1.03	0.06	2.56	0.26	1.47	50.5	82
South Norwood	17717	249	242	14.1	13.7	42	0.24	0.06	1.86	0.56	0.06	5.13	0.67	1.52	28.8	7
Woodside ...	15654	185	175	11.8	11.3	50	0.38	0.06	1.50	0.88	0.13	3.64	0.44	1.47	36.7	10
East ...	18035	140	171	7.8	9.5	46	0.11	0.11	0.67	0.33	—	3.27	0.61	1.77	9.6	-31
Addiscombe ...	14458	189	189	13.1	13.1	35	0.14	...	1.80	1.04	0.07	4.56	0.62	1.87	48.8	...
Whitehorse Manor	16754	272	223	16.2	13.3	62	0.24	0.29	1.79	1.24	0.06	3.46	0.77	1.55	62.9	49
Broad Green ...	15370	213	179	13.9	11.6	57	0.13	0.13	1.50	0.72	0.07	4.03	0.65	1.36	68.9	34
Central ...	12209	120	122	9.8	10.0	15	0.08	0.08	1.23	0.33	0.08	3.44	0.41	1.56	33.3	-2
Waddon ...	21839	361	290	16.5	13.3	63	0.28	0.18	2.11	0.64	0.23	3.80	0.64	1.46	22.2	71
South ...	14901	132	211	8.9	14.2	91	0.13	0.13	1.08	0.55	0.20	4.63	0.85	2.50	12.5	-79
Addington ...	2875	56	26	19.5	9.0	18	0.08	0.35	1.39	...	...	2.09	1.08	1.74	0.80	80
The Borough ...	239950	3147*	2721*	13.2	11.3	47	0.17	0.11	1.42	0.68	0.09	3.69	0.62	1.56	...	...

\* These are the corrected figures.

### Comments on Table VI.

Corrections have been made for deaths of infants in institutions. A death under such circumstances has been allocated to the Ward in which the parents reside.

Infantile mortality was highest in South (91), Waddon (63), Whitehorse Manor (62), and Upper Norwood and Broad Green (57); lowest in Central (15), Bensham Manor (19).

The Infantile Mortality rate was above the average for the whole Borough in the following Wards: Upper Norwood, Woodside, Whitehorse Manor, Broad Green, Waddon and South.

Birth-rates were highest in Waddon, Whitehorse Manor, and Thornton Heath; lowest in Norbury, East, South, Upper Norwood and Central.

The general death-rate was highest in South, South Norwood, Whitehorse Manor, Waddon and Addiscombe; lowest in Norbury, Bensham Manor, East, and Thornton Heath.

The death-rate was above the average for the whole Borough in the following Wards: South Norwood, Addiscombe, Whitehorse Manor, Broad Green, Waddon and South.

Most persons to the acre in Broad Green, Whitehorse Manor, Thornton Heath, and Bensham Manor; least in East, South, and Upper Norwood.

Addington, owing to its relatively scanty population, has not been included for purposes of comparison.

The birth-rate is the lowest yet recorded.

The death-rate from Zymotic diseases was highest in Woodside, Waddon, South Norwood, and Whitehorse Manor; from Diarrhoea in Whitehorse Manor, Bensham Manor, and Waddon; from Bronchitis and Pneumonia in Waddon, South Norwood, Addiscombe, and Whitehorse Manor; from Pulmonary Tuberculosis in Whitehorse Manor, Addiscombe and Thornton Heath; from Non-Pulmonary Tuberculosis in Waddon and South; from Diseases of the Heart and Circulation in South Norwood, South, and Addiscombe; from Nervous Diseases in South and Whitehorse Manor; from Cancer in South and Addiscombe.

TABLE VII.

Year.	Birth Rate.		Death Rate.		Nat. Increase 1000 population.		Natural Increase
1891	2832	27.4	1553	15.0	103,300	12.4	1279
1901	3578	26.6	1748	12.9	134,665	13.6	1830
1911	3748	22.0	2069	12.1	170,451	9.8	1679
1921	3631	18.9	2054	10.7	191,500	8.2	1577
1928	3374	15.7	2351	10.9	214,800	4.8	1023
1929	3399	15.3	2792	12.5	222,300	2.7	607
1930	3514	15.8	2337	10.5	222,300	5.7	1177
1931	3400	14.6	2674	11.4	233,800	3.1	726
1932	3311	14.0	2556	10.8	237,186	3.2	755
1933	3147	13.2	2721	11.3	239,950	1.8	426

TABLE VIII.

Year.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REG. IN THE DISTRICT.		TRANSFER-ABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT.			
		Uncorrected Number.	Nett.		Number.	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number.	Rate.					Number.	Rate per 1,000 Nett Births.	Number.	Rate
1921	191,500	3713	3631	18.9	2115	11.0	283	222	269	74	2054	10.7
1922	192,800	3616	3505	18.2	2469	12.8	337	255	224	64	2387	12.4
1923	193,400	3445	3370	17.4	2082	12.5	284	209	176	52	2007	10.4
1924	196,000	3536	3456	17.6	2384	12.1	317	213	195	56	2280	11.6
1925	199,300	3521	3406	17.1	2262	11.4	336	243	187	55	2169	10.9
1926	205,900	3569	3477	16.9	2340	11.4	318	247	211	61	2269	11.0
1927	211,700	3329	3174	15.0	2542	12.1	384	294	176	55	2452	11.6
1928	214,800	3501	3374	15.7	2439	11.4	389	301	178	53	2354	11.0
1929	222,300	3553	3399	15.3	2954	13.3	463	301	221	65	2792	12.5
1930	222,300	3703	3514	15.8	2407	10.8	364	294	171	48	2337	10.5
1931	233,800	3601	3400	14.5	2719	11.6	331	300	196	58	2674	11.4
1932	237,186	3607	3311	14.0	2500	10.5	242	298	161	49	2556	10.8
1933	239,950	3391	3147	13.2	2612	10.9	257	366	148	47	2721	11.3

TABLE IX.  
DEATHS REGISTERED DURING THE CALENDER YEAR 1933.  
CLASSIFIED BY AGE AND CAUSE.

CAUSES OF DEATH		Net Deaths at the subjoined ages of "Residents," whether occurring within or without the District.											Total Deaths whether of "Res- idents" or "non- Residents" in Institutions in the District.
		All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 35 years.	35 and under 45 years.	45 and under 55 years.	55 and under 65 years.	65 years and upwards.	
I		2	3	4	5	6	7	8	9	10	11	12	13
All Causes	Certified ...	2719	148	19	29	65	90	114	167	294	416	1377	1519
	Uncertified ...	2	...	...	...	...	...	...	...	...	...	2	...
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles...	...	13	3	5	3	2	...	...	...	...	...	...	8
Scarlet Fever...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	3	1	...	2	...	...	...	...	...	...	...	1
Diphtheria and Croup	...	17	...	...	7	7	2	...	...	1	...	...	17
Influenza (excl. Influenzal Pneu'nia)	...	58	...	...	...	...	3	...	10	5	10	30	8
Erysipelas	...	8	1	...	...	...	...	1	...	3	...	3	7
Tetanus	...	1	...	...	...	1	...	...	...	...	...	...	1
Pulmonary Tuberculosis	...	162	...	...	...	1	34	45	37	28	13	4	91
Tuberculous Meningitis	...	10	2	...	3	5	...	...	...	...	...	...	10
Other Tuberculous Disease	...	12	2	...	...	...	2	1	2	...	5	...	11
Cancer, Malignant Disease	...	374	1	...	...	...	2	11	16	59	108	177	200
Acute Rheumatism and Rheumatic Fever	...	4	...	...	...	...	1	...	...	1	1	1	3
Cerebro-Spinal Meningitis	...	2	...	...	1	...	1	...	...	...	...	...	2
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Forms of Meningitis (not T.B.)	...	7	2	...	1	2	1	1	...	...	...	...	6
Poliomyelitis	...	1	...	...	...	...	...	...	1	...	...	...	...
Locomotor Ataxy	...	7	...	...	...	...	...	...	...	2	2	3	3
General Paralysis of the Insane	...	5	...	...	...	...	...	...	2	2	...	1	7
Cerebral Hæmorrhage	...	158	...	...	...	...	2	2	2	16	31	105	83
Other Diseases of the Nervous Sys'm	...	107	1	...	1	1	...	1	7	12	13	71	47
Senile Decay	...	99	...	...	...	...	...	...	...	...	1	98	48
Diabetes	...	24	...	...	...	1	1	...	...	2	5	15	14
Organic Heart Disease	...	627	...	...	...	10	7	8	17	55	86	444	279
Arterio-Sclerosi	...	63	...	...	...	...	...	...	...	...	6	57	41
Aneurism	...	2	...	...	...	...	...	...	1	...	...	1	...
Other Diseases of the Circulatory System	...	36	...	...	...	2	2	2	5	8	10	7	21
Bronchitis, Acute	...	37	3	1	...	...	...	...	2	4	6	21	7
Bronchitis, Chronic	...	93	...	...	...	...	...	...	1	5	9	78	38
Influenzal Pneumonia	...	45	1	1	1	2	1	3	9	6	8	13	20
Pneumonia (other forms)	...	210	25	6	3	6	...	9	13	18	32	98	143
Other Diseases of the Respiratory System	...	22	1	...	...	1	1	1	...	6	4	8	11
Diarrhoea and Enteritis	...	26	18	1	...	1	...	...	...	1	...	5	22
Appendicitis, Typhlitis, and Peri- tonitis	...	44	...	...	4	7	4	1	7	10	4	7	45
Cirrhosis of the Liver	...	6	...	...	...	...	...	...	...	1	3	2	3
Alcoholism	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of the Digestive Sys'm	...	62	1	2	...	3	...	3	7	15	18	13	55
Nephritis and Bright's Disease	...	78	...	...	...	2	...	1	2	13	18	42	31
Other Diseases of the Urinary Sys'm	...	44	...	...	1	...	...	2	3	4	9	25	36
Puerperal Fever	...	7	...	...	...	...	1	2	4	...	...	...	7
Puerperal Pyrexia	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases and Accidents of Pregnancy and Parturition	...	5	...	...	...	...	2	2	1	...	...	...	5
Congenital Debility and Malforma'n	...	19	16	2	1	...	...	...	...	...	...	...	9
Premature Birth	...	47	47	...	...	...	...	...	...	...	...	...	35
Veneral Diseases	...	3	2	...	...	...	...	...	...	1	...	...	3
Other Diseases of the Reproductive System (Non-Malignant)	...	9	1	...	...	...	...	...	...	...	...	8	4
Violent Deaths (excluding Suicide)	...	70	1	...	1	7	14	11	2	5	4	25	53
Suicide	...	30	...	...	...	...	6	1	5	6	7	5	45
All other Defined Diseases	...	56	19	1	...	3	2	5	8	5	2	11	37
Diseases Ill-defined or unknown	...	8	...	...	...	1	1	1	3	...	1	1	2
All Causes	...	2721	148	19	29	65	90	114	167	294	416	1379	1519

The deaths entered in the last column include deaths of non-residents of the Borough.

### Comparisons with 1932.

(i) Measles, which was prevalent during the first half of the year, showed an increased mortality. All the deaths occurred under 15 years of age. (ii) Whooping Cough showed a decreased fatality in the first five years of life. (iii) An increase in the number of deaths from diphtheria. (iv) Deaths from influenza remained much the same. (v) Deaths from pulmonary tuberculosis, which are largely concentrated between 15 and 45 years of age, showed an increase. (vi) Cancer deaths increased with a preponderance of deaths over 45 years of age, as in 1932. (vii) Deaths attributed to senile decay remained much the same. (viii) Organic heart disease was the chief cause of death. (ix) A decrease in deaths from acute and chronic bronchitis. (x) An increase of 1 only in infantile deaths from diarrhoea. (xi) A slight decrease in deaths from nephritis. (xii) A decrease in the number of suicides. Deaths from violence and suicide combined now loom sufficiently conspicuous in the causes of death to assume importance from Public Health aspects.

### Comments on Table IX.

(i) Cancer remains the chief cause of death between the ages of 55 and 65 years closely followed by heart disease. (ii) Heart disease is the main cause of death over 65, followed by cancer. (iii) Heart disease took the place of cancer as the chief cause of death of persons dying in institutions. (iv) The main causes of death in persons over 65—excluding senile decay—were: Heart Disease (444), Cancer (177), Cerebral Hæmorrhage (105), Pneumonia (98). (v) Pneumonia still showed its maxima at both extremes of life as in previous years. The most dangerous time of life until the 45—55 age is reached is the first year. (vi) Violent death overtakes the older groups of the population rather more often than the younger groups, though in 1930, 1931, 1932 and the year under review the age-group 15—25 had a large number of fatalities from this cause. Suicide was commonest between 45 and 65 as in previous years.

There are a few points of difference between Table IX and the short list of causes of death supplied by the Registrar-General. The causes of the differences are due to the different methods of classification when more than one cause of death is given on the death certificate. For example, in the abbreviated table of the Registrar-General there are 736 deaths from Heart Disease, whilst Table IX gives only 627. There are, however, given in the latter table 99 deaths from Senile Decay as against 46 in the Registrar-

General's table, and 42 more deaths from Bronchitis. A number of certificates state the deceased died from Myocarditis and Senility, or Myocarditis and Chronic Bronchitis; in the local classification the latter cause has been taken as the cause of death.

The percentage of deaths under 1 year of age to total deaths was 5.4. Deaths under 15 years, 9.6%; deaths under 65 years, 49.3%; deaths over 65 years, 50.7%.

TABLE X.  
CLASSIFICATION OF DEATHS ACCORDING TO DISEASE OVER  
A PERIOD OF 12 YEARS.

Cause of Death.	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	
	Total Deaths.	Total Deaths.	Total Deaths.	Total Deaths.	Total Deaths.	Total Deaths.	Total Deaths.	Total Deaths.	Total Deaths.	Total Deaths.	Total Deaths.	Total Deaths.	Death Rate.
Enteric Fever ... ..	1	...	2	...	1	2	...	1	...	...	2	...	...
Malaria... ..	1	...	...	1	1	...	...	...	...	...	...	...	...
Small Pox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ... ..	19	9	4	7	13	6	30	1	22	...	2	13	0.054
Scarlet Fever ... ..	6	2	2	1	...	3	5	4	2	3	...	...	...
Whooping Cough ... ..	11	11	11	9	9	21	14	24	3	9	12	3	0.013
Diphtheria and Croup ... ..	27	21	8	8	32	10	32	23	14	5	11	17	0.071
Influenza (including influenzal pneumonia) ... ..	101	20	89	63	44	118	38	199	32	84	100	103	0.429
Dysentery ... ..	...	...	...	...	...	...	...	...	1	1	...	...	...
Erysipelas ... ..	2	2	4	5	5	5	3	8	7	4	3	8	0.033
Cerebro-Spinal Fever ... ..	2	...	2	...	...	...	2	...	2	3	2	2	0.008
Pulmonary Tuberculosis ... ..	183	153	157	151	171	165	167	170	154	155	144	162	0.675
Tuberculous Meningitis ... ..	14	22	12	17	17	10	13	10	7	11	9	10	0.042
Other Tuberculous Disease ... ..	12	15	19	13	20	28	26	19	14	11	13	12	0.050
Cancer, Malignant Disease ... ..	252	259	293	319	330	344	327	330	339	342	341	374	1.563
Rheumatic Fever ... ..	7	5	9	8	11	6	6	5	4	7	4	4	0.016
Meningitis ... ..	12	8	6	6	2	9	11	17	14	15	9	7	0.029
Organic Heart Disease ... ..	324	254	305	273	281	346	405	308	375	490	469	627	2.613
Bronchitis, Acute and Chronic ... ..	194	139	142	130	100	92	92	226	125	200	145	130	0.542
Pneumonia ... ..	183	144	182	140	138	200	158	272	199	258	238	210	0.875
Other Diseases of the Respiratory Organs ... ..	40	36	33	32	34	33	33	21	16	20	15	22	0.092
Diarrhoea and Enteritis ... ..	37	36	32	36	34	24	28	45	32	15	25	28	0.108
Appendicitis and Typhlitis ... ..	15	21	28	20	14	17	16	27	23	23	28	44	0.183
Cirrhosis of Liver ... ..	14	11	7	12	3	9	11	10	5	5	8	6	0.025
Alcoholism ... ..	1	3	3	1	2	3	3	4	3	1	1	...	...
Nephritis and Bright's Disease ... ..	47	59	70	65	81	77	79	117	45	60	81	78	0.325
Paerperal Fever ... ..	6	4	2	5	11	4	2	6	1	8	2	7	0.029
Other Diseases and Accidents of Pregnancy & Parturition ... ..	10	6	8	8	13	5	11	5	6	14	5	5	0.021
Congenital Debility and Malformation ... ..	52	32	37	36	52	30	26	42	42	49	27	19	0.079
Premature Birth ... ..	38	39	54	42	40	48	32	47	40	49	48	47	0.196
Violent deaths (excluding Suicide) ... ..	48	49	66	65	71	83	75	64	74	92	75	70	0.292
Suicide ... ..	19	23	23	23	33	30	35	29	19	33	43	30	0.125
Other Defined Diseases ... ..	687	624	670	672	703	720	664	748	713	706	684	677	2.821
Diseases Ill-defined or unknown ... ..	22	...	...	1	3	4	10	10	4	1	10	8	0.033
Total ... ..	2387	2007	2280	2169	2269	2452	2354	2792	2337	2674	2556	2721	11.3

1933 showed an increase in the general death-rate; a further diminution in the birth-rate; and a further decline in the infant mortality rate, which reached the lowest yet recorded in Croydon. In view of the decreasing birth-rate, the average age of the whole population is steadily rising; consequently, sooner or later there will be an increase in the death-rate quite apart from Public Health conditions. It would seem this point has been reached, and any further decline in the death-rate is not to be expected.

### Causes of Death.

The chief causes of death during 1933 were:—Organic heart disease, 627 deaths, death-rate 2.61; Cancer, 374 deaths, death-rate 1.56; All forms of Tuberculosis, 184 deaths, death-rate 0.77; Pneumonia (including influenzal pneumonia), 255 deaths, death-rate 1.06; Arterio Sclerosis and Cerebral Hæmorrhage, 221 deaths, death-rate 0.92.

Taking diseases of bodily systems and group diseases to which deaths were definitely assigned we find:—

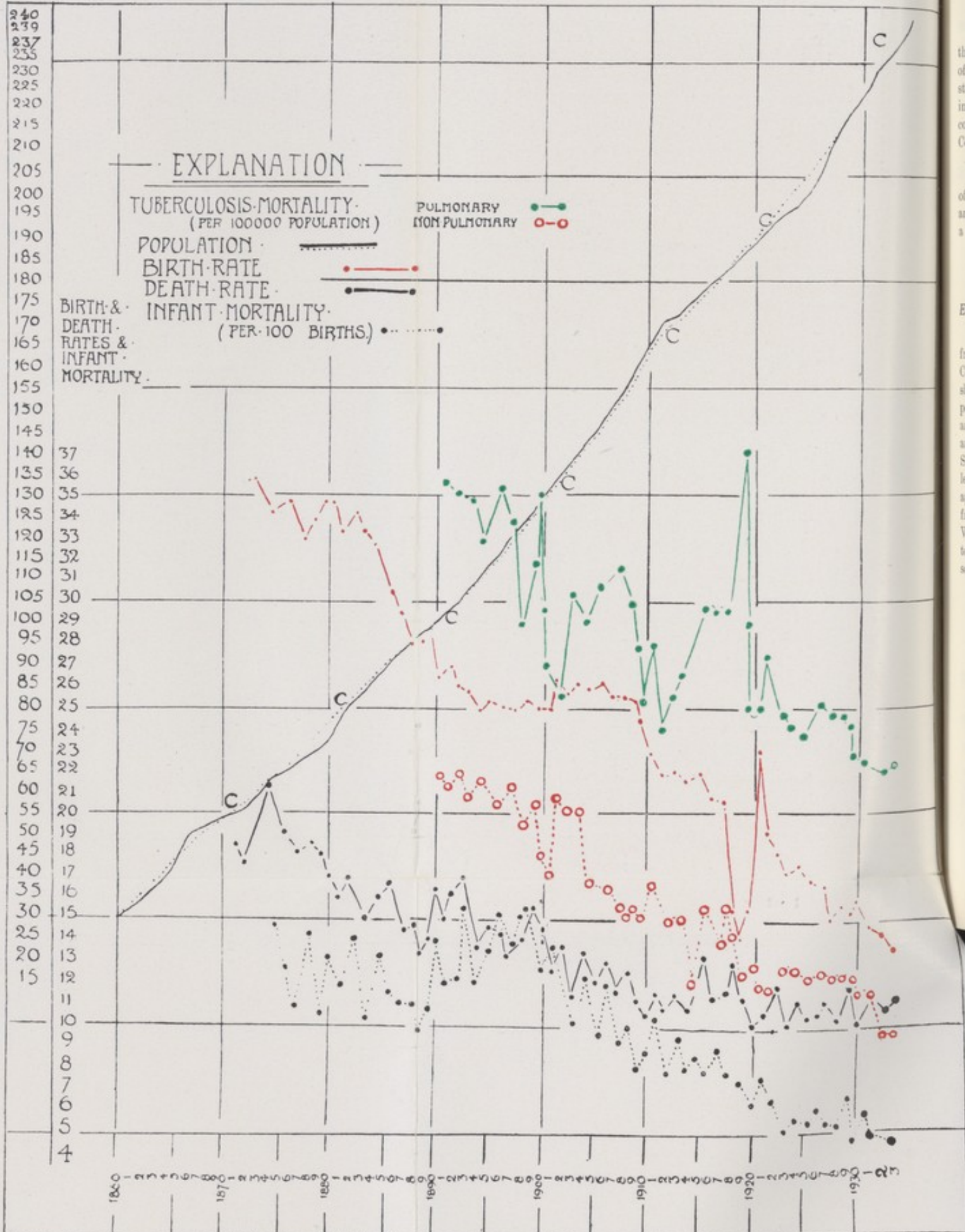
	per 1,000 population.
Circulatory System (including Atheroma and Cerebral Hæmorrhage) ... ..	886 or 3.69
Cancer ... ..	374 1.56
Respiratory System (not Tubercular) ...	362 1.51
Tuberculosis (all forms) ... ..	184 0.77
Diseases of the Digestive System (exclud- ing Cancer and Tuberculosis) ...	162̄ 0.68
Diseases of the Nervous System (not Tubercular) ... ..	126 0.53
Diseases of Renal System ... ..	122 0.51
Infectious Diseases (excluding Tuber- culosis but including Influenza) ...	102 0.43
Suicides and Violent Deaths ... ..	100 0.42
Old Age ... ..	99 0.41
Congenital Debility and Prematurity ...	66 0.28

The greatest single group of causes of death as in 1932 was diseases of the Circulatory system, and of this group Organic Heart Disease was the most prominent member (627 deaths). Rheumatism in childhood is indubitably a cause of cardiac breakdown later in life, more particularly if the original attack of rheumatism has been overlooked or disregarded.





Population  
in thousands



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Arterio-sclerosis (63 deaths) is the second big cause of death in this group. This is a thickening, and diminution in the elasticity, of the walls of the arteries and is an expression either of prolonged stress or unwise living. Cerebral Hæmorrhage, which caused, incidentally, 158 deaths, is one of the sequelae of Arterio-sclerosis, combined with excessive blood pressure. Arterio-sclerosis and Cerebral Hæmorrhage between them caused 221 deaths.

Influenza was the most fatal infectious disease; the majority of deaths occurring over 65 years of age. Diphtheria came second and Measles third. Excluding Influenza the infectious diseases as a group were not a prominent cause of death.

## POPULATION.

### *Explanation of Graphs.*

The estimated population is shown by a continuous black line from 1860 onwards, the letter C denoting a census year. In 1860 Croydon's population was a little over 30,000; in 1931 the census showed it to have risen to 233,115, whilst for 1933 the estimated population is 239,950. The growth of Croydon has been rapid and continuous; even during the war years the increase was not arrested, whilst since the war its growth has been accelerated. Such an increase of population gives rise to peculiar health problems, not the least of which is the inhabitants do not always appreciate that within a space of 60 years their town has grown from a village to one of the great and important towns of England. With the extension of civil aviation, Croydon's importance is likely to become greater each year. The trend of industrialism to the south and the relatively low rates are also exerting an influence.

## SECTION II.

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### SANITARY CIRCUMSTANCES.

*To the Medical Officer of Health.*

I beg to submit in accordance with the Sanitary Officers' Order, 1922, a report for the year ending December 31st, 1933, of the work carried out by the Sanitary Inspectors and other officers under my supervision.

ROBERT J. JACKSON,  
*Chief Sanitary Inspector.*

#### List of Adoptive Acts and Local Acts and Regulations Relating to Public Health.

##### Local Acts.

1884.	Croydon Corporation Act.	
1895.	" "	"
1900.	" "	"
1905.	" "	"
1920.	" "	"
1921.	Croydon Corporation Water Act.	
1924.	Croydon Corporation Act.	
1927.	" "	"
1930.	" "	"

##### General Adoptive Acts.

Baths and Washhouses Act, 1846-1899.

Public Health Acts Amendment Act, 1890, Part 3 (sections 16-50). Section 19 repealed by Croydon Corporation Act, 1905, Section 34.

Infectious Diseases (Prevention) Act, 1890.

Public Health Acts Amendment Act, 1907, Sections 19, 20, 21, 24, 25, 28, 33, 35, 36, 51, 55 and Part V.

Public Health Act, 1925. Sections 14, 17, 18, 19, 23, to 26 (inclusive) 28, 30, 31, 33, 35, 41, 42, 43, 45 and 47 to 55 (inclusive).

**Regulations.**

Regulations as to connections with sewers, 1911.

- „ for securing the proper ventilation and lighting of rooms to which Section 18 (1) of the Housing Act, 1925, applies and the Protection thereof against Dampness, Effluvia or Exhalation.

**Byelaws.**

With respect to Common Lodging Houses, 1931.

- „ Tents, Vans, Sheds and similar structures used for human habitation, 1931.
- „ Slaughterhouses, 1914.
- „ New Streets and Buildings, 1929.
- „ Offensive Trades, 1925.
- „ Conduct of Persons using Public Conveniences, 1926.
- „ Street Trading, 1927.
- „ Slaughterhouses, 1929, Amending 1914 Byelaws.
- „ Cleanliness of Food, 1929.
- „ Smoke. Public Health (Smoke Abatement) Act, 1926.
- „ Houses Let in Lodgings, 1931.
- „ The Prevention of Nuisances arising from Snow, Rubbish, etc., and for the Prevention of Keeping of Animals so as to be Injurious to Health, 1931.
- „ The Good Rule and Government of the County Borough of Croydon and for the Prevention of Nuisances.
- „ Nuisances from Dogs, 1932.

**Summary of Inspections made by the Sanitary Inspectors and other Departmental Work.**

Total No. of Houses inspected for housing defects (under Public Health or Housing Acts) ... ..	4742
No. of houses inspected under the Housing (Consolidated Regulations) 1925 ... ..	2936
No. of Houses inspected under the Rent Restrictions Act, 1920 ...	115
No. of Houses inspected where zymotic diseases have occurred ...	640
House drains tested with smoke (primary) ... ..	1227

House drains tested with smoke (on application) ... ..	80
No. of smoke tests during repair ... ..	551
Inspection of drainage work during construction ... ..	3784
No. of water tests during repair ... ..	461
Final tests of drains after repair ... ..	78
Final tests of drains when completely relaid ... ..	107
Length of new drains tested with water ... .. yards	2744
Inspections of yards, stables and manure pits ..	662
" Passages ... ..	148
" Public Conveniences ... ..	734
" Pigstyes ... ..	85
" Tents, Vans, and similar structures ... ..	61
" Theatres, Cinemas, Halls, etc. ... ..	160
" Ponds and Ditches ... ..	58
" Schools ... ..	7
" School Lavatories ... ..	107
" Common Lodging Houses (including night visits) ...	88
" Houses let in lodgings ... ..	149
" Premises where offensive trades are conducted ...	228
Smoke Observations ... ..	32
No. of Visits re Infectious Diseases ... ..	1779
Inspections of Shops (under Shops Acts) ... ..	3168
Special Early Closing Patrols ... ..	100
Special Evening Inspections under Shop Hours' Act ...	60
Inspections under Fertilisers and Feeding Stuffs Act ...	70
" under Pharmacy and Poisons Act ... ..	17
" Dairies ... ..	341
" Farms and Cowsheds ... ..	134
" Milkshops ... ..	620
" Premises where food is prepared or sold ... ..	8732
" Slaughterhouses ... ..	1215
" Factories ... ..	725
" Factory Laundries ... ..	31
" Workshops ... ..	806
" Workshop Laundries ... ..	19
" Workplaces ... ..	317
" Factory Bakehouses ... ..	286
" Workshop Bakehouses ... ..	142
" Outworkers Premises ... ..	170
" ... ..	32
Visits to Employers of Outworkers ... ..	26464
Reinspections of Work in Progress ... ..	4969
Sundry Inspections and Visits ... ..	3471
Appointments kept with Owners, Builders, etc. ... ..	3858
Complaints from public investigated (for purposes other than in- specification of House) ... ..	1120
Examination of Building Plans ... ..	2393
Informal Notices outstanding 31/12/32 ... ..	11672
" " served ... ..	10585
" " complied ... ..	689
No. of Informal Notices referred for Statutory Orders ...	2791
Informal Notices outstanding (including 384 overcrowding) ...	156
Statutory Notices outstanding 31/12/32 ... ..	636
" " served ... ..	618
" " complied ... ..	3723
Total number of complaints received ... ..	4034
Interviews with callers ... ..	4051
Letters received ... ..	8056
Letters and other intimations, etc., sent (not including notices) ...	



## (2) FACTORIES, WORKSHOPS &amp; WORKPLACES—

Cleansing and whitewashing required ... ..	127
Additional ventilation ... ..	11
Dustbins required ... ..	38
Drainage of floors ... ..	5
Repairs to floors ... ..	12
Repairs to paving ... ..	16
Overcrowding ... ..	1
Ventilation of stoves ... ..	2
Infringements of drinking water supply regulations ...	11
Sundry other nuisances or defects ... ..	80
Outworkers lists not in accordance with Act ... ..	2
Abstract not exhibited ... ..	6
W.c.'s—	
Insufficiently screened ... ..	13
Insufficient ... ..	11
Defective ... ..	119
Not kept clean ... ..	132
Not separate for sexes ... ..	1
Want of intervening ventilated space ... ..	

## (3) INFRINGEMENTS OF CROYDON CORPORATION ACT, 1924—

Food cupboards defective or required ... ..	252
Dustbins required ... ..	1480
Verminous conditions ... ..	60

## (4) INFRINGEMENTS OF PUBLIC HEALTH ACT, 1925 (S.72—75) AND INFRINGEMENTS OF FOOD BYE-LAWS—

Cleansing of walls and ceilings ... ..	184
„ „ floors ... ..	53
„ „ utensils ... ..	24
„ „ counters, shelves, fixtures, &c. ... ..	78
„ „ w.c.'s ... ..	54
Food storage bins required ... ..	15
Defective plaster ... ..	8
Animals kept in food store ... ..	4
Drain inlet in food store ... ..	2
Dirty yards ... ..	92
Accumulation in food store ... ..	43
Refuse bins left uncovered ... ..	35
Food in uncovered vehicles ... ..	9
Food not kept covered ... ..	23
Renewal of swill bins ... ..	8
Food improperly kept or manufactured ... ..	51
Premises not suitable for food stored ... ..	19
Want of provision of towels ... ..	17
Provision of cloak rooms ... ..	57
Overalls required ... ..	13
Illegal wrapping of food ... ..	4
Washing in food store ... ..	6
Want of ventilation in food store ... ..	5
„ „ intervening ventilated space between w.c. and food store ... ..	4





(10) INSPECTION OF AMUSEMENT HOUSES—		
Defective sanitary fittings	...	7
„ wall plaster	...	1
Cleansing and lime washing	...	4
W.c. required cleansing	...	2
W.c. windows defective	...	1
Dustbins required	...	1
(11) KEEPING OF ANIMALS—		
Other nuisances in connection with the keeping of pigs	...	5
Nuisances arising from the keeping of other animals	...	24
(12) INSPECTION OF WATERCOURSES, etc.—		
Pond sprayed with formalin owing to prevalence of mosquitoes	...	1
Cleansing of watercourses	...	1
(13) INFRINGEMENTS OF PHARMACY & POISONS, &c., ACT—		
Article not labelled in accordance with the Act	...	2
(14) INFRINGEMENTS OF FERTILISERS & FEEDING STUFFS ACT, Sec. 1 (1) (11)		17
(15) INFRINGEMENTS OF RATS & MICE DESTRUCTION ACT—		
Infestations of rats in yards of business premises	...	4
„ „ on premises where food is prepared or sold	...	12
Accumulations of refuse, etc., harbouring rats	...	4
Domestic accumulations harbouring rats	...	2
Rats on premises where animals are kept	...	2
Defective drainage	...	2
Structural defects allowing ingress of rats into dwelling houses	...	2
(16) INFRINGEMENTS OF MERCHANDISE MARKS ACT & AGRICULTURAL PRODUCE & MARKING ACT—		
Apples not marked	...	123
Tomatoes „	...	126
Eggs „	...	2
Salmon „	...	6
Imported Butter not marked	...	11
Currants	...	45
Sultanas	...	36
Raisins	...	25
(17) INSPECTION OF SCHOOL LAVATORIES—		
Defective Sanitary fittings	...	4
Defective Drains	...	1
Structural defects in school lavatories	...	1
(18) INFRINGEMENTS OF OTHER BYELAWS—		
Noisy loud speakers	...	1
Noisy animals	...	15

Refuse deposited in streets	...	...	...	...	...	...	...	2
Washing down shop fronts	...	...	...	...	...	...	...	1
Offensive washing up water thrown over footpath	...	...	...	...	...	...	...	4
Fouling footpaths by dogs	...	...	...	...	...	...	...	2
Swill tubs not covered in slaughter-house	...	...	...	...	...	...	...	1
Lime-washing required	...	...	...	...	...	...	...	2
<b>(19) INFRINGEMENTS OF PUBLIC HEALTH (MEAT) REGULATIONS—</b>								
Want of receptacles for the storage of scraps	...	...	...	...	...	...	...	1
Scraps not kept in receptacles	...	...	...	...	...	...	...	4
Food not protected	...	...	...	...	...	...	...	1
<b>(20) INFRINGEMENTS OF FOOD AND DRUGS (ADULTERATION) ACT, 1928—</b>								
Margarine not marked	...	...	...	...	...	...	...	11
<b>(21) SALE OF FOOD ORDER, 1921—</b>								
Meat not marked	...	...	...	...	...	...	...	82
<b>(22) INFRINGEMENTS OF MILK &amp; DAIRIES REGULATIONS, &amp;c.—</b>								
Defective walls	...	...	...	...	...	...	...	1
"    "    dairy floors and paving	...	...	...	...	...	...	...	6
"    "    sanitary fittings	...	...	...	...	...	...	...	1
"    drainage	...	...	...	...	...	...	...	4
Dirty dairies	...	...	...	...	...	...	...	13
"    utensils in dairies	...	...	...	...	...	...	...	5
"    conveniences	...	...	...	...	...	...	...	1
Unsuitable storage for bottles	...	...	...	...	...	...	...	1
Milk improperly kept	...	...	...	...	...	...	...	6
Illegal bottling of milk	...	...	...	...	...	...	...	2
Dairy improperly lighted and ventilated	...	...	...	...	...	...	...	1
Vehicles not labelled	...	...	...	...	...	...	...	1
Bottles not labelled	...	...	...	...	...	...	...	1
Dirty milking appliances	...	...	...	...	...	...	...	1
Cows requiring grooming	...	...	...	...	...	...	...	1
Cowshed requiring limewashing	...	...	...	...	...	...	...	2
"    "    lighting	...	...	...	...	...	...	...	1

### SANITARY CERTIFICATES

On application, an intending or actual occupier or owner, may have a sanitary survey made of the house, to ascertain whether there are conditions existing which may be injurious to health or requiring attention. In each case an examination is made of the premises and the drains are tested.

During 1933 requests were made in connection with

77 houses.

3 schools. Total 80.

The following defects were ascertained in consequence of these inspections :—

Defective gutters	...	...	...	...	...	1
„ downspouts	...	...	...	...	...	3
„ drains	...	...	...	...	...	20
„ sanitary fittings	...	...	...	...	...	17
„ roofs	...	...	...	...	...	1
„ fireplace	...	...	...	...	...	1
„ plasterwork	...	...	...	...	...	2
„ yard paving	...	...	...	...	...	2
Dampness	...	...	...	...	...	3
Food cupboards required	...	...	...	...	...	1

### RENT RESTRICTION ACTS.

A number of applications were received for certificates as to the condition of repair of the houses concerned. In 44 instances where the Acts applied certificates were granted. In nine instances certificates were given to owners stating that the work had been carried out.

### LEGAL PROCEEDINGS TAKEN REGARDING NUISANCES, ETC.

Offence.	Result		Total.
	Fines.	Costs.	
	£ s. d.	£ s. d.	£ s. d.
Using as dwelling house premises not constructed for human habitation	Order to vacate— Case withdrawn.		—

### HOUSING ACT, 1930.

#### Five Years Slum Clearance Programme.

The following Areas have, up to the present been scheduled as Clearance Areas. The Old Town Area has been approved by the Ministry of Health, but with respect to the Leighton Street East Area, the necessary Local Enquiry has not yet been held. :—

	Total number of houses in Area.	No. of houses to be demolished.	No. of persons to be displaced from houses to be demolished.	No. of persons to be displaced to abate overcrowding.
(1) Old Town	108	91	490	—
(2) Leighton Street East	34	34	157	—

The following Improvement Areas have already been approved by the Council, and with respect to Dickenson's Place and Ely Road, the Ministry of Health approval had been obtained at the time of this report :—

	Total number of houses in Area.	No. of houses to be demolished.	No. of persons to be displaced from houses to be demolished.	No. of persons to be displaced to abate overcrowding.
(1) Dickenson's Place ... ..	21	9	28	1
(2) Ely Road and Holmesdale Road ... ..	46	8	102	37
(3) Leighton Street East and West ... ..	107	11	37	86
(4) Albion Street .. ..	32	2	8	10

Fourteen individual houses have up to the present been recommended for demolition, the number of persons who will be displaced thereby being 50.

In addition to the above, and in consequence of informal action, 15 houses were demolished voluntarily. Further, 27 houses have been demolished in the Old Town Area for street widening, and approximately 132 persons were displaced. One house outside this area was closed on representation, and will be pulled down; 5 persons were displaced.

Further contemplated action under the Five Year Plan is as follows. It must be understood that there are other areas in the town under survey, though no representations have as yet been made. It has been decided to see how the Improvement Area clauses operate in actual practice in the areas already scheduled before putting forward more areas. It may be found that quicker and more effective action can be taken under Sections 17 and 19 (Individual Unfit Houses).

Areas to be put forward to be dealt with either under Section 1 or under Section 7, and the approximate number of persons affected :—

	Total number of houses in Area.	No. of houses to be demolished.	No. of persons to be displaced from houses to be demolished.	No. of persons to be displaced to abate overcrowding.
(1) Upper Norwood : Victory Place & Stoney Lane...	26	23	75	—
(2) Paddock Gardens & Albert Terrace ... ..	25	11	36	6
(23) Napier & Magdala Roads.	67	—	—	17
(4) Wilford Road & Forster Road ... ..	132	—	—	55*

\*This figure is only very approximate.

The steps so far taken with respect to the Areas scheduled are :—

- (1) OLD TOWN CLEARANCE AREA.—The clearance of the site is complete and re-building is in hand.
- (2) LEIGHTON STREET CLEARANCE AREA.—The resolution declaring this Area to be a Clearance Area was passed on the 23rd April, 1934. The next step is for the Council to make a Clearance Order.
- (3) DICKENSON'S PLACE IMPROVEMENT AREA.—The formal resolution as approved by the Minister of Health was passed on the 29th January, 1934. Notices to repair 10 houses will be served immediately. Demolition Orders have recently been made in respect of 8 houses on the ground of unfitness, but will not operate before August next.
- (4) ELY ROAD IMPROVEMENT AREA.—Notices will be served for the repair of 38 houses. Steps will be taken to make Demolition Orders in respect of 6 houses to be demolished on the ground of unfitness and to acquire 2 houses to open up the Area.

It is estimated that during the next five years, 150 individual houses in various parts of the town will be the subject of representations under Section 19 for demolition.

As the housing shortage, judging from the number of persons whose names are on the waiting list for Corporation houses, has not been made up, apart from any action resulting from slum clearance, perhaps the most urgent problem at present in Croydon is the supply of houses at rentals which persons of the labouring classes can afford. There does not seem much useful purpose in making representations for Clearance and Improvement Areas until there is a prospect that the representations will take effect, and persons displaced owing to demolitions or to abate overcrowding, re-housed within a reasonable time. Croydon is becoming built up. The finding of sites near the scheduled areas is a difficult matter, whilst the purchase of available sites at a price which will enable rents of 7s. or 8s. a week to be charged for houses erected thereon, is even more difficult. To re-house occupants of Clearance Areas on sites situated on the outskirts of the Borough is unwise. In all probability there would commence a steady drift back. Overcrowding might be abated immediately, but aggravated ultimately.

The following table gives particulars as to Housing during 1933 under the headings prescribed by the Ministry of Health :—

1.—Inspection of Dwelling-houses during the year :—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ... ..	4,742
(b) Number of inspections made for the purpose ... ..	4,742
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 ... ..	2,936
(b) Number of inspections made for the purpose ... ..	2,936
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ... ..	14
(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 ... ..	3,073

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 ...	3,011
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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 ... ..	154
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(2) Number of dwelling houses which were rendered fit after service of formal notices :—	
(a) By owners ... ..	+75
(b) By local authority in default of owners ... ..	5
B. Proceedings under Public Health Acts :—	
(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied ... ..	209
(2) Number of dwelling houses in which defects were remedied after service of formal notices :—	
(a) By owners ... ..	*183
(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 ... ..	14
(2) Number of dwelling houses demolished in pursuance of Demolition Orders ... ..	4
(3) Insanitary houses have been demolished in anticipation of formal procedure under Section 19 ... ..	15
D. Proceedings under section 20 of the Housing Act, 1930 :—	
(1) 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 ... ..	1

\*This number does not include 38 houses in regard to which notices were served in 1932 and complied with in 1933.

†Not including 37 houses concerning which notices were served in 1932 and complied with in 1933.

### OVERCROWDING.

During the course of a systematic inspection of 4,742 houses between 1st January and 31st December, 1933, 89 or 1.87 per cent. were found to contain one or more overcrowded rooms.

A family is considered to be overcrowded if the total accommodation, after allowing one room as a living room, in addition to the necessary bedroom accommodation, does not provide floor area for each member of the family of 40 square feet for persons over 5 years and 30 square feet for persons under 5 years, or the accommodation does not permit of the sexes being properly divided.

133 families occupied these 89 houses and 91 or 68.4 per cent. of these families were found to be overcrowded. In 54 houses of the 89 houses it was found possible to abate overcrowding without producing corresponding overcrowding elsewhere.

91 notices were served to abate overcrowding.

TABLE XI.

### FACTORIES, WORKSHOPS, AND WORKPLACES.

#### 1. Inspection.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions
FACTORIES. (including Factory Laundries) ... ..	756	178	...
WORKSHOPS. (including Workshop Laundries) ... ..	825	190	...
WORK PLACES. (other than Outworkers premises) ... ..	317	34	...
Total ... ..	1898	402	...

TABLE XII.

#### 2. Defects Found in Factories, Workshops, and Workplaces.

Particulars.	No of Defects.		Referred to H. M. Inspector.	Prosecutions.
	Found.	Remedied.		
Nuisances under the Public Health Acts—				
Want of Cleanliness ... ..	127	86	...	...
Want of Ventilation ... ..	11	4	..	...
Overcrowding ... ..	1	...	...	...
Want of Drainage of Floors ... ..	5	...	...	...
Other Nuisances ... ..	165	119	...	...
Sanitary Accommodation—				
Insufficient ... ..	11	4	...	...
Unsuitable or Defective ... ..	275	215	...	...
Not separate for sexes ... ..	1	1	..	...
Offences under the Factory and Workshops Acts—				
Illegal occupation of underground bakehouses ... ..	...	...	...	...
Other offences— (excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers Order, 1921) ... ..	...	..	...	...
Reports to H. M. Inspector ... ..	...	...	16	...
Total ... ..	596	429	16	...



### 3. List of Registered Workshops.

<i>Trades.</i>	<i>Totals.</i>
Bakers and Confectioners ... ..	55
Tailors ... ..	105
Dressmakers ... ..	91
Building Trades ... ..	80
Milliners ... ..	27
Upholsterers ... ..	52
Laundries ... ..	17
Cycle Works ... ..	26
Blacksmiths ... ..	18
Bootmakers ... ..	78
Watchmakers ... ..	17
Motor Engineers ... ..	78
Coachbuilders ... ..	13
Photographers ... ..	8
Picture Framers ... ..	7
Umbrella Makers and Repairers ... ..	2
Saddlers ... ..	6
Ladder and Barrow Makers ... ..	3
Wig Makers ... ..	3
Scale Makers ... ..	2
Blind Makers ... ..	2
Furriers ... ..	2
Marine Stores ... ..	8
Cabinet Makers ... ..	18
French Polishers ... ..	6
Embroidery ... ..	2
Sign Writers ... ..	12
Miscellaneous Trades ... ..	151

### 4. Bakehouses.

The control of Bakehouses is dealt with under the Factory and Workshops Act, the Public Health Acts, Croydon Corporation Act, 1924, and Cleanliness of Food Byelaws. For details of Croydon Corporation Act, see under Food Inspection.

Number of bakehouses on Register, 31st December, 1933 ...	108
Number of underground bakehouses (included in above) ...	6
Visits made to bakehouses during the year ... ..	428
Defects found ... ..	97
Notices issued ... ..	54
Notices complied ... ..	50

### 5. Home Work.

Lists of home-workers are sent in twice yearly, and last year contained the names of 189 outworkers residing within the Borough. 170 visits were paid to outworkers and 32 visits were paid to premises of employers of outworkers to examine lists and for other purposes.

TABLE XIII.

NATURE OF EMPLOYMENT OF WORKERS ON THE REGISTER,  
31st DECEMBER, 1933.

Nature of Work.	Number employed.	Outwork in infected premises.	Outwork in unsatisfactory premises.	Remarks.
Making, cleaning, altering and repairing wearing apparel ...	151	2	...	...
Upholstery work .. ...	4	...	...	...
Lace goods... ..	1	...	...	...
Other classes or work ... ..	33	...	...	...
	189	2	...	...

**REGISTERED AND LICENSED PREMISES IN THE  
BOROUGH, 31st DECEMBER, 1933.**

Slaughterhouses (not including Public) ... ..	3
Bakehouses ... ..	108
Common Lodging Houses ... ..	11
Houses Let in Lodgings ... ..	90
Dairies and Milkshops ... ..	365
Cowsheds ... ..	26
Offensive Trades ... ..	118
Wholesale Dealers in Margarine, etc. ... ..	35
Registered Workshops ... ..	889
Premises registered under Artificial Cream Act, 1929	0
Premises registered for preparation or manufacture of potted, pressed, pickled or preserved meat, fish, or other food intended for the purpose of sale for human food ... ..	125

**SHOP HOURS ACTS.**

3,328 visits and patrols were made during the year, including week-day and evening patrols and Sunday evening patrols. Infringements of the Acts ascertained as the result of these inspections are set out in the summary of infringements (paragraph 6).

## COMMON LODGING HOUSES.

### 1. Municipal Lodging House.

The Municipal Lodging House (built by the Corporation owing to displacement of private common lodging houses due to improvement scheme) is situate at Pitlake, and contains 101 cubicle beds for nightly letting to lodgers. In addition there are three cubicles allotted to members of the Municipal Lodging House Staff, making a total of 104 cubicles on the premises. The charge per night to lodgers is 1s., the cost of a weekly ticket is 6s. for seven nights.

The number of men accommodated during the year was 31,588. The number of men lodgers exceeded 86 per night throughout the year. The receipts and expenditure for the last ten years are as follows:—

	<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s.	d.	£	s.	d.
1924 ... ..	1182	11	2	1350	10	7
1925 ... ..	1346	16	6	1485	0	1
1926 ... ..	1338	8	7	1639	2	8
1927 ... ..	1362	14	7	1591	17	0
1928 ... ..	1346	2	8	1516	7	11
1929 ... ..	1329	5	1	1483	1	5
1930 ... ..	1324	10	8	1477	13	6
1931 ... ..	1385	6	4	1711	19	6
1932 ... ..	1517	8	4	1547	5	5
1933 ... ..	1437	2	6	1544	7	10

### 2. Private Common Lodging Houses.

There were 13 common lodging houses on the register at the beginning of 1933, but two were discontinued during the year.

During 1933, 66 day and 22 night inspections were made.

Notices were served for the conditions and defects as set out in the summary of defects found (paragraph 7).

TABLE XIV.

The following table gives the situation of and the accommodation in the common lodging houses:—

Premises	No. of Rooms.	Accommodation
9, Prospect Place ... ..	3	17 men
52 and 53, Union Street ... ..	17	41 men
19, 20, 21, 22, 23 and 24, Lahore Road..	30	75 men and women
11 and 12, Princess Road ... ..	10	39 men and women
11	60	172 men and women

## HOUSES LET IN LODGINGS.

There are 90 houses registered under the Byelaws.

149 visits were made for inspection purposes.

97 notices were served for various amendments.

89 notices were complied with.

TABLE XV.

The following table gives the situation of these premises:—

<i>Road.</i>	<i>No. of Houses Let in Lodgings.</i>
Beulah Grove ... ..	1
Princess Road ... ..	1
Queen's Road (Croydon) ... ..	1
Ely Road ... ..	7
Forster Road ... ..	13
Holmesdale Road ... ..	4
Wilford Road ... ..	31
Donald Road ... ..	1
Canterbury Road ... ..	2
London Road ... ..	2
Whitehorse Lane ... ..	1
Nursery Road ... ..	1
Mayday Road ... ..	1
Queen's Road, South Norwood ... ..	1
Lodge Road ... ..	1
Sydenham Road ... ..	1
Tamworth Road ... ..	2
Bert Road ... ..	1
Croydon Grove ... ..	1
Derby Road ... ..	3
Belgrave Road ... ..	2
Cecil Road ... ..	1
Windmill Road ... ..	2
Auckland Road ... ..	1
Harrington Road ... ..	1
St. Peter's Road ... ..	2
Alexandra Road ... ..	1
Whitehorse Road ... ..	2
Grange Road ... ..	1
Penge Road ... ..	1

Notices were served for the conditions and defects as set out in the summary of defects found (paragraph 8).

## OFFENSIVE TRADES.

Bye-laws relating to Offensive Trades were adopted during the latter part of the year 1925.

228 inspections were made of premises where such trades were carried on and notices issued requiring amendments in accordance with the byelaws.

The following are on the register :—

Rag and Bone Dealers ... ..	40
Gut Scrapers ... ..	2
Fish Friers ... ..	74
Rabbit Skin Drier ... ..	1
Fellmonger ... ..	1
	<hr/>
	118
	<hr/>

### RAG FLOCK ACTS, 1911 AND 1928.

Seven samples were obtained and subjected to analysis, the results being as follows :—

No. 1 contained 7 parts of Chlorine per 100,000
„ 2 „ 7 „ „ „
„ 3 „ 8 „ „ „
„ 4 „ 6 „ „ „
„ 5 „ 3 „ „ „
„ 6 „ 4 „ „ „
„ 7 „ 4 „ „ „

The seven samples conformed to the standard of cleanliness prescribed under the Rag Flock Regulations, 1912, made under the Rag Flock Act, 1911. The legal maximum of chlorine allowed is 30 parts per 100,000.

### SMOKE OBSERVATIONS.

During the year 32 observations were made of factory chimneys for the purpose of detecting offences under the Act. 4 notices were sent and amendments carried out to stop the nuisance.

### AMUSEMENT HOUSES.

160 visits were made to theatres, music halls, cinemas, and premises where stage plays are given. Attention was given to the ventilation of the halls, sanitary conveniences, structure and cleanliness of the dressing rooms. A report is submitted to the Licensing Authorities annually. Notices were issued for the conditions and defects as set out in the summary of defects found (paragraph 10).

### KEEPING OF ANIMALS.

109 inspections were made in connection with the keeping of animals. There were 40 premises, including institutions, where pigs were known to be kept in the Borough.

5 notices were served to abate nuisances arising from various causes in connection with the keeping of pigs and 24 notices were served to abate nuisances arising from the keeping of other animals.

### **SCHOOLS.**

114 inspections of schools or school lavatories were made during 1933. In one instance the drains were found defective, and there were four instances of defective sanitary fittings, and one lavatory structurally defective.

The water supply in all cases is from the mains.

### **INSPECTION OF WATERCOURSES, ETC.**

During the year 58 visits were made to ditches, watercourses, etc., in order to see whether there were any infringements of the several Acts, etc. In a number of instances action was taken and notices served to disconnect surface water and other drains from ditches, watercourses, etc.

### **PHARMACY AND POISONS ACT, 1933.**

This Act consolidates the Poisons and Pharmacy Acts from the year 1852. The object is to regulate the sale of certain poisonous substances and the Act contains important provisions.

The number of licences renewed under the Act was seven, and in addition seven licences were renewed under the Order-in-Council dated November 10th, 1911, to assistants in the employ of persons already holding licences.

Two infringements of the Act were found.

### **FERTILISERS AND FEEDING STUFFS ACT, 1926.**

Seventy inspections of premises where fertilisers and feeding stuffs were sold were carried out during the year. Seventeen infringements of the Act were found. Reinspections were made at a later date and the infringements found to have been rectified.

### **DISINFECTION.**

The Borough Disinfecting Station is situate in Factory Lane.

Two steam disinfectors are in use and are supplied with steam from the refuse destructor.

A Cleansing Station, consisting of reception room, four baths and discharge room, is attached to the Disinfecting Station, and is used for dealing with verminous conditions in children and adults.

The following articles were disinfected at the Disinfecting Station during the year :—

	No. of Articles.
By Steam ... ..	32,792
By Formalin gas ... ..	3,461
By Formalin spray ... ..	728
	<hr/>
	36,981
	<hr/>

In addition 1,198 articles were destroyed on request.

Disinfection after infectious or contagious disease was carried out in

2,442 rooms at 1,645 houses.

76 class rooms.

4 hospital wards.

3 vehicles.

1 hut.

7 bags.

27 W.C.'s.

2 lobbies and corridors.

1 office.

1 school hall.

### CLEANSING OF VERMINOUS PERSONS, ETC.

During the year 1 adult was cleansed for verminous conditions, and fifteen adults and twenty-two children for scabies, also one adult after contact with infectious disease.

### RATS AND MICE DESTRUCTION.

The rat-catcher is a permanent member of the staff, and no charge is made for his services.

Rats are destroyed by the following methods: Dogs, poison baits, traps, and rat varnish smeared on cardboard.

Close co-operation is carried out between the rat-catcher and the District Sanitary Inspectors.

The following is a summary of the visits paid during 1933 under the Rats and Mice (Destruction) Act, 1919.

TABLE XVI.

Premises.	No. of Visits made.	No. of Poison and other baits laid.	No. of Rats Killed.
Private Houses ... ..	1295	} 3728	} 791
Butchers ... ..	37		
Other premises where food is prepared or sold ... ..	162		
Other premises ... ..	229		
Total .. ..	1723	3728	791

In addition to the above, 2,638 rats were killed at Corporation refuse tips by employees of another department.



### SECTION III.—FOOD SUPPLY.

The supervision and inspection of the food supplies is carried out by twelve of the district inspectors, who are qualified in food inspection.

The work is supervised by the Chief Sanitary Inspector and the Deputy Chief Inspector, who also hold the necessary qualifications.

Each district inspector is responsible for the examination of all foodstuffs, exposed or deposited, or in preparation for sale in shops, wholesale and retail markets, hotel and cafe kitchens, etc. together with the methods used in the preparation of the foodstuffs, the storage places and premises.

This method of inspection, along with frequent sampling of all articles of food, is intended to procure for the public a wholesome supply of pure, unadulterated food.

This desirable condition entails an enormous amount of detail work at all times of the year, especially intensified during the hot months, and it is only by constant vigilance that this can be maintained.

The traders of the town have by their co-operation helped in the task, and I am sure desire to supply pure, wholesome food to the public.

On the other hand the householder can help considerably in attaining the best standard by purchasing clean food, at the same time insisting that it has not been handled by unauthorised persons or exposed to injurious contamination such as flies and dust.

It is, moreover, of great importance that householders should take equal precautions in the home. Foodstuffs should be bought in small quantities and kept in a clean, well-ventilated food pantry, screened from flies.

Refrigeration, as a method of storage, gains further ground, not only in the shops but in the home. This method of low temperature storage ensures a fresher article with practically no waste.

A larger number of articles are packed in hygienic containers and this method facilitates handling and prevents contamination.

The wrapping of bread and cakes, as delivered to houses in the borough, has not kept pace with other hygienic measures. This desirable method would soon materialise if the public were to demand it.

Additional legislation continues to impose new tasks on the inspectorate. In addition to the actual examination of all foodstuffs the inspectors also observe if the marking of the foodstuffs, required by the various acts and orders, is being complied with.

The Merchandise Marks Act requires an indication of the origin of certain imported goods. Orders under the Act have been made dealing with imported fresh apples, honey, raw tomatoes, oat products, currants, sultanas, raisins, eggs, salmon, butter, etc.

In addition Regulations regarding condensed and dried milk have been adopted, while other foodstuffs require marking under the Milk (Special Designations) Order, Food and Drugs Acts, Artificial Cream Act, Public Health (Preservatives) Regulations, Sale of Food Orders, etc.

The necessity for a wholesome meat supply entails the examination of meat, not only in the shops, but also in the wholesale markets. Carcases coming into the borough, but dressed elsewhere, are subjected to minute examination. The private slaughterhouses are visited and the dressed meat is inspected before being passed out for human consumption, either in the borough or elsewhere. In order that a proper supervision of the food supplies in the borough be maintained it is necessary for the inspectors to be on duty long after ordinary hours of working.

The Public Slaughterhouses are under the control of the Superintendent, who also acts under the supervision of the Chief Sanitary Inspector.

During the year there were 43,615 animals slaughtered for human consumption, these figures being a decrease of 6,155 on those for the year 1932.

The following table shows the premises in the Borough at which foodstuffs are known to be sold, manufactured or stored:—

General Shops	...	...	...	...	...	210
Grocers and Provision Shops	...	...	...	...	...	606
Greengrocers and Fruiterers	...	...	...	..	...	475
Confectioners, Bakers, and Pie Makers	...	...	...	...	...	575
Ice-Cream Shops	...	...	...	...	...	291
Hotel and Restaurant Kitchens and Dining Rooms						252
Butchers	...	...	...	...	...	228
Fishmongers (including Fried Fish Shops)	...	...	...	...	...	147
Ham and Beef Shops	...	...	...	...	...	76
Sweet Manufacturers	...	..	...	...	...	7
Other Food Premises	...	...	...	...	...	26
						2,893

In addition to the premises in the above table, there are the following food premises, referred to in other paragraphs of this report:—Slaughterhouses and dairies, cowsheds and milkshops on the registers. Further, there are a large number of stalls and barrows used for food purposes in different areas in the Borough and forming street markets. There are also barrows and other vehicles which are used by hawkers, etc., for the selling of foodstuffs, but it is difficult to estimate the actual number in use, as this varies daily. All these barrows and vehicles, wherever found, are inspected by the food inspectors.

### PUBLIC SLAUGHTERHOUSES, PITLAKE, AND MEAT INSPECTION.

These slaughterhouses, although the buildings were not originally intended for such, comprise twelve slaughterhouses with lairage attached. In addition a gut cleaning firm utilises one building on the premises. Of the twelve slaughterhouses nine with lairage attached, are let on agreement to tenant butchers, and the remainder are used for public slaughtering, for which head rate tolls are charged.

TABLE XVII

The following animals were slaughtered at the Public Slaughterhouses during 1933:—

#### Pitlake.

Public Slaughterhouses.	Cattle.	Sheep.	Pigs.	Calves.	Total.
Public section	49	418	2478	371	3316
Private section	663	12866	15950	3089	32568
Totals ...	712	13284	18428	3460	35884

The whole of the meat and offal is examined before it leaves the premises.

The following meat and offal from the Public Slaughterhouses was surrendered and destroyed during the year 1933 :—

<i>Description.</i>		<i>Cause.</i>	
4	beef carcasses and offal ... ..	General tuberculosis.	
5	„ forequarters ... ..	Localised tuberculosis.	
1	„ hindquarter ... ..	Traumatism, etc.	
2	„ forequarters ... ..	„ „	
3	„ parts ... ..	Localised tuberculosis.	
12	sets beef lungs ... ..	Inflammatory, etc.	
34	„ beef lungs ... ..	Localised tuberculosis.	
16	beef heads ... ..	„ „	
23	„ various offals ... ..	„ „	
4	„ heads and tongues ... ..	Actinomycosis.	
5	„ parts ... ..	Inflammatory conditions, etc.	
154	„ various offals ... ..	„ „	
11	veal plucks ... ..	Tubercular.	
6	„ various offals ... ..	„ „	
67	„ various offals ... ..	Inflammatory, etc.	
1	„ carcase and offal ... ..	Jaundice.	
1	„ carcase ... ..	Traumatism.	
4	„ plucks ... ..	Inflammatory conditions.	
14	„ heads ... ..	Various causes.	
13	pig carcasses and offals ... ..	General tuberculosis.	
13	„ quarters ... ..	Localised tuberculosis.	
18	„ various parts ... ..	„ „	
294	„ heads ... ..	„ „	
123	„ plucks ... ..	„ „	
70	„ various offals ... ..	„ „	
17	„ carcasses and offals ... ..	Swine fever.	
24	„ carcasses and offals ... ..	Inflammatory conditions, etc.	
10	„ quarters ... ..	„ „	
566	„ plucks ... ..	„ „	
16	„ heads ... ..	„ „	
290	„ various offals and 21 parts ... ..	„ „	
4	sheep carcasses and offals ... ..	Inflammatory, etc.	
8	„ parts ... ..	Inflammatory, traumatic, etc.	
24	„ plucks ... ..	Parasitical, etc.	
183	„ various offals ... ..	„ „	
3	„ carcasses and offals ... ..	Emaciation and Dropsical.	
2	„ carcasses ... ..	Parasitical, etc.	

Total weight destroyed : 22,747 lbs.

## PRIVATE SLAUGHTERHOUSES AND MEAT INSPECTION

At the end of 1933 there were 3 registered slaughterhouses in the Borough. Registered Private Slaughterhouses have in recent years gradually been reduced from 6 to 3. In two instances they have been accommodated at the Public Slaughterhouses. The number of visits paid to the Private Slaughterhouses for the purpose of inspecting the meat during 1933 was 1,215.

TABLE XVIII.

The number of animals slaughtered in the Private Slaughterhouses during the year was :—

Cattle.	Sheep.	Pigs.	Calves.	Total.
81	2252	3400	1998	7,731

The following meat and offal from Private Slaughterhouses was surrendered and destroyed during 1933 :—

<i>Description.</i>	<i>Cause.</i>
1 beef head ... ..	Localised tuberculosis.
2 sets beef lungs ... ..	" "
1 set beef lungs ... ..	Inflammatory conditions, etc.
5 beef various offals ... ..	" "
1 veal pluck ... ..	Localised tuberculosis.
1 set veal lungs ... ..	Inflammatory.
1 set veal various offals ... ..	" "
46 pig heads and 4 parts ... ..	Localised tuberculosis.
36 ,, plucks ... ..	" "
16 ,, sundry offals ... ..	" "
11 ,, plucks ... ..	Inflammatory, etc.
24 ,, offals (various) ... ..	" "
12 sheep offals (various) ... ..	Parasitical, etc.

Total weight destroyed : 946½ lbs.

TABLE XIX.

Total number of animals slaughtered for human consumption in the Borough during 1933 :—

Cattle.	Sheep.	Pigs.	Calves.	Total.
793	15,536	21,828	5,458	43,615

TABLE XX.

*Summary of whole carcasses destroyed with the reasons for such destruction.*

Class of Animal.	Tuberculosis.	Emaciated and Dropsical.	Inflammatory Conditions.	Traumatism.	Jaundice.	Swine Fever.	Asphyxiation.	Parasitical.	Parturient.	Mastitis.	Total carcasses.
Cattle ...	4	...	...	...	...	...	...	...	...	...	4
Calves ...	...	...	...	1	1	...	...	...	...	...	2
Sheep ...	...	3	2	...	...	...	...	2	1	1	9
Pigs ...	13	...	16	...	7	17	1	...	...	...	54
Totals	17	3	18	1	8	17	1	2	1	1	69

TABLE XXI

*Summary of carcasses in which tuberculosis was found in the course of inspection, and method of disposal.*

Animals affected.	Carcase and all internal organs destroyed.	Quarters or parts of carcase destroyed (including heads)	All or parts of organs destroyed.	Total.
Cattle (including calves) ...	4	20	48	72
Pigs ...	13	340	159	512
Total ...	17	360	207	584

### General Food Inspection.

The following table gives a summary of the inspections made during the year (not including visits made to slaughterhouses or dairies, cowsheds and milkshops):—

Butchers	...	...	...	...	...	...	2133
Fishmongers	...	...	...	...	...	...	308
Fried Fish Shops	...	...	...	...	...	...	190
Grocers	...	...	...	...	...	...	1153
Greengrocers	...	...	...	...	...	...	878
Poultry and Game Dealers	...	...	...	...	...	...	62
Cooked and Prepared Meat Shops	...	...	...	...	...	...	335
Bakers' Premises	...	...	...	...	...	...	293
Confectioners' Premises	...	...	...	...	...	...	785
Markets	...	...	...	...	...	...	694
Hawkers' Carts and Barrows	...	...	...	...	...	...	306
Hotel and other Kitchens, etc.	...	...	...	...	...	...	703
Ice Cream Manufacturers and Vendors	...	...	...	...	...	...	388
General Shops	...	...	...	...	...	...	446
Other premises	...	...	...	...	...	...	58
							8,732

The following articles of food were surrendered and destroyed during 1933 :—

1 beef forequarter	(Imported)	...	...	...	...	Unsound
11 „ hindquarters	„	...	...	...	...	do.
81 „ parts and trimmings	„	...	...	...	...	do.
39 „ kidneys	„	...	...	...	...	do.
9 „ livers, etc.	„	...	...	...	...	do.
5 mutton parts	„	...	...	...	...	do.
2 lamb carcasses	„	...	...	...	...	do.
160 lbs. lambs' liver	„	...	...	...	...	do.
1 pork carcase	„	...	...	...	...	do.
10 pork parts	„	...	...	...	...	do.
2 veal parts	„	...	...	...	...	do.
260 lbs. pig kidneys, livers, etc.	„	...	...	...	...	do.
27 lbs. sheeps' hearts	„	...	...	...	...	do.
94 rabbits	...	...	...	...	...	do.
469 lbs. mackerel, skate, etc.	...	...	...	...	...	do.
40 lbs. ducks	...	...	...	...	...	do.
176 tins salmon, etc.	...	...	...	...	...	do.
34 tins sardines	...	...	...	...	...	do.
1764 tins cherries, loganberries, plums, etc.	...	...	...	...	...	do.
54 lbs. pears	...	...	...	...	...	do.
56 lbs. apples	...	...	...	...	...	do.
1 lb. tomatoes	...	...	...	...	...	do.
213 tins milk	...	...	...	...	...	do.
525 lbs. sugar, confectionery, etc.	...	...	...	...	...	do.
50 jars jam, syrup, etc.	...	...	...	...	...	do.
22 jars pickles, etc.	...	...	...	...	...	do.
54 doz. eggs	...	...	...	...	...	do.
19 tins soup	...	...	...	...	...	do.
19 lbs. bacon, etc.	...	...	...	...	...	do.
92 tins cooked ham, etc.	...	...	...	...	...	do.
5 bags winkles	...	...	...	...	...	do.
50 lbs. tripe	...	...	...	...	...	do.

Total weight destroyed : 11,758½ lbs.

TABLE XXII.

*General Summary of Meat and other articles destroyed during the year 1933.*

ARTICLES.	Weight in lbs.			Remarks.
	Diseased.	Unsound.	Total.	
Beef ... ..	3,092	4,363½	7,455½	Including 4 carcasses.
Veal ... ..	140	156	296	„ 2 „
Mutton ... ..	460	1,504	2,164	„ 9 „
Pork ... ..	11,083	842	11,925	„ 54 „
Offal ... ..	8,146½	961½	9,108	„ imported offal.
Fish ... ..	...	525	525	Haddocks, Mackerel, Skate, etc.
Fruit & Vegetables	...	266	266	Pears, Apples, etc.
Tinned Goods ...	...	3,195	3,195	2,198 tins, 69 jars.
Sundries ... ..	...	717	717	Rabbits, Ducks, Sugar, Confectionery, etc.
	22,921½	12,530½	35,451½	

### MILK.

The milk supply of the Borough is derived principally from the south, south-east and south-west counties and arrives either by rail or road.

Only a small proportion is produced in the borough, due largely to the absorption of land for building purposes and the decreasing amount of available pasture land.

The Milk and Dairies (Consolidation) Act, 1915, and the Milk and Dairies Orders gave additional powers to deal with milk premises.

Dairies, milkshops and cowsheds have received continuous inspection. In the case of dairies separate premises are required for the storage of milk and also for the washing of utensils. Alterations have been carried out to existing dairies in conformity with modern practice. Further, a large additional distribution depot with the most up-to-date equipment has been erected to facilitate the handling of milk in the best possible manner.



Mechanical refrigeration and cooling is used by increasing numbers of dairymen in the Borough as part of their equipment.

Enquiries show that approximately 18,441 gallons of milk are sold daily in the Borough. Of this amount 92.9% is bottled, 1.% is retailed as loose milk, the remaining 6.1% being sold wholesale to large consumers. These figures are interesting in view of the fact that ten years ago the whole of the milk sold was distributed loose. The sale of this type of milk, whether in shops or on the rounds, is discouraged.

Of the total milk sold daily in the Borough, 13,061 gallons is graded milk. This figure is extremely gratifying and draws attention to the remarkable changes which have taken place in the treatment and distribution of our milk supplies.

Sterilised milk continues to be sold in the Borough.

A recent innovation is the introduction of milk sold in waxed cartons; this method ensures that by ingenious machinery the carton is made and filled with milk and delivered ready sealed. During this operation it is untouched by hand. This method, which entirely eliminates the costly bottle, appears to appeal to the public, judging by the increasing amount which is being sold. It will be interesting to watch the progress of this new method of distribution.

Large numbers of samples have been obtained both for chemical and bacteriological analysis during the year. When a sample of milk is not up to a reasonable standard of bacterial purity the supplier, whether retailer or producer, is notified. At the same time he is invited to interview the Chief Sanitary Inspector. The methods of production and distribution are discussed and suggestions made, these when adopted have produced excellent results.

It is interesting to note that the bacteriological examination in all grades of milk shows a reduced total bacterial count on the previous year, and the majority of milk distributed in the Borough is uniformly of excellent quality. This, unfortunately, does not apply to the milk as it is delivered by the farmer, which shows unnecessarily high bacterial counts, etc. This low standard makes it necessary for the vendors to provide and maintain elaborate and expensive plant to eliminate something which should be kept out at the source.

**MILK AND DAIRIES (CONSOLIDATION) ACT, 1915, THE  
MILK AND DAIRIES AMENDMENT ACT, 1922, AND THE  
MILK AND DAIRIES ORDERS, 1926.**

**Cowkeepers, Dairymen and Purveyors of Milk.**

The following statement shows the number of Cowkeepers, Cowsheds, Dairies and Purveyor of Milk premises on the register :—

Cowkeepers on register (1932)	...	...	...	9
„ added to the register (1933)	...	...	...	—
„ discontinued (1933)	...	...	...	—
			Net ...	9
				—
Cowsheds on register (1932)	...	...	...	26
„ added to the register (1933)	...	...	...	—
„ discontinued (1933)	...	...	...	—
			Net ...	26
				—
Number of cows provided for	...	...	...	241
Average number of cows in sheds (1933)	...	...	...	218
No. of dairies and purveyors of milk on register (1932)	...	...	...	327
No. of dairies and purveyors of milk added to register (1933)	...	...	...	79
No. of dairies and purveyors of milk discontinued during 1933	...	...	...	41
			Net ...	365
				—
Grand total of cowsheds, dairies and purveyors of milk on register, 31st December, 1933	...	...	...	391

During the year 1,095 inspections were made of dairies, cowsheds and milkshops.

Mr. P. Thrale, the part-time veterinary surgeon, makes quarterly reports on his visits to the farms and his examination of the cattle thereon.

During 1933 all the farms were visited for this purpose at least 4 times.

A total of 892 cows were inspected during the year.

**Milk (Special Designations) Order, 1923.**

The following licences were granted during the year under this Order and were in force on the 31st December, 1933 :—

<i>Description of Licences.</i>	<i>No.</i>
(1) Producers' Licences to use the designation "Grade A" ... ..	—
(2) Dealers' Licences to use the designation "Certified" ... ..	15
(3) Dealers' Licences to use the designation "Grade A" (Tuberculin tested)—	
(a) Bottling establishments ... ..	1
(b) Shops ... ..	17
(4) Dealers' licences to use the designation "Grade A"—	
(a) Bottling establishments ... ..	—
(b) Shops ... ..	2
(5) Dealers' Licences to use the designation "Grade A Pasteurised"—	
(a) Shops ... ..	4
(6) Dealers' licences to use the designation "Pasteurised"—	
(a) Pasteurising establishments ... ..	1
(b) Shops ... ..	49
(7) Dealers' Supplementary Licences to use the designation—	
(a) Certified ... ..	3
(b) Grade A T.T. ... ..	4
(c) Grade A ... ..	3
(d) Pasteurised ... ..	4

Inspection of these licensed premises has been carried out regularly during the year to see that the conditions of the licences were observed.

During the year the following samples of milk were examined under the Milk (Special Designations) Order, 1923 :—

*Certified Milk.*

Licensed country producers supplying milk to licensed local dairymen ... ..	7
---	---

*Grade A (Tuberculin Tested) and Grade A Milks.*

Licensed country producers of Grade A (Tuberculin Tested) milk supplying milk to licensed local dairymen ... .. 13

Licensed country producer of Grade A milk supplying milk to a licensed local dairyman ... .. —

*Pasteurised Milk.*

Samples from licensed dealers ... .. 136

The following tables summarise the result of the bacteriological examinations of Certified, Grade A (Tuberculin Tested), Grade A and Pasteurised samples, from 1st January to 31st December, 1933 :—

TABLE XXIII.

CERTIFIED MILK.	Present.		Absent.		Over 30,000 per c.c.		Under 30,000 per c.c.		Present in 1/10 c.c.		Not present in 1/10 c.c.	
	Present.	Absent.	Present.	Absent.	Present.	Absent.	Present.	Absent.	Present.	Absent.	Exceeding a trace.	Not exceeding a trace.
Tubercle bacillus ... ..	...	7	...	...	...	...	...	...	...	...	...	...
Total number of bacteria ...	...	...	...	7	...	...	...	...	...	...	...	...
Bacillus Coli ... ..	...	...	...	...	...	7	...	...	...	...	...	...
Blood ... ..	...	...	...	...	...	...	...	7	...	...	...	...
Fus ... ..	...	...	...	...	...	...	...	...	...	7	...	...
Detritus ... ..	...	...	...	...	...	...	...	...	...	...	7	...
	...	7	...	7	...	7	...	7	...	7	...	7

The above 7 Certified Milk samples contained total bacteria per c.c. as follows :—

0—1,000	...	3
1,000—5,000	...	2
5,000—10,000	...	2
		—
		7
		—

Under the Regulations Certified Milk must not contain more than 30,000 bacteria per c.c.

TABLE XXIV.

GRADE A (TUBERCULIN TESTED) AND GRADE A MILKS.	Present.	Absent.	Over 200,000 per c.c.	Under 200,000 per c.c.	Present in 1/100 c.c.	Not present in 1/100 c.c.	Present.	Absent.	Present.	Absent.	Exceeding a trace.	Not exceeding a trace.
Tubercle bacillus ...	...	13										
Total number of bacteria ...			...	13								
Bacillus coli ...	...				2	11						
Blood ...	...						...	13				
Pus ...	...								...	13		
Detritus ...	...										...	13
	...	13	...	13	2	11	...	13	...	13	...	13

The 13 Grade A (Tuberculin Tested) and Grade A milks contained bacteria per c.c. as follows:—

0—1,000	...	2
1,000—5,000	...	6
5,000—10,000	...	2
20,000—30,000	...	1
50,000—100,000	...	1
100,000—200,000	...	1
		—
		13
		—

Under the Regulations Grade A (Tuberculin Tested) or Grade A milk must not contain more than 200,000 bacteria per c.c.

The following tables summarise the results of the bacteriological examinations of Pasteurised milk samples from 1st January to 31st December, 1933:—

TABLE XXV.

PASTEURISED MILK. (licences granted under the Milk (Special Designations) Order, 1923).	Present.	Absent.	Over 100,000 per c.c.	Under 100,000 per c.c.	Present.	Absent.	Present.	Absent.	Present.	Absent.	Exceeding a trace.	Not exceeding a trace.
Tubercle bacillus ...	...	136										
Total number of bacteria ...			4	132								
Bacillus coli ...	...				37	99						
Blood ...	...						...	136				
Pus ...	...								...	136		
Detritus ...	...										...	136
	...	136	4	132	37	99	...	136	...	136	...	136

The above 136 Pasteurised Milk samples contained bacteria per c.c. as follows :—

Under 1,000	...	5
1,000—5,000	...	52
5,000—10,000	...	40
10,000—20,000	...	14
20,000—30,000	...	7
30,000—50,000	...	11
50,000—100,000	...	3
Over 100,000	...	4
		136

Under the Regulations Pasteurised Milk must not contain more than 100,000 bacteria per c.c.

There were 2 samples of Sterilized Milk taken during 1933. *Bacillus Coli* was absent in each case, and the bacterial content was as follows :—

1 sample contained 20 bacteria per c.c.

1 sample contained 80 bacteria per c.c.

### **MILK AND DAIRIES ORDERS 1926.**

Two offences were discovered under the above Orders, namely :—

Bottling milk on other than the Registered premises.

The roundsmen were prosecuted and fines and costs amounting to £3 12s. were incurred.

### **PROVISION AS TO MILK SUPPLY.**

During the year 360 samples of ordinary milk were procured and submitted to examination for tuberculosis in accordance with the Milk and Dairies (Consolidation) Act, 1915.

These samples were taken as follows:—

Samples taken at cowsheds in the Borough	...	92
Samples in course of delivery from country cowsheds to local dairymen and purveyors of milk in the Borough	... ..	18
Samples taken at dairymen's premises in the Borough	... ..	70
Samples taken in course of delivery by local dairymen or milk sellers on their rounds in different parts of the Borough	... ..	170
Other samples taken	... ..	10
		360

Nineteen samples proved to be tuberculous, but of these nine were obtained in group or individual testing of cows on a farm in the Borough, in consequence of which three cows were slaughtered under the Tuberculous Order, 1925, and found to be affected. Four samples were from a creamery in Somerset which obtained its supplies from a considerable number of farms, and it was not possible to trace the source of infection. One sample was from a farm in the Borough, but it was not possible to discover the infected animal, as this may have been sold. Two samples were from supplies coming from Sussex; a considerable number of cows were examined by the Authority's Veterinary Officers, suspected animals isolated, and samples taken. As the result of their investigations two animals were dealt with under the Tuberculosis Order, 1925. Three samples were taken from supplies coming from Surrey, and again, after a considerable number of cows had been examined by the Authority's Veterinary Officers, suspected animals isolated and samples taken. As the result of their investigations two animals were dealt with under the Tuberculosis Order, 1925.

The following table summarises the results of the bacteriological examination of ordinary milk samples, taken under the Milk and Dairies (Consolidation) Act, 1915, from 1st January to 31st December, 1933 :—

TABLE XXVI.

ORDINARY MILK.	Present.	Absent.	per c.c.		Present in 1/100 c.c.	Absent from 1/100 c.c.	Present.	Absent.	Present.	Absent.	Exceeding a trace.	Not exceeding & trace.
			Over 200,000	Under 200,000								
Tubercle bacillus ... ..	19	342										
Total No. of bacteria ... ..			79	281								
Bacillus Coli ... ..					141	219						
Blood ... ..							...	360				
Pus ... ..									...	360		
Detritus ... ..											...	360
	19	342	79	281	141	219	...	360	...	360	...	360

The 360 samples of Ordinary Milk contained total bacteria per c.c. as follows :—

0—1,000	...	5
1,000—5,000	...	57
5,000—10,000	...	38
10,000—20,000	...	43
20,000—30,000	...	36
30,000—40,000	...	13
40,000—50,000	...	10
50,000—100,000	...	48
100,000—150,000	...	16
150,000—200,000	...	15
200,000—250,000	...	10
250,000—500,000	...	22
500,000—750,000	...	9
750,000—1,000,000	...	7
1,000,000—2,000,000	...	12
Over 2,000,000	...	19

---

360

---



There is no standard fixed for total bacteria per c.c. in ordinary commercial milk, but comparing the results with the Grade A standard, *i.e.*, 200,000 per c.c., it will be seen that 281 of the samples contained total bacteria in accordance with that standard. It has to be remembered that a proportion of this milk has been subjected to commercial pasteurisation.

The 360 samples taken under the Milk and Dairies (Consolidation) Act, 1915, were samples of milk which had been produced in the following areas:—

TABLE XXVII.

Areas.	No. obtained.	No. Tuberculous.
Croydon .. ...	92	10
Kent ... ..	1	...
Surrey ... ..	4	3
Sussex ... ..	20	2
Dorset ... ..	1	...
Somerset ... ..	4	4
*Unclassified ... ..	238	...
Totals ... ..	360	19

\*These samples could not be classified owing to the fact that it was mixed milk of large dairy firms or wholesale purveyors of milk, who obtain their milk from practically all the areas mentioned in the above table.

### FOOD AND DRUGS (ADULTERATION) ACT, 1928.

During the year 433 samples of milk (432 new, 1 condensed) and 453 other samples were taken.

In 13 instances the vendors were warned.

23 samples of Ice Cream were taken during the year. The Public Analyst reports that 11 of these samples contained fat in amounts varying from 2.1% to 9.1%. The remaining twelve contained fat in amounts varying from 10.0% to 17.8%.

There is no legal standard for fat in Ice Cream. 10 per cent. is suggested as a reasonable minimum amount. Bearing in mind this figure, it will be seen that the majority of the samples of Ice Cream were well above this suggested standard.

## 1. Summary of Samples.

During 1933 samples were obtained and submitted to the Public Analyst as follows:—

TABLE XXVIII.

Samples of	Total Samples.	Genuine.	Not Genuine.	Prosecutions.	Convictions.	Cautions.
Milk ... ..	432	420	12	4	4	8
Condensed Milk ... ..	1	1	—	—	—	—
Tinned Cream ... ..	2	2	—	—	—	—
Arrowroot ... ..	8	8	—	—	—	—
Aspirin Tablets ... ..	1	1	—	—	—	—
Baked Beans ... ..	1	1	—	—	—	—
Bacon ... ..	5	5	—	—	—	—
Baking Powder ... ..	8	8	—	—	—	—
Brawn ... ..	10	10	—	—	—	—
Bread ... ..	9	9	—	—	—	—
Bun Flour ... ..	1	1	—	—	—	—
Butter ... ..	15	15	—	—	—	—
Black Pudding ... ..	3	3	—	—	—	—
Castor Oil ... ..	4	4	—	—	—	—
Cheese ... ..	1	1	—	—	—	—
Cocoa ... ..	9	9	—	—	—	—
Cod Liver Oil ... ..	1	1	—	—	—	—
Coffee ... ..	4	4	—	—	—	—
„ and Chicory ... ..	3	3	—	—	—	—
„ Essence with Chicory ... ..	3	3	—	—	—	—
Coffee Essence ... ..	1	1	—	—	—	—
Corned Beef... ..	1	1	—	—	—	—
Confection of Senna ... ..	2	2	—	—	—	—
Corn Flour ... ..	4	4	—	—	—	—
Cream of Tartar ... ..	6	6	—	—	—	—
Custard Powder ... ..	4	4	—	—	—	—
Cherry Ciderade ... ..	2	2	—	—	—	—
Chutney Sauce ... ..	1	1	—	—	—	—
Demerara Sugar ... ..	4	4	—	—	—	—
Dripping ... ..	5	5	—	—	—	—
Faggots ... ..	8	8	—	—	—	—
Fish Paste ... ..	10	10	—	—	—	—
Flour (including Self-raising) ... ..	9	9	—	—	—	—
Fish Cakes ... ..	1	1	—	—	—	—
Ginger Ale ... ..	3	3	—	—	—	—
Ginger Beer ... ..	5	5	—	—	—	—
Glycerine ... ..	2	2	—	—	—	—
Golden Syrup ... ..	4	4	—	—	—	—
Ground Almonds ... ..	8	8	—	—	—	—
Ground Ginger ... ..	6	6	—	—	—	—
Ground Rice ... ..	6	6	—	—	—	—
Gelantine ... ..	1	1	—	—	—	—
Honey ... ..	8	8	—	—	—	—
Ice Cream ... ..	23	23	—	—	—	—
Jam ... ..	14	13	1	—	—	1
Lard ... ..	7	7	—	—	—	—
Lemonade ... ..	1	1	—	—	—	—
Lemonade Powder ... ..	5	5	—	—	—	—
Lemon Squash ... ..	1	1	—	—	—	—
Liquorice Powder Compd. ... ..	3	3	—	—	—	—
Lemon Curd... ..	1	1	—	—	—	—
Margarine ... ..	9	9	—	—	—	—
Meat Paste ... ..	12	12	—	—	—	—
Carried forward ... ..	698	685	13	4	4	9

Samples of	Total Samples.	Genuine.	Not Genuine.	Prosecutions.	Convictions.	Cautions.
Brought forward ...	698	685	13	4	4	9
Mince-meat ... ..	4	4	—	—	—	—
Mint Sauce ... ..	1	1	—	—	—	—
Mustard ... ..	4	3	1	—	—	—
Mustard Mixture ... ..	1	1	—	—	—	—
Meat Roll ... ..	1	1	—	—	—	—
Meat Pie ... ..	1	1	—	—	—	—
Minced Beef... ..	2	2	—	—	—	—
Olive Oil ... ..	1	1	—	—	—	—
Pearl Barley... ..	5	5	—	—	—	—
Pepper (Black) ... ..	5	5	—	—	—	—
Pickles—Onions ... ..	5	5	—	—	—	—
„ Mixed ... ..	2	2	—	—	—	—
Polonies ... ..	1	1	—	—	—	—
Rissoles ... ..	1	1	—	—	—	—
Rochelle Salt ... ..	1	1	—	—	—	—
Rum Essence ... ..	1	1	—	—	—	—
Sausage, Beef ... ..	18	17	1	—	—	1
„ Breakfast ... ..	9	9	—	—	—	—
„ Pork ... ..	12	12	—	—	—	—
„ Luncheon... ..	7	7	—	—	—	—
„ Preserved ... ..	8	8	—	—	—	—
„ Breakfast Preserved	1	1	—	—	—	—
Saveloys ... ..	7	7	—	—	—	—
Shredded or Chopped Beef						
Suet ... ..	4	4	—	—	—	—
Sweets ... ..	24	21	3	—	—	2
Syrup of Figs ... ..	1	1	—	—	—	—
Spice, Ground ... ..	2	2	—	—	—	—
Sugar ... ..	1	1	—	—	—	—
Tea ... ..	12	12	—	—	—	—
Tinned Tomatoes ... ..	1	1	—	—	—	—
Tinned Beans ... ..	6	6	—	—	—	—
Tinned Peas ... ..	12	12	—	—	—	—
Treacle ... ..	5	5	—	—	—	—
Tincture of Rhubarb Comp.	2	2	—	—	—	—
Tinned Asparagus ... ..	2	2	—	—	—	—
Vinegar, Malt ... ..	12	11	1	—	—	1
Whiskey ... ..	6	6	—	—	—	—
Totals ... ..	886	867	19	4	4	13

## 2. Result of Analysis of New Milk Samples.

SOLIDS NOT FAT.\* (Legal standard is 8.5%).

6.9 7.6 7.9 8.3 8.4 8.5\* 8.6 8.7 8.8 8.9 9.0 9.1

1 1 1 1 3 15 33 107 111 92 45 16

9.2 9.3 9.4

4 1 1

Total 432

MILK FAT.* (Legal standard is 3%).														
2.6	2.8	2.9	3.0*	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8			
1	2	4	2	13	33	61	75	81	55	37	22			
					3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.7	5.1	5.5
					17	7	5	3	1	6	4	1	1	1
Total Samples of New Milk ...												432		
												Total 432		

The Samples of Milk (including Separated Milk) for analysis were obtained as follows:—

Country Milk in course of delivery by train to Local Dairymen	6
Country Milk in course of delivery by motor lorry to Local Dairymen ... ..	12
On Milk Rounds (Sundays) ... ..	16
"    "    (Week-days) ... ..	290
Cowsheds ... ..	—
At Shops ... ..	98
Taken at Institutions ... ..	10
"Appeal to Cow" Samples taken at farms outside Borough ...	—
	<b>432</b>

#### AVERAGE COMPOSITION OF NEW MILK SAMPLES.

Solids not Fat ... ..	8.8%
Milk Fat ... ..	3.5%

Percentage of New Milk Samples below legal standard: 2.8%

#### Adulterated Samples.

The following is a detailed statement of the adulterated samples and action taken:—

No.	Sample.	Adulteration or Deficiency.	Remarks.
811.	Boiled Sweets ...	Contained 0.114 per cent. of sulphur dioxide equal to 1140 parts per million by weight.	Wholesalers ordered stock to be withdrawn. Further sample proved genuine.
789.	Blackberry with Apple Jelly Jam (Full Fruit Standard).	Sample contained not more than 15 per cent. of blackberry fruit. Not of Full Fruit Standard.	Manufacturers warned. Further sample proved genuine.
652.	New Milk ...	1 per cent. added ... water.	Vendor warned. Further sample proved genuine.
738.	New Milk ...	Not less than 2 or 3 per cent. of added water.	Vendor warned. Further samples proved genuine.
773.	New Milk ...	4 per cent. deficient in fat.	Vendor warned. Further samples proved genuine.

No.	Sample.	Adulteration or Deficiency.	Remarks.
722.	Mustard	... No notice of admixture given. Sample contained 20 per cent. of wheaten flour.	Vendor removed before result of sample came to hand. Vendor and Manufacturer could not be traced.
820.	Beef Sausage	... Contained a trace of boric acid—too small to admit of quantitative determination.	Vendor warned. Further sample proved genuine.
642.	Malt Vinegar	... Sample was an artificial vinegar, consisting of dilute acetic acid, coloured and flavoured.	Sold as malt vinegar in error. Explanation accepted and warning given. Further sample proved genuine.
966.	New Milk	... 8 per cent. deficient in fat.	See Samples 969 and 971 below.
968.	New Milk	... 2 per cent. deficient in fat.	Vendor warned. Further sample proved genuine.
969.	New Milk	... 6 per cent. deficient in fat.	Taken subsequently in the course of delivery. Warning given. Further sample proved genuine.
971.	New Milk	... 2 per cent. deficient in fat.	
1077.	Boiled Sweets	... Contained sulphur dioxide 0.007 per cent. Equal to 70 parts per million by weight.	Matter take up with manufacturers and warning given.
77.	Boiled Sweets	... Contained sulphur dioxide 0.019 per cent. Equal to 190 parts per million by weight.	Matter take up with manufacturers and warning given.
1147.	New Milk	... 6 per cent. of added water.	Proceedings taken and conviction secured. Vendor fined £5 and costs of £1 5s. 6d. incurred.
1187.	New Milk	... 2 per cent. of added water.	Further sample proved genuine. Vendor warned.
28.	Grade "A" Milk	19 per cent. of added water.	Consignor prosecuted and conviction secured. Fined £2 and costs of £1 16s. incurred.
29.	Grade "A" Milk	11 per cent. of added water.	From same consignor as Sample 28. Proceedings taken and conviction secured. Fined £2 and costs of £1 16s. incurred.
187.	New Milk	... 14 per cent. deficient in fat.	Vendor proceeded against. Conviction secured. Fined £5 5s. and costs of £4 19s. incurred.

## SECTION IV.

## CANCER.

Deaths from Cancer numbered 374 as compared with 341 in 1932; 342 in 1931; 339 in 1930; 330 in 1929; 327 in 1928; 344 in 1927; 330 in 1926; 319 in 1925; 293 in 1924.

Death-rates per 1,000 of the population for the previous 10 years are as follows:—

1923—1.34 (259)	...	1928—1.54 (327)
1924—1.50 (293)	...	1929—1.48 (330)
1925—1.60 (319)	...	1930—1.52 (339)
1926—1.60 (330)	...	1931—1.46 (342)
1927—1.62 (344)	...	1932—1.44 (341)

For 1933 the rate is 1.56 (374).

## Deaths From Cancer in Municipal Wards.

TABLE XXIX.

Ward.	Male.	Female.	Total.	Death-rate	Estimated Population. Mid 1933.	
					Male.	Female.
Upper Norwood	9	26	35	1.56	10122	12258
St. John's	10	12	22	1.37	7240	8753
West Thornton	11	13	24	1.20	9402	10664
Stamham Manor	8	11	19	1.18	7518	8566
Thornton Heath	12	11	23	1.48	7450	8165
South Norwood	12	15	27	1.52	8077	9640
Woolside	10	13	23	1.47	7432	8222
St. George's	17	15	32	1.77	7927	10108
Walscombe	15	12	27	1.87	6688	7770
Whitehorse Mnr	11	15	26	1.55	7995	8759
Wood Green	11	10	21	1.37	7304	8066
Central	11	8	19	1.56	5432	6777
Waddon	11	21	32	1.47	10387	11452
South	10	27	37	2.48	6332	8569
Wimbledon	2	3	5	1.74	1426	1449
Not fixed abode.	1	1	2	—	—	—
Total ...	161	213	374	1.56	110732	129218

TABLE XXX.

Deaths from Cancer occurred at the following ages:—

Age period.	Male.	Female.	Total.	Calculated population at this age period.	Incidence per 1,000 persons living.
Under 25 years ...	1	2	3	100779	.029
25 and under 35 years	2	9	11	35996	.306
35 and under 45 years	7	9	16	38388	.417
45 and under 65 years	68	99	167	47991	3.480
65 years and over ...	83	94	177	16796	10.538
	161	213	374	239,950	1.559

TABLE XXXI.

*Sites of Fatal Cancer.*

Site.	Male.	Female.	Total.	Percentage of Total.
Brain ... ..	—	1	1	0.26
Skin ... ..	3	3	6	1.60
Tongue and Mouth ...	5	2	7	1.87
Lip ... ..	1	—	1	0.26
Oesophagus ... ..	6	4	10	2.67
Stomach ... ..	33	37	70	18.72
Liver ... ..	2	10	12	3.21
Bowel ... ..	23	33	56	14.97
Rectum ... ..	26	9	35	9.36
Bladder ... ..	7	1	8	2.14
Prostate ... ..	10	—	10	2.67
Larynx ... ..	4	1	5	1.34
Uterus ... ..	—	20	20	5.35
Breast ... ..	1	42	43	11.49
Ovary ... ..	—	13	13	3.48
Pancreas ... ..	9	5	14	3.74
Gall Bladder and Duct.	1	9	10	2.67
Bones ... ..	3	4	7	1.87
Mediastinum ... ..	4	—	4	1.07
Lungs ... ..	10	5	15	4.01
Kidneys ... ..	4	3	7	1.87
Glands ... ..	4	5	9	2.41
Other Reproductive ...	2	4	6	1.60
Pharynx ... ..	1	2	3	0.80
Not defined ... ..	2	—	2	0.53
	161	213	374	

### Comments on Foregoing Tables.

(1) Deaths from Cancer increase as age advances; this in accordance with established facts.

(2) Mortality is about evenly distributed between the two sexes at all ages, making allowance for the preponderance of females in the general population.

(3) The two main groups of organs attacked in both sexes are the alimentary system and the reproductive system. In males 73.3% of the total deaths fall within these groups and in females 88.7%. In both sexes Cancer of the digestive system is the commonest situation, amounting to 65.8% in males and 51.1% in females. Cancer of the reproductive system caused 37.5% of the total deaths in females. Cancer of the larynx, tongue and mouth is commoner in males than females, 9 deaths occurring in males as compared with 3 in females. The organs most often attacked in descending order of incidence are, in males the Rectum and Bowels (30.4%); the Stomach (20.5%); the Prostate, and Lungs (6.2%); in females, the Bowels and Rectum (19.7%); the Breast (19.7%); Stomach (17.4%); and the Uterus (9.4%). This is slightly different from the incidence in 1932.

The main incidence of Cancer is, in both sexes, on two groups of organs, both having a common characteristic, namely, periods of active cell degeneration and regeneration.

Although much research has been made and is continuing into the causation of Cancer, the reason why certain cells suddenly become abnormally active and reproduce themselves excessively, with resultant invasion of surrounding tissues, has not yet been elucidated. The Cancer cell is an ordinary tissue cell which has become invested with abnormal properties. Why this should happen is not yet understood.



## SECTION V.

## PREVALENCE AND CONTROL OF INFECTIOUS DISEASE.

Table XXXII gives the figures for ages and wards.

Scarlet Fever was more prevalent than in 1932; the largest incidence has been in East, Upper Norwood, Addiscombe and Waddon Wards. Based on the estimated ward populations, the case rate for these wards was respectively, 471, 371, 432, 275; and 264 per 100,000 of the population. The age group 5-15 years, as usual, suffered most; cases in this group comprising 53.4% of the total.

Diphtheria was also more prevalent than in 1932, most cases occurred in Waddon (43) and Addiscombe (29). Once again the age group 5-15 years gave the highest figures.

Three cases of Small Pox occurred in the Upper Norwood Ward.

There were 13 cases of Puerperal Fever and 39 of Puerperal Pyrexia; 18 occurred in the age group 16-25 years and 34 in the age group 26-45 years. A majority of the cases occurred in women having their first confinement.

The incidence of the commoner infectious diseases in Croydon during the past ten years is of interest.

*Scarlet Fever* has shown a succession of shallow waves of incidence with a distinct trend towards an aggregate increase. The periods of maximum intensity have been in 1924, June and July; 1925, March, April and May; 1926, May, June and July; 1927, April, May and June; 1928, January and February, with another in November and December. 1929, a gradual increase throughout the year without any intermissions. 1930 and 1931, the incidence was relatively constant, with a slight decline in the number of cases in August and September. During 1932 there was a steady increase in cases until the beginning of May when the incidence fell rapidly and remained low until the beginning of a new wave in November. In 1933 the incidence remained fairly steady throughout the year, the highest number of cases notified during a week was 23 (week ending July 22nd) and the lowest 4 (week ending August 19th). The weekly average of cases throughout the year was 10.5, being 2.2 higher than in 1932.

*Diphtheria.*—During 1924 there was a small but steady incidence throughout the year; in 1925 a trough occurred in the curve and very few cases were notified, but towards the end of the year the notifications began to increase steadily, the curve reaching its apex in November and December, 1926; the curve then declined through 1927 until the last quarter, when the trend became upwards once more, reaching its apex in January, 1928, this was followed by a slight fall, followed by a slight rise until December, 1928, when another fall commenced, reaching its minimum in July, 1929, from when the curve rose steadily to its maximum in November. In 1930 Diphtheria was not troublesome, though there was a small rise in the number of cases in October, reaching a maximum of 22 during the week ending October 18th. In 1931 the highest number of cases arose in February and the last two weeks of March. In 1932 there was a slight rise in March, and again in mid September and the end of November. During 1933, there was a steady upward trend in incidence as the year advanced, with only a slight remission during April and May. The weekly average of cases was 4.1 as compared with 2.2 in 1932.

*Whooping Cough.*—From being inconspicuous in 1924, the curve rose gradually to a maximum in May, June and July, 1925, then fell rapidly to a minimum in November and December, then rose very gradually to a lower maximum in September, 1926; once again the curve fell abruptly to a minimum in January, 1927, rose in June and July, and fell again gradually to a minimum in November and December, then rose steadily to the highest level of the period under review in January, 1929, from when it fell steadily to the end of the year. Throughout 1930 it remained quite inconspicuous, until December when there were indications of the commencement of a wave of increased incidence which persisted in 1931 until the end of July, after which the number of cases dropped considerably. December showed a small rise in cases. A wave of increased incidence occurred in 1932, commencing the second week in April and persisting until the end of July. Two small waves showed themselves during 1933, the first commencing early in February and persisting until the beginning of August; the second beginning in late October and continuing until the end of the year.

*Measles* was very prevalent in April and May, 1924, then dropped suddenly, but showed a small rebound during September, October and November, after when it died away until a sudden rise in May, June and July, 1925, and was followed, after a fall, by a further and more prolonged rise from October, 1925, to May, 1926.

During 1927 there was very little Measles in Croydon; a small rise in October, November and December, however, heralded a very big incidence of cases—the highest during the period under review—during the first six months of 1928. Practically no cases occurred after this exacerbation, until March, 1929, but during this month, and April, May and June, 1929, a number of cases occurred from when the incidence dropped away until the end of the year. Another wave of considerable intensity commenced abruptly during the last week of February, 1930, reaching its maximum in the second week of March and dying away gradually until terminating at the end of June. During 1931, Measles was quite inconspicuous; but in 1932 there was a sharp rise in cases the second week in April which reached a maximum in the last week in June, falling then rapidly. The beginning of another wave showed itself at the end of November and the cases were steadily increasing in number for the rest of the year. The measles waves therefore were as follows: the first half of 1924, the second half of 1925, and the first quarter of 1926; first half of 1928, the first half of 1929, the first half of 1930, and the first half of 1932. Measles was rather prevalent during the first quarter of 1933, dropping rapidly during the second quarter and not becoming noticeable again until December. The characteristics of the Measles curves were their abrupt rises and rather less abrupt falls.

*Chicken Pox.*—A small wave of cases occurred during the first half of 1924, followed by a higher wave covering the last quarter of 1924 and the first half of 1925; another irregular wave was experienced during the first half of 1926, followed by a secondary in the last quarter. During 1927 and 1928 there was a fairly high and steady incidence with a peak in October and November, 1927. Another wave came during the latter half of 1929 with its maximum in December; this wave continued into 1930, gradually declining to a minimum at the end of July. Another wave commenced in November and continued until the end of the year. In 1931 Chicken Pox was prevalent until the end of June, when the number of cases declined and remained low until November, when the cases again rose. During 1932 the incidence remained steady until the end of March when a rise occurred, persisting until the end of August. After the vacation the disease practically died out for the remainder of the year. Chicken Pox rose during the first half of the year to reach a maximum early in July. It then dropped rapidly and did not show any signs of recrudescence until the end of November.

*Mumps* occurred in a series of waves from 1924 to 1928 inclusive, but was not at all prevalent in 1929. In 1930, however, a rather severe incidence was noted throughout the first half of the year. In 1931, there was an irregular and gradual decline throughout the year and in 1932 the incidence was very low. The very low incidence of *Mumps* continued during 1933. The waves showed their maxima in March, 1924; May, 1925; March, 1926; May, 1927; March, 1928 and May, 1930, and their minima in September, 1924; September, 1925; September, 1926; and September, 1927.

Year	Month	Incidence
1924	Jan	Low
1924	Feb	Low
1924	Mar	Max
1924	Apr	Low
1924	May	Low
1924	Jun	Low
1924	Jul	Low
1924	Aug	Low
1924	Sep	Min
1924	Oct	Low
1924	Nov	Low
1924	Dec	Low
1925	Jan	Low
1925	Feb	Low
1925	Mar	Low
1925	Apr	Low
1925	May	Max
1925	Jun	Low
1925	Jul	Low
1925	Aug	Low
1925	Sep	Low
1925	Oct	Low
1925	Nov	Low
1925	Dec	Low
1926	Jan	Low
1926	Feb	Low
1926	Mar	Max
1926	Apr	Low
1926	May	Low
1926	Jun	Low
1926	Jul	Low
1926	Aug	Low
1926	Sep	Low
1926	Oct	Low
1926	Nov	Low
1926	Dec	Low
1927	Jan	Low
1927	Feb	Low
1927	Mar	Low
1927	Apr	Low
1927	May	Max
1927	Jun	Low
1927	Jul	Low
1927	Aug	Low
1927	Sep	Low
1927	Oct	Low
1927	Nov	Low
1927	Dec	Low
1928	Jan	Low
1928	Feb	Low
1928	Mar	Max
1928	Apr	Low
1928	May	Low
1928	Jun	Low
1928	Jul	Low
1928	Aug	Low
1928	Sep	Low
1928	Oct	Low
1928	Nov	Low
1928	Dec	Low
1929	Jan	Low
1929	Feb	Low
1929	Mar	Low
1929	Apr	Low
1929	May	Low
1929	Jun	Low
1929	Jul	Low
1929	Aug	Low
1929	Sep	Low
1929	Oct	Low
1929	Nov	Low
1929	Dec	Low
1930	Jan	Low
1930	Feb	Low
1930	Mar	Low
1930	Apr	Low
1930	May	Max
1930	Jun	Low
1930	Jul	Low
1930	Aug	Low
1930	Sep	Low
1930	Oct	Low
1930	Nov	Low
1930	Dec	Low
1931	Jan	Low
1931	Feb	Low
1931	Mar	Low
1931	Apr	Low
1931	May	Low
1931	Jun	Low
1931	Jul	Low
1931	Aug	Low
1931	Sep	Low
1931	Oct	Low
1931	Nov	Low
1931	Dec	Low
1932	Jan	Low
1932	Feb	Low
1932	Mar	Low
1932	Apr	Low
1932	May	Low
1932	Jun	Low
1932	Jul	Low
1932	Aug	Low
1932	Sep	Low
1932	Oct	Low
1932	Nov	Low
1932	Dec	Low
1933	Jan	Low
1933	Feb	Low
1933	Mar	Low
1933	Apr	Low
1933	May	Low
1933	Jun	Low
1933	Jul	Low
1933	Aug	Low
1933	Sep	Low
1933	Oct	Low
1933	Nov	Low
1933	Dec	Low

TABLE XXXII.  
CASES OF NOTIFIED INFECTIOUS DISEASE, 1933

Notifiable Disease.	Cases notified in the whole District.								Total cases notified in each Ward.													Total cases removed to Borough Hospital.	Total Deaths in the Borough.	1932.					
	At all Ages.	At ages—years.							Upper Norwood.	Norbury	West Thornton.	Pensham Manor.	Thornton Heath.	South Norwood.	Woodside.	East.	Addiscombe.	Whitehorse Manor.	Broad Green.	Central.	Waddon.			South.	Addington.	M	F		
		Under 1 year.	1-5	6-15	16-25	26-45	46-65	66 and up.																					
Small Pox ... ..	3	...	...	3	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Cholera ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diphtheria (inc. Membranous Croup) ... ..	222	1	57	111	26	23	4	...	16	8	20	8	15	19	14	9	29	19	12	3	42	4	4	4	225	17	54	62	
Erysipelas ... ..	105	2	1	10	11	40	27	14	2	9	27	5	9	4	3	6	3	7	5	3	14	4	...	...	...	8	32	43	
Scarlet Fever ... ..	633	6	169	338	65	45	10	...	83	24	37	29	37	28	35	85	62	56	39	18	60	38	2	533	...	199	242		
Typhus Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Enteric Fever (including Paratyphoid) ... ..	24	...	3	10	6	5	...	...	3	1	3	...	1	...	...	6	1	...	4	...	3	2	...	...	...	...	7	5	
Puerperal Fever ... ..	13	...	...	...	5	8	...	...	...	1	3	2	1	...	...	1	1	...	2	1	1	...	...	...	14	7	...	13	
Puerperal Pyrexia ... ..	39	...	...	...	13	26	...	...	2	1	19	1	...	2	3	...	1	4	1	1	1	1	1	...	...	...	...	33	
Cerebro-Spinal Meningitis ... ..	3	...	1	1	1	...	...	...	...	...	2	...	...	...	...	...	...	...	1	...	...	...	...	...	3	2	7	2	
Ophthalmia Neonatorum ... ..	10	10	...	...	...	...	...	...	2	...	4	1	...	...	...	1	1	...	...	...	...	1	...	...	...	2	...	14	7
Poliomyelitis ... ..	4	...	2	2	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	1	...	...	...	4	1	5	1	
Encephalitis lethargica ... ..	3	...	...	...	2	1	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...	2	1
Dysentery ... ..	12	...	4	7	...	...	...	...	3	...	7	...	2	...	...	...	...	...	...	...	...	...	...	...	...	8	...	...	...
Malaria ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ac. Primary and Ac. Inf. Pneumonia ... ..	73	2	4	10	9	27	13	8	9	1	20	3	3	6	4	4	5	7	2	1	3	5	...	...	...	...	...	...	...
Polio Encephalitis ... ..	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...

\*Influenzal Pneumonia only.

†Not accommodated at Borough Hospital.

TABLE XXXIII.

Notified Disease.	Incidence Rate per 1,000 population.		Housing Conditions.			Case occurring in Institutions in the Borough.	Total cases notified.
	1933	1932	1-3 rooms.	4-5 rooms.	Over 5 rooms.		
Small Pox ... ..	0.012	0.004	—	3	—	—	3
Diphtheria ... ..	0.92	0.49	2	178	7	35	222
Erysipelas ... ..	0.44	0.32	1	70	7	27	105
Scarlet Fever ... ..	2.65	1.88	7	489	49	88	633
Enteric Fever (inc. Paratyphoid) ... ..	0.096	0.051	—	15	3	6	24
Puerperal Fever ... ..	0.054	0.055	—	8	—	5	13
Puerperal Pyrexia ... ..	0.162	0.141	—	12	1	26	39
Cerebro-Spinal Meningitis ... ..	0.012	0.038	—	—	—	3	3
Ophthalmia Neonatorum ... ..	0.042	0.09	—	6	—	4	10
Poliomyelitis ... ..	0.016	0.025	—	2	1	1	4
Encephalitis Lethargica ... ..	0.012	0.0125	—	2	—	1	3
Acute Primary or Acute Influenzal Pneumonia ... ..	0.305	0.47	1	47	5	20	73
Dysentery ... ..	0.048	—	—	5	—	7	12
Polioencephalitis ... ..	0.004	—	—	—	—	1	1

The highest incidence of notifiable infectious diseases was in houses of 4-5 rooms. The 1931 Census showed that houses of 1-3 rooms formed 4.7% of the total number of houses; those of 4-5 rooms 51.4% and those with over 5 rooms 43.9%.

TABLE XXXIV.  
SCARLET FEVER.

YEAR	Cases notified in Croydon.	Attack Rate Per 100,000 of Population.	No. of Deaths.	Percentage of Deaths to Cases notified.	All Cases Admitted to Hospital with a Diagnosis of Scarlet Fever.		
					No. Admitted.	No. of Deaths.	Percentage of Deaths to Cases Treated*
1	2	3	4	5	6	7	8
1908	534	338	5	.9	497	8	1.6
1909	727	451	9	1.2	608	11	1.8
1910	759	454	7	.9	624	7	1.1
1911	468	274	7	1.5	377	5	1.3
1912	476	273	2	.4	365	4	1.09
1913	470	263	3	.6	411	4	.9
1914	748	411	5	.6	638	5	.7
1915	414	233	5	1.2	391	4	1.02
1916	297	169	4	1.3	283	6	2.1
1917	191	102	2	1.05	196	2	1.02
1918	414	219	6	1.4	376	8	2.1
1919	603	314	11	1.8	522	11	2.1
1920	638	332	7	1.09	535	8	1.4
1921	855	446	4	.4	720	4	.5
1922	800	416	6	.7	691	6	.8
1923	379	195	2	.5	340	...	...
1924	289	147	2	.6	237	2	.8
1925	347	174	1	.2	248	2	.8
1926	525	254	...	..	409	...	...
1927	717	338	3	.4	686	3	.4
1928	552	259	4	.7	574	8	1.3
1929	759	335	4	.54	714	3	0.42
1930	681	306	2	.29	679	2	0.29
1931	527	225	3	.57	528	2	0.38
1932	441	186	1†	.23	387	1	0.26
1933	633	264	...	...	599	1	0.17

\*Cases admitted to the Borough Hospital from Penge are included in arriving at the figures in Cols. 6 to 8.

†Death not due to Scarlet Fever.

There was an increase in the number of cases notified and admitted to Hospital in 1933 as compared with 1932. The type was mild and the case mortality was nil. The attack rate (Col. 3) for England and Wales was 321. Croydon shows a lower figure.

TABLE XXXV.

## DIPHTHERIA.

YEAR.	Cases notified in Croydon.	Attack Rate Per 100,000 of Population.	No. of Deaths.	Percentage of Deaths to Cases notified.	All Cases Admitted to Hospital with a diagnosis of Diphtheria.		
					No. Admitted.	No. of Deaths.	Percentage of Deaths to Cases Treated*
1	2	3	4	5	6	7	8
1908	405	256	37	9.1	354	29	8.2
1909	356	220	24	6.7	292	24	8.2
1910	267	159	21	7.8	222	15	6.7
1911	514	301	37	7.2	430	35	8.1
1912	767	440	25	3.2	600	22	3.6
1913	451	253	16	3.5	389	13	3.3
1914	226	124	18	7.9	186	19	10.2
1915	195	109	14	7.1	188	8	4.2
1916	312	177	4	1.2	303	15	4.9
1917	191	102	9	4.7	194	8	4.1
1918	179	94	2	1.1	168	21	1.3
1919	429	223	36	8.3	388	38	7
1920	558	290	26	4.6	529	21	3.9
1921	483	252	23	4.7	451	24	5.3
1922	358	186	27	7.5	329	21	6.3
1923	196	101	21	10.7	202	18	8.9
1924	222	113	8	3.6	196	7	3.5
1925	104	52	8	7.6	114	11	9.6
1926	321	155	32	9.9	321	28	8.7
1927	262	123	10	3.8	300	8	2.6
1928	476	224	32	6.7	493	31	6.2
1929	435	194	23	5.3	470	23	4.9
1930	394	177	14	5.3	462	12	2.6
1931	221	94	5	2.2	219	7	3.2
1932	116	49	9	7.8	162	9	5.6
1933	222	93	17	7.7	236	18	7.6

\*Cases from Penge are included in Cols. 6 to 8.



The incidence of diphtheria showed a considerable increase in 1933, and the mortality was 7.7%. The type of the disease was moderately severe.

Thirty-four cases of bacteriological Diphtheria were admitted but these are not included as diphtheria as they exhibited no clinical symptoms.

The case rate (Col. 3) for England and Wales was 118. Croydon's rate is therefore lower than for the whole country.

### BOROUGH HOSPITAL

The table below gives a summary of all cases treated in Hospital in 1933, 1,128 patients were admitted and discharged during the year, whilst including patients in at the commencement of 1933 (111) 1,239 cases were dealt with. Thirty-six died, giving a case mortality for the whole hospital of 3.1%, an increase of 0.3% over 1932.

The average number of days of each patient in hospital for all classes of patients was 31.2 as against 30.9 in 1932.

Penge Urban District Council has an agreement with the Corporation to send their cases to the hospital. During 1933 a total of 80 cases were admitted from this district, these cases are included in the table.

The hospital is a recognised training school for fever nurses and during the year 4 probationers passed the preliminary and 2 the final examination of the General Nursing Council.

The accommodation in the hospital remained as for 1932.

The new operating theatre was put into use during the year and twelve cases were operated upon for removal of tonsils and adenoids, one case for acute mastoiditis and one for empyema.

Complaint for which Admitted.	Patients remaining in Hospital on Jan. 1st, 1933.			Patients admitted and discharged in 1933.			Patients remaining in Hospital on Jan. 1st, 1934.			Analysis of all Cases admitted in 1933 whether discharged or not during the year.				
	Total.	Recovered	Died.	Total.	Recovered	Died.	Total.	Recovered	Died.	Total	Recovered	Died.	Case Mortality.	Average No. of days in Hospital.
Scarlet Fever ... ..	69	68	1	599	509	1	89	89	...	599	598	1	0.2	40.6
Diphtheria ... ..	18	18	...	236	185	16	35	33	2	236	218	18	7.6	31.0
Typhoid Fever ... ..	1	1	...	8	7	...	1	1	...	8	8	...	...	37.5
Paratyphoid Fever ... ..	...	...	...	10	10	...	...	...	...	10	10	...	...	30.7
Erysipelas ... ..	2	2	...	62	54	3	5	5	...	62	59	3	4.8	14.1
Measles ... ..	13	13	...	68	60	7	1	1	...	68	61	7	10.0	22.1
Puerperal Fever ... ..	2	2	...	14	10	4	...	...	...	14	10	4	28.6	30.0
Puerperal Pyrexia ... ..	...	...	...	1	1	...	...	...	...	1	1	...	...	30.0
Encephalitis Lethargica ... ..	...	...	...	5	3	2	...	...	...	5	3	2	40.0	15.0
Whooping Cough ... ..	1	...	1	16	15	...	1	1	...	16	16	...	...	34.4
Cerebro-Spinal Meningitis ... ..	2	1	1	3	2	1	...	...	...	3	2	1	33.3	39.0
Chicken Pox ... ..	1	1	...	51	51	...	...	...	...	51	51	...	...	21.8
Mumps ... ..	1	1	...	9	9	...	...	...	...	9	9	...	...	20.4
Ophthalmia Neonatorum ... ..	...	...	...	2	2	...	...	...	...	2	2	...	...	15.6
Infantile Palsy ... ..	...	...	...	4	4	...	...	...	...	4	4	...	...	16.5
Pemphigus ... ..	...	...	...	1	...	1	...	...	...	1	...	1	100.0	3.0
White Leg ... ..	...	...	...	2	2	...	...	...	...	2	2	...	...	17.0
Typhoid Carriers ... ..	...	...	...	3	3	...	...	...	...	3	3	...	...	20.5
Dysentery (Flexner type)... ..	...	...	...	8	8	...	...	...	...	8	8	...	...	18.4
Vincent's Angina ... ..	...	...	...	1	1	...	...	...	...	1	1	...	...	34.0
Septicaemia* ... ..	...	...	...	1	...	1	...	...	...	1	...	1	100.0	4.0
German Measles ... ..	...	...	...	5	5	...	...	...	...	5	5	...	...	13.5
No Disease ... ..	1	1	...	19	19	...	...	...	...	19	19	...	...	...
Total ... ..	111	108	3	1128	960	36	132	130	2	1128	1090	38	...	...

\*This was really a case of lobar pneumonia.

TABLE XXXVI.

### SCARLET FEVER.

The total number of cases of Scarlet Fever admitted during the year was 599, an increase of 212 on 1932.

533 cases were admitted from the Borough and 66 cases from Penge. The type of disease during the year was of average severity there being a fair number of adult cases as is shown in the subsequent table. There were three return cases.

The following complications and sequelae occurred amongst the 580 true cases of the disease of whom 208 received serum treatment:—

	Serum cases.	Non-serum cases.
Adenitis ...	19 (9.1%)	30 (8.1%)
Otorrhœa ...	15 (7.2%)	31 (8.3%)
Rhinorrhœa ...	16 (7.7%)	26 (7.0%)
Albuminuria ...	—	2 (0.54%)
Nephritis ...	1 (0.48%)	1 (0.27%)
Rheumatism ...	2 (0.96%)	3 (0.8%)
Relapses ...	—	1 (0.27%)
Secondary Sore		
Throat ...	1 (0.48%)	3 (0.8%)
Abscesses and boils	1 (0.48%)	5 (1.35%)
Endocarditis ...	1 (0.48%)	—
Septicaemia ...	—	1 (0.27%)
Retro-pharyngeal abscess ...	—	1 (0.27%)
Quinsy ...	1 (0.48%)	2 (0.53%)
<b>Total ...</b>	<b>57 (27.4%)</b>	<b>106 (28.5%)</b>

Average stay in Hospital: Serum cases, 41.2 days; non-serum cases, 40.1 days.

Complications: Serum cases, 26.8%; non-serum cases, 25.6%.

11 cases sent in as Scarlet Fever were found not to be suffering from the disease, whilst 8 others were not cases of Scarlet Fever but as follows:—

Measles	...	...	...	...	3
Pneumonia	...	...	...	...	2
Diphtheria	...	...	...	...	1
Tonsillitis	...	...	...	...	1
Eczema	...	...	...	...	1

No deaths occurred amongst the Scarlet Fever cases. One fatal case admitted as Scarlet Fever was really a Puerperal Septicaemia.

### Ages and Sexes of Scarlet Fever Patients Admitted.

The following table shows the ages and sexes of Scarlet Fever patients admitted:—

TABLE XXXVII.

Age.	Males.	Females.	Totals.	
0—1	2	1	3	} Pre-school period 23.8 %
1—2	9	12	21	
2—3	19	6	25	
3—4	11	18	29	
4—5	29	31	60	
5—10	109	119	228	} School period 59 %
10—15	46	68	114	
15—20	16	20	36	} Post-school period 17.2 %
20—30	10	28	38	
30 & over	7	19	26	
Total 1933	258	322	580	
Total 1932	179	208	387	

### Monthly Admissions of Scarlet Fever Patients to the Hospital.

TABLE XXXVIII.

Month.	Cases admitted.		Cases notified.
	1932.	1933.	
January ..	33	44	53
February ..	27	47	54
March ..	39	51	50
April .. ..	40	40	47
May .. ..	37	58	64
June .. ..	18	49	51
July .. ..	22	55	56
August ..	19	24	26
September .	17	44	45
October ..	37	52	47
November .	44	58	62
December .	54	77	78
Total ..	387	599	633

Only one true relapse occurred, in a girl aged 6, admitted on 3rd day of disease, the relapse was on 29th day. She was not given serum.

## DIPHTHERIA.

236 cases were admitted with a diagnosis of diphtheria, an increase of 74 cases on 1932. Of these 12 were found not to be cases of diphtheria and 34 were positive swabs without clinical symptoms, leaving 190 cases of true diphtheria as against 115 true cases in 1932.

Analysis of the 190 diphtheria cases:—

Faucial diphtheria	...	...	...	...	153
Nasal diphtheria	...	...	...	...	19
Laryngeal diphtheria	...	...	...	...	15
Faucial and nasal diphtheria	...	...	...	...	2
Faucial and laryngeal diphtheria	...	...	...	...	1
					<hr/>
					190
					<hr/>

Of the 15 laryngeal cases tracheotomy was necessary in 7 cases and 4 died, one being moribund on admission, and two dying subsequently from heart failure and intercurrent disease.

The following complications and sequelæ occurred amongst the diphtheria patients:—

Adenitis	...	...	11	Quinsy	...	...	3
Otorrhœa	...	...	6	Paralysis: Ocular	...	...	3
Rhinorrhœa	...	...	15	Paralysis: Palatal	...	...	5
Secondary sore throat	...	...	12	Paralysis diaphragm and intercostals	...	...	1
Albuminuria	...	...	3	Paralysis: Facial	...	...	1
Cardiac failure	...	...	12				

In 5 cases the disease was not confirmed and 7 were other diseases, viz:—

1 bronchitis.	1 measles.
3 tonsillitis.	1 simple laryngitis.
1 pneumococcal septicæmia.	

## Ages and Sexes of Diphtheria Cases Admitted.

TABLE XXXIX.

	Age.	Males.	Females.	Totals.	Deaths.	Mor- tality. %
Pre-school period, 23.7 %	0—1	2	—	2	1	50.0
	1—2	2	3	5	—	—
	2—3	8	3	11	2	18.2
	3—4	8	6	14	2	14.3
School period, 54.2 %	4—5	8	5	13	1	7.7
	5—10	42	30	72	4	5.6
Post-school period 22.1 %	10—15	12	19	31	1	3.2
	15—20	6	5	11	2	18.2
	20—30	5	14	19	—	—
	30 & over	3	9	12	1	8.3
Total 1933		96	94	190	14	7.4
Total 1932		84	78	162	9	5.5

The type of diphtheria which occurred in 1933 was rather more severe than in 1932. The death rate has shown a steady increase during the past three years.

## Admissions of Diphtheria Cases to the Borough Hospital in 1933.

TABLE XL.

Month.	Cases notified.	Cases admitted.	
		1933.	1932.
January ..	19	19	4
February ..	11	12	16
March ..	21	16	16
April .. ..	10	16	22
May .. ..	9	8	10
June .. ..	14	17	9
July .. ..	17	17	10
August ..	16	17	15
September .	22	29	14
October ..	30	30	13
November .	27	28	23
December .	26	27	10
Total ..	222	236*	162†

†Including 16 cases from Penge.

\*Including 11 cases from Penge.

Among the cases admitted are patients who had positive swab results but showed no clinical symptoms and were not notified as diphtheria.

TABLE XLI.

## Particulars of Fatal Cases.

<i>Name.</i>	<i>Day of Disease.</i>	<i>Condition on Admission.</i>	<i>Subsequent progress.</i>	<i>Date of Death Days after Admission.</i>
(1) C.W. (F.) 45 years.	2	Cyanosed; sloughing membrane over whole pharynx; glands of neck + +; wandering. Received no serum before admission.	Condition grew progressively worse; died on 3rd day in semi-coma.	3 days.
(2) R.P. (F.) 34 years.	6	Sloughing membrane over whole pharynx; glands enlarged; signs of acute bronchopneumonia; cyanosed.	Increasing heart failure with rapid irregular pulse.	21 hours.
(3) C.S. (F.) 6 years.	3	Croupy; aphonia, some recession; colour poor; pulse weak and rapid; throat clean. Received no serum before admission. Laryngeal.	Increasing heart failure; death within 10 hours of admission.	10 hours.
(4) R.C. (M.) 3½ years.	5	Croupy; membrane over both tonsils; glands of neck + +; some recession. Received no serum before admission. Laryngeal.	Owing to increasing restlessness tracheotomy performed with relief. Had a heart attack in early morning and collapsed suddenly 1½ hours later.	19 hours.
(5) H.H. (F.) 2 8/12 yrs.	4	Cyanosed; bleeding from lips; membrane over both tonsils; Bull neck; showed signs of heart failure on admission. Received no serum before admission.	Condition grew steadily worse; collapsed suddenly on 5th day after admission.	5 days.
(6) R.S. (M.) 16 years.	5	Throat covered with membrane; Bull neck; profuse rhinorrhoea; restless. Received 16,000 A.D.S. day before admission.	Condition steadily worse; oedema of throat; heart sounds weak and rapid. Collapsed on 4th day after admission.	4 days.

<i>Name.</i>	<i>Day of Disease.</i>	<i>Condition on Admission.</i>	<i>Subsequent progress.</i>	<i>Date of Death Days after Admission.</i>
(7) W.T. (M.) 5 years.	2	Croupy; bilateral recession; cyanosis; throat clean; tonsils + +. Received no serum before admission.	Tracheotomy performed owing to increasing obstructions, with relief, soon after admission. Developed signs of pneumonia and collapsed on 3rd day.	3 days.
(8) M.H. (M.) 2 2/12 yrs.	6	Sloughing membrane over whole pharynx; rhinorrhoea + +; foetor glands of neck + +; heart failure on admission.	Severe epistaxis 2nd day after admission; very restless at times. Collapsed suddenly on 2nd day after admission.	2 days.
(9) C.C. (M.) 6 years.	4	Whole pharynx covered with membrane; difficulty of breathing. Received no serum before admission.	Tracheotomy performed soon after admission, but patient died soon after; moribund on admission.	10 hours.
(10) R.G. (M.) 16 years.	4	Extensive membrane over pharynx, and oedema; Bull neck; cyanosis; foetor; signs of heart failure. Received no serum before admission.	Died by progressive heart failure 3 hours after admission.	3 hours.
(11) L.G. (M.) 8½ years.	7	Membrane over both tonsils; blood-stained rhinorrhoea. Received no serum before admission.	Developed signs of heart failure day after admission which was progressive until death.	8 days.
(12) J.R. (F.) 3 11/12 yrs.	3	Extensive membrane over whole throat; Bull neck; colour poor; toxic; signs of heart failure. Received no serum before admission.	Rapidly increasing heart failure; died same night.	9 hours.
(13) M.P. 11 years.	3	Extensive membrane over whole throat. Bull neck. rhinorrhoea + +; toxic. Received no serum before admission.	Condition grew steadily worse, and patient collapsed a few hours after admission.	3½ hours.
(14) M.C. (F.) 6 years.	1 (?)	Croupy; some recession; colour poor; pulse weak and rapid. Received no serum before admission. Laryngeal.	Sudden heart attack during night and collapsed.	8 hours



Only three cases had received serum before admission.

Intra-muscular injections of serum between 24,000—72,000 units were given to cases. One case received 20,000 units intravenously.

The beneficial effect of large doses of serum when given late was less marked than when given at the onset of the disease, the patient having already absorbed large doses of toxin in the system which, becoming fixed in the tissue cells, cannot be neutralised by the anti-toxin administered. This was the cause of the rapid onset of heart failure.

### Enteric Fever.

Eight cases of enteric fever and 10 cases of para-typhoid B were admitted compared with 3 enteric and 5 para-typhoid patients in 1932.

The following is an analysis of the cases.

Sent in as enteric and diagnosis confirmed ... ..	7
Sent in as enteric and really tubercular meningitis ...	1
Sent in as para-typhoid B and diagnosis confirmed ...	9
Sent in as paratyphoid B and really bac. coli infection	1
	—
	18
	—

The cases were of moderate severity. The one death was due to tubercular meningitis and not typhoid fever.

### Puerperal Fever and Pyrexia.

Thirteen cases were sent in as Puerperal Fever: of these

1 was a case of influenza only.

1 a case of constipation only.

1 a case of ante-partum hæmorrhage and thrombo-phlebitis of femoral vein.

1 a case of abortion and septicæmia.

In 9 cases the diagnosis was confirmed.

One case of puerperal pyrexia was sent in and the diagnosis was confirmed.

Four deaths occurred amongst the puerperal fever cases; one due to thrombo-phlebitis of femoral vein and ante-partum hæmorrhage, and three were severe cases of general septicæmia, one following abortion.

### **Erysipelas.**

There were 62 cases of erysipelas admitted, an increase of 23 cases on 1932. The disease was of a particular severity as a whole. Three deaths occurred. One was a case of cancer of jaw complicated by erysipelas and two were senile cases in whom the erysipelas was a terminal condition.

### **Measles.**

There were 68 cases of measles, a decrease of 90 on 1932. The disease was of average severity and there were six fatal cases, due to broncho-pneumonia. All occurred in young children, the eldest being five years old.

### **Whooping Cough.**

Fifteen cases of whooping cough were admitted, a decrease of 33 on 1932. The disease was mild as a whole and no fatal cases occurred.

### **Cerebro-Spinal Meningitis.**

Three cases only of this disease were admitted and the diagnosis was confirmed: one case proved fatal.

### **Encephalitis Lethargica.**

Four cases were admitted: in three cases the diagnosis was confirmed. The fatal case was a post-influenzal encephalitis.

### **Infantile Paralysis (Poliomyelitis).**

Four cases were admitted: of these one was a case of chorea and not of infantile paralysis. No deaths occurred.

### **Dysentery.**

Eight cases were admitted from Mayday Hospital. The organism isolated from the stools being of the Flexner type. The cases were all mild in character and recovered rapidly.

**Ophthalmia Neonatorum.**

Two cases were admitted, but only in one was the diagnosis confirmed; the other was a case of simple ophthalmia.

**Other Diseases.**

TABLE XLII.

DISEASE	0-1		1-2		2-5		5-15		15-25		25-35		35-45		45 & up.		Totals	Deaths
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
Enteric Fever ...	...	...	...	...	...	2	3	1	...	2	...	...	...	...	...	...	8	...
Paratyphoid B. ...	...	...	...	...	...	2	3	...	...	1	...	3	...	1	...	...	10	...
Puerperal Fever...	...	...	...	...	...	...	...	...	...	3	...	6	...	5	...	...	14	4
Puerperal Pyrexia ...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...
Erysipelas ...	1	...	...	...	...	1	1	2	2	2	1	11	12	4	18	7	62	3
Measles ...	6	4	6	7	17	13	5	4	1	1	2	2	...	...	...	...	67	7
German Measles ...	...	...	...	...	...	1	2	2	...	...	...	...	...	...	...	...	5	...
Encephalitis Lethargica ...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	2	1	5	2
Cerebro-Spinal Meningitis ...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	...	3	1
Whooping Cough ...	3	3	3	1	2	4	...	...	...	...	...	...	...	...	...	...	16	...
Chicken Pox ...	2	1	1	2	16	16	4	7	1	1	...	...	...	...	...	...	51	...
Ophthalmia Neonatorum ...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
Mumps ..	...	...	...	...	...	...	3	1	4	...	...	...	...	...	...	1	9	...
Septicemia*	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1
Infantile Ictery	...	...	1	...	1	2	...	...	...	...	...	...	...	...	...	...	4	...
Pemphigus ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
White Leg ...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	2	...
Typhoid Carriers ...	...	...	...	...	...	...	1	1	...	...	...	...	...	1	...	...	3	...
Vincent's Angina ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Dysentery ...	...	...	...	...	1	3	2	1	...	...	...	...	...	...	...	1	8	...
No disease ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19	...
Totals ...	14	9	11	10	37	44	26	19	10	11	3	24	12	13	21	10	292	18

\* This was really a case of Lobar Pneumonia.

TABLE XLIII.

## Out of Borough Cases.

Disease.	Males.	Females.	Totals.	Deaths.
Scarlet Fever ...	34	32	66	—
Diphtheria ...	5	6	11	1
Puerperal Fever...	—	2	2	—
Baby with Mother	—	1	1	—

## Croydon Borough Hospital Laboratory Report.

TABLE XLIV.

## DIPHTHERIA.

Nose and Throat swabs examined.			
New cases swabbed on admission.	Convalescent Cases.	Negatives.	Total.
+	+	—	
81	96	3,281	3,458

## FÆCES EXAMINED FOR DYSENTERY.

—	+	Total.
15	—	15

## FÆCES EXAMINED FOR ENTERIC GROUP.

—	+	Total.
26	—	26

## DREYER'S AGGLUTINATION TEST FOR ENTERIC GROUP.

—	+	Total.
3	3	6

1—Positive B. Typhoid. 2—Para.-Typhoid B.

**Other Examinations.**

Specimens of blood for culture 8.

2 Fluids Weichselbaum's Diplococcus obtained in pure culture.

3 specimens Pneumococcus obtained in pure culture.

1 specimen Para Typhoid B obtained in pure culture.

2 specimens were proved sterile.

Specimens of Pus for Organisms.

5 specimens Streptococcus obtained.

Cerebro Spinal Fluids: 5 examined.

2 Fluids Weichsebaum's Diplococcus obtained in pure culture.

1 Fluid B. Tuberculosis seen in stained smear from fluid.

2 Fluids were proved sterile.

Eye swabs for examination: 2.

1 eye swab proved positive for Gonorrhœa.

1 eye swab Streptococcus brevis obtained.

Fluids from chests for examination: 2.

Urines cultured for organisms: 8.

Specimens of Lochia examined for Hæmolytic Streptococcus: 3.

2 specimens Hæmolytic Streptococcus obtained in pure culture.

1 specimen was proved to be sterile.

**Culture Media.**

Leoffler's Blood Serum: 250 doz. tubes.

Agar Agar: ... ..	4,300cc
Peptone Broth ... ..	3,300cc
Litmus Milk ... ..	400cc
Peptone Water ... ..	900cc
Hiss' Serum Water ... ..	150cc

## BACTERIOLOGICAL EXAMINATIONS.

I am indebted to the Borough Pathologist, Dr. H. W. Southgate, for the figures given in the appended tables:—

TABLE XLV.  
I. At the Laboratory, Croydon General Hospital.

	For private practitioners		Mayday Hos.		For Borough Hospital		For Tub. Dispensary		For School Medical		Other Instns. of Corporation		Other Institutions		Total	
	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Swabs for Diphtheria ...	111	1336	7	144	...	...	...	3	60	2559	...	5	8	248	186	4295
Virulence tests for Diphtheria ...	..	..	...	1	...	...	...	...	2	5	...	1	2	...	4	7
Sputum for Tub. Bac. ...	112	569	166	205	...	...	256	379	...	...	...	1	13	88	547	1242
Pus for Tub. Bac. ...	...	2	6	450	...	...	...	...	...	...	...	40	...	...	6	492
Pus for Gonococci ...	...	...	17	71	...	...	...	...	...	...	4	67	...	...	21	138
Pus for other organisms ...	...	2	...	494	...	...	...	...	...	...	...	...	...	44	...	540
Blood for Typhoid Groups ...	7	19	4	10	...	...	...	...	...	...	...	...	4	1	15	30
Blood for Wassermann ...	...	1	26	116	...	...	...	2	...	...	...	1	...	2	26	122
Material for Spirochaetes ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...
Faeces for Typhoid Group ..	3	5	7	27	...	1	...	...	...	...	1	10	...	...	11	43
Hair for Ringworm ...	...	1	5	4	...	...	...	...	...	...	3	2	...	1	8	8
Examination of Urine ...	2		282		...		...		...		38		...		322	
Examination of Pleural Fluid	...		30		...		...		...		...		...		30	
Examination of C.S. Fluid ...	...		25		...		...		...		1		...		26	
Other Examinations ...	...		467		4		...		...		32		7		510	

## Examinations Done Under National Health Insurance Act.

TABLE XLVI.

<i>Nature of Examination.</i>		<i>Nature of Examination.</i>	
Pus for Gonococci ...	10 (5 pos.)	Urine for Chemical Exam. ...	3
Pus for other organisms	7	Urine for Microscopical Exam. ...	3
Pus for Tubercle B. ...	6	Urine for Tubercle B. ...	3
Blood for Wassermann ...	24 (4 pos.)	Urine for Cultural Exam. ...	3
Complete Blood counts ...	5	Other Examinations ...	11

## Bacteriological Examination of Milk.

TABLE XLVII.

<i>Number of Samples submitted for Counts</i> ...	517
Number under 10,000 per cc ...	224
No. over 10,000 but under 50,000 per cc ...	129
Over 50,000 but under 100,000 per cc ...	50
Over 100,000 but under 500,000 per cc ...	65
Over 500,000 but under 1,000,000 per cc ...	18
Over 1,000,000 per cc ...	31

### *Bacillus Coli Content—*

Not found in 0.1 cc ...	243
„ „ 0.01 cc ...	117
„ „ 0.001 cc ...	63
Present in 0.001 cc ...	94
Higher dilutions not made.	

### *Tubercle Bacilli—*

No. of samples of milk submitted ...	517
No. found positive by inoculation test ...	18

## VACCINATION ACTS.

I am indebted to Mr. Huggins, the Vaccination Officer, for the particulars in the returns in subjoined Table.

TABLE XLVIII.

Registration Sub-Districts in V.O. District.	Births Registered.	Vaccinated.	Insusceptible	Statutory Declarations.	Died Un- vaccinated.	P.P.O.	Transferred to other V.Os.	Not traced Removals.	In Default.	Overage when Registered.
South Sub-District ...	916	330	9	371	34	17	46	20	89	...
West „ ...	1849	523	6	898	71	26	11	38	275	1
North „ ...	686	248	8	280	19	8	10	8	104	1
	3451	1101	23	1549	124	51	67	66	468	2

During the year 2,095 Forms Q were sent to parents, and 501 Forms K. Form Q is the form drawing attention to the requirements of the Vaccination Acts and Form K refers to cases in default.

1,074 names were sent on the H lists to Public Vaccinators to be visited.

Return showing the Numbers of Persons vaccinated and re-vaccinated at the cost of the Rates by the Medical Officer of the Poor Law Institutions and the Public Vaccinators during the year ended 30th September, 1933:—

TABLE XLIX.

<i>Name of Poor Law Institution or Vaccination District.</i>	<i>Numbers of successful Primary Vaccinations of persons.</i>			<i>No. successful re-vaccinations, i.e., successful vaccinations of persons who had been successfully vaccinated at some previous time.</i>
	<i>Under 1 year of age.</i>	<i>1 year and upwards.</i>	<i>Total.</i>	
Croydon No. 1 Area ...	100	9	109	8
No. 2 Area ...	159	15	174	9
No. 3 Area ...	69	4	73	6
No. 4 Area ...	100	18	118	4
No. 5 Area ...	128	27	155	19
Addington ...	8	1	9	—
Queen's Road Homes...	5	—	5	—
Mayday Road Hospital..	—	—	—	—
Children's Homes ...	—	1	1	—
Shirley Schools ...	—	—	—	—
	569	75	644	46



## SECTION VI.

**PREVENTION AND CONTROL OF TUBERCULOSIS.**

The Tuberculosis Clinic is situated at 13, Katharine Street. The premises are not suitable, being cramped and noisy. Sessions are held daily in the mornings and afternoons except on Monday mornings and Thursday afternoons. An evening session is held on Tuesdays. The Clinic is primarily a diagnostic and advisory centre. To it come patients sent by doctors, cases under observation and cases under treatment at home. From it patients are drafted to various Sanatoria and Hospitals or back to their private practitioner.

I am indebted to Dr. J. C. McMillan, the Assistant M.O.H. for Tuberculosis, for the greater part of this section of the report.

An efficient Clinic dealing with Tuberculosis should have an X-ray plant on the premises. Although the facilities for obtaining X-ray reports and films are good, the medical officer in charge of the Clinic loses the great advantage of making his own screen observations and taking his X-rays. The patients also are put to some inconvenience by the present arrangements. For the carrying out of Collapse Therapy X-ray control is absolutely essential, consequently the Clinic is unable to undertake artificial Pneumothorax refills. As this treatment is being used at the Cheam Sanatorium it would be advantageous to the patients if they could, on their discharge from the Sanatorium, obtain necessary refills in Croydon, instead of, as at present, having to go up to London or to Cheam.

**Undue Fear of Tuberculosis.**

One French authority on Tuberculosis published an article designed to put the public on its guard against undue fear of the disease. He states that by the number of placards urging the avoidance of contagion by refraining from spitting in public places a veritable psychosis has been created in the minds of persons who were predisposed. The fear of tuberculosis contagion haunts them. They take ridiculous precautions. As soon as they cough they consult a doctor, demanding that they be examined and radiographed, or they use self-medication recommended by advertisements in the daily press. They go from one doctor to another, until they finally encounter a charlatan who exploits their credulity. Another class are those who have a tuberculous patient in the family. They go to extremes in protecting the patient, demoralis-

ing him, whereas he may not be contagious at all. These over-worried persons communicate their phobia to those about them. In workrooms they demand the dismissal of an employee who coughs. He points out that the worst part of the situation is that persons who are actually tuberculous, feeling themselves the object of surveillance, seek to conceal their condition for fear of losing their employment; neglect to visit a Dispensary for fear of being observed there, and fail to take proper care of themselves. He stresses the point that contagion is rare between adults, except in certain circumstances, and the need of establishing immunity in childhood.

#### Notification of Tuberculosis.

Two hundred and thirty-three cases of Pulmonary tuberculosis and 33 of Non-Pulmonary tuberculosis were notified on Form A (primary notifications), of these 116 males and 117 females were pulmonary cases, 18 males and 15 females non-pulmonary. In addition 63 pulmonary cases and 17 non-pulmonary came to our notice as new cases otherwise than by notification.

#### Notification in Previous Years.

TABLE L.

			Pulmonary	Non-Pulmonary
1926	...	...	244	140
1927	...	...	231	97
1928	...	...	314	75
1929	...	...	250	68
1930	...	...	262	54
1931	...	...	282	48
1932	...	...	254	50
1933	...	...	233	33

The total number of new cases of tuberculosis coming to the knowledge of the Medical Officer of Health during 1933 by notification or otherwise, was 346, as compared with 369 in 1932, 412 in 1931, 387 in 1930, 390 in 1929 and 449 in 1928.

296 of these cases were Pulmonary Tuberculosis. 137 in males and 159 in females. There were 28 fewer cases of Pulmonary Tuberculosis in males, and 25 more in females than in 1932.

There were 25 cases of Non-Pulmonary Tuberculosis among children under 15 years as compared with 28 in 1932. The number of cases in adults was 25 as compared with 42 in 1932.

Of the cases notified in 1933 28 males and 20 females died from the pulmonary form of the disease during the year, equal to 20.6% of those notified, and 1 male and 4 females from the non-pulmonary.

The incidence rate of Tuberculosis of all forms was 1.44 per 1,000 of the population, for Pulmonary Tuberculosis 1.23 and for Non-Pulmonary 0.21 per 1,000 population. The Notification rate was 1.11 per 1,000.

### Public Health (Tuberculosis) Regulations 1930.

Summary of Notifications during the period from the 1st January, 1933, to the 31st December, 1933:—

TABLE LI.

Age periods	Notifications on Form A.												Total Notifications on Form A.
	No. of Primary Notifications of new cases of tuberculosis.											Total (all ages)	
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards		
Pulmonary Males ...	...	2	...	2	16	23	19	25	17	8	4	116	136
„ Females...	...	...	...	3	16	31	29	21	11	2	4	117	137
Non-pulmonary Males	...	2	5	2	3	2	1	1	1	...	1	18	20
„ „ Females	...	1	4	...	3	2	2	1	2	...	...	15	17

TABLE LII.

New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the period from the 1st January, 1933, to the 31st December, 1933, otherwise than by formal notification.

Age periods	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Total Cases
Pulmonary Males ...	...	...	...	...	...	4	6	6	3	1	1	21
„ Females ...	1	...	...	...	5	14	11	4	4	2	1	42
Non-Pulmonary Males	3	1	3	1	...	...	...	1	...	1	...	10
„ „ Females	...	...	2	1	...	2	...	...	...	2	...	7

The source or sources from which information as to the above-mentioned cases was obtained are shown below.—

Source of Information.	No. of Cases.	
	Pulmonary.	Non-Pulmonary.
Death Returns from local Registrars... ..	8	7
Transferable Deaths from Registrar General ... ..	2	4
"Transfers" from other areas (other than transferable deaths)	46	5
Posthumous notifications... ..	2	...
Other sources—Form I. ... ..	5	1

### Notification Register.

Number of cases of Tuberculosis remaining on the Notification register on the 31st December, 1933:—

TABLE LIII.

PULMONARY			NON-PULMONARY			Total Cases
Males	Females	Total	Males	Females	Total	
599	540	1,139	155	154	309	1,448

Number of cases removed from the Registers during the year and the reasons for such removal.

	PULMONARY.			NON-PULMONARY.			TOTAL CASES.
	Males.	Females.	Total.	Males.	Females.	Total.	
1. Withdrawal of Notification ... ..	6	9	15	4	4	8	23
2. Recovery from the Disease ... ..	29	34	63	34	33	67	130
3. Death ... ..	94	74	168	15	11	26	194

## Housing Statistics of Patients.

TABLE LIV.

	Patients occupying a separate bedroom.	Patients occupying a separate bed but not a separate bedroom.	Patients not occupying a separate bed.	Totals
<b>Number of Pulmonary cases:</b>				
Under 15 years ...	22	8	7	37
15 years and over ...	460	104	372	936
	482	112	379	973
<b>Number of Non-Pulmonary cases :</b>				
Under 15 years ...	39	42	34	115
15 years and over ...	40	22	39	101
	79	64	73	216
<b>Totals ...</b>	<b>561</b>	<b>176</b>	<b>452</b>	<b>1,189</b>

The above table gives a summary of the housing conditions found in notified cases. It is seen that 49.5% of the pulmonary cases and 36.5% of the non-pulmonary cases were occupying a separate bedroom. In 38.9% of the pulmonary and 33.8% of the non-pulmonary the sleeping arrangements were not satisfactory inasmuch as the patient did not have a separate bed.

52 patients, who are definite cases of pulmonary tuberculosis on the Dispensary Register at the end of 1933, resided in houses built and let by the Corporation.

### The Mortality from Tuberculosis.

The following Table shows the intervals of time elapsing between the date of notification of a patient as suffering from Pulmonary Tuberculosis and the date of his death from that complaint. In the total of 162 deaths during 1933, 29 (17.9%) were either not notified at all or only notified within a month prior to death. In 1932 this figure was 25 or 17.3%. Of these, 11 were not notified during life; 5 of whom were cases of fulminating or complicated cases of Tuberculosis; and 6 cases were certified by the Coroner.

Early notification is of great importance from both the preventive and curative sides of Tuberculosis work. It is unfortunate that in some cases its onset is so insidious that it passes unnoticed until considerable damage has been done; whilst in others, the patient in an endeavour to remain at work, and in the hope that the trouble will pass off, ignores symptoms until after the stage of curability has passed. The periodic medical examination of the whole population, as is now applied to public Elementary School children would, in the case of this one disease alone, probably be an economic asset.

The success of a Tuberculosis Scheme may be judged on the number of persons dying from Tuberculosis without having been notified, or only notified shortly before death. The Croydon figure is a fairly satisfactory one but it can be improved upon.

In a certain number of predisposed persons periodic medical examination might lead to apprehension. The early detection of disease is, nevertheless, of paramount importance.

In 27.7% notification preceded death by less than six months.

For Non-pulmonary Tuberculosis the proportion of non-notified fatal cases to the total deaths from this form of the disease was 54.5%. In other words, out of a total of 22 deaths, 12 were not notified during life; only 2 of these 12 cases died at home, one of whom was certified by a Coroner. The other 10 cases died in Hospital.

Of the total deaths from Tuberculosis of all forms, 23 or 12.5%, were not notified prior to death, compared with 12% in 1932.

#### Interval Between Notification and Death From Pulmonary Tuberculosis in Cases Dying in 1933.

TABLE LV.

Not Notified	Under 1 week	1-2 weeks	2-4 weeks	1-2 months	2-3 months	3-6 months	6-12 months
11	6	6	6	9	6	12	24

One Year	Two Years	Three Years	Four Years	Five Years	Six Years	Seven Years	Eight years and over
32	14	11	10	4	1	2	8

## Ages at Death from Pulmonary Tuberculosis.

TABLE LVI.

Year.	0—5	5—15	15—25	25—45	45—65	Over 65	Total
1924	...	2	40	66	36	5	149
1925	...	4	30	60	44	10	148
1926	...	...	34	81	45	9	169
1927	1	1	39	76	41	7	165
1928	2	1	38	79	37	10	167
1929	3	2	41	76	41	7	170
1930	1	3	40	57	45	8	154
1931	6	1	33	65	41	9	155
1932	1	1	39	65	32	6	144
1933	...	1	34	82	41	4	162

The most fatal period is between 25 and 45 years; under 15, Pulmonary Tuberculosis is not a prominent cause of death, its fatality is greatest during the most productive and active periods of life, and herein lies much of its social and economic importance.

The total deaths from Pulmonary Tuberculosis remain very steady, but as the population is steadily increasing the death-rate is consequently slowly decreasing.

In 1933 the death-rate from all forms of Tuberculosis was  
0.77 per 1,000 population  
,, ,, Pulmonary Tuberculosis 0.68 ,,  
,, ,, Non-Pulmonary Tuberculosis 0.09 ,,

Similar figures for 1932 were 0.7; 0.61 and 0.093.

## Deaths from Non-Pulmonary Tuberculosis.

During 1933, 22 deaths were certified to be due to Non-Pulmonary Tuberculosis, compared with 22 in 1932; 19 in 1931; 21 in 1930; 29 in 1929; 39 in 1928; 38 in 1927; 39 in 1926; 33 in 1925; and 33 in 1924. The deaths were due to:—

	Males	Females	Total
Meningitis ... ..	6	4	10
Tb. Peritonitis ... ..	0	2	2
Tb. Kidneys, Bladder, etc. ... ..	3	0	3
Tb. Intestines ... ..	0	3	3
Tb. Spine ... ..	1	0	1
Miliary and General Tb. ... ..	1	2	3
	<b>11</b>	<b>11</b>	<b>22</b>
	<b>=</b>	<b>=</b>	<b>=</b>

Table LVII. shows the incidence rate and death rate of all forms of Tuberculosis for the various wards of the Borough, based on ward populations calculated from a total population of 239,950. The death rate for the whole Borough was 0.77.

TABLE LVII.

The following were the Wards from which new patients came:—

Ward.	Density of Population persons per acre.	Pulmonary	Non-Pulmonary	Total	Incidence Rate per 1000	Death Rate per 1000
Upper Norwood ... ..	20.1	31	3	34	1.5	0.62
Norbury ... ..	29.2	21	1	22	1.4	0.62
West Thornton ... ..	42.2	22	3	25	1.2	0.14
Ben-ham Manor ... ..	49.8	14	2	16	1.0	0.49
Thornton Heath ... ..	50.5	29	4	33	2.1	1.09
South Norwood ... ..	28.8	21	3	24	1.4	0.62
Woodside ... ..	36.7	19	5	24	1.5	1.01
East ... ..	9.6	15	2	17	0.9	0.44
Addiscombe .. ..	48.8	14	3	17	1.2	1.11
Whitehorse Manor ... ..	62.9	23	7	30	1.8	1.30
Broad Green ... ..	68.9	20	3	23	1.5	0.79
Central ... ..	33.3	14	2	16	1.3	0.41
Waddon ... ..	22.2	31	5	36	1.6	0.87
South ... ..	12.5	18	5	23	1.5	0.75
Addington ... ..	0.8	3	1	4	1.4	...
No fixed abode ... ..	...	1	1	2	...	...
		296	50	346	1.4	0.77

The Wards showing the highest incidence of new patients in 1933 were: Thornton Heath (2.1), and Whitehorse Manor (1.8).

The highest death-rates were in Whitehorse Manor (1.30) and Addiscombe (1.11). With the relatively small figures available, these rates are subject to wide annual variations.



TABLE LVIII. TUBERCULOSIS. (Summary of Notifications and Deaths at various age periods).

Age periods,	1933 Population at age period. (estimated)		Pulmonary,								Non-Pulmonary.							
			New Cases.				All Cases.				New Cases.				All Cases.			
			Number.		Incidence Rate.		Deaths.		Death Rate (based on 1933 figures).		Number.		Incidence Rate.		Deaths.		Death Rate (based on 1933 est. figs.)	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under one year	2124	1952	...	1	...	0.51	...	...	...	...	3	...	1.41	...	3	1	1.41	0.51
1—5 years	6882	7242	2	...	0.29	...	...	...	...	...	3	1	0.44	0.14	2	1	0.29	0.14
5—10 ..	11243	10348	...	...	...	...	...	...	...	...	8	6	0.71	0.58	1	3	0.09	0.29
10—15 ..	11899	11326	2	3	0.17	0.26	...	1	...	0.09	3	1	0.25	0.09	1	...	0.08	...
15—20 ..	9789	10562	16	21	1.64	1.99	5	7	0.51	0.66	3	3	0.31	0.28	1	...	0.10	...
20—25 ..	7596	9832	27	45	3.55	4.58	9	13	1.18	1.32	2	4	0.26	0.41	...	1	...	0.10
25—35 ..	15537	20456	25	40	1.61	1.95	22	23	1.42	1.12	1	2	0.06	0.10	...	1	...	0.06
35—45 ..	17303	21083	31	25	1.79	1.19	20	17	1.16	0.81	2	1	0.12	0.05	1	1	0.06	0.05
45—55 ..	13816	15861	20	15	1.45	0.94	20	8	1.45	0.50	1	2	0.07	0.13	...	...	...	...
55—65 ..	8241	10061	9	4	1.09	0.40	12	1	1.46	0.10	1	2	0.12	0.19	2	3	0.24	0.29
65 and upwards	6302	10495	5	5	0.79	0.48	2	2	0.32	0.18	1	...	0.16	...	...	...	...	...
Totals	110732	129218	137	159	1.24	1.23	90	72	0.81	0.56	23	22	0.25	0.17	11	11	0.10	0.09

In the above table the death rate is based upon the total deaths in 1933, and not on deaths in New Cases only.

### **Pulmonary Tuberculosis.**

In 1933 there were fewer deaths from Pulmonary Tuberculosis up to the 25th year of life than in 1932, but in the next five years there were many more deaths. The age group 25—30 had the greatest number of deaths, greater in fact than in any other age group. From the 30th year onwards there was a gradual fall in the number of deaths, the number being greater than in the preceding year.

With regard to the sexes, in females the highest peak was reached in the 20-25 age group whereas in males it was in the 25-30 age group. After the 40th year the male deaths exceed those in females. This is probably connected with the fact that women lead a more sheltered existence than men in the later years of life.

The number of new cases of Pulmonary Tuberculosis in 1933 was greatest in the age group 20-25 years, whereas in 1932 the greatest number was in the age group 25-35 years. In the other age groups the number of new cases was approximately the same as in 1932.

The greater proportion of new cases of pulmonary tuberculosis were in the age groups comprising 20 to 35 years. In the age groups 15 to 35 years there was a greater number of new cases among women but after 35 years there was a greater number in men. There is a close similarity between the age distribution of new cases and of deaths from Pulmonary Tuberculosis but not so marked as in 1932. This year the peak of new cases was in the 20-25 age group, compared with the peak in deaths being in the age group 25-35 years in 1932. The figures indicate that Pulmonary Tuberculosis is a rare disease in the first ten years of life.

### **Non-Pulmonary Tuberculosis.**

Non-pulmonary Tuberculosis shows its highest incidence under the 20th year of life; the greatest number of cases occurring, as in 1932, in the 5-10 years group. 50% of the deaths occurred under the age of 10 years.

TABLE LIX.

The diagnoses of the new cases entered in Notification Register during 1933 were as follows:—

	Male.	Female.
Hip ... ..	4	1
Spine ... ..	3	2
Left Ankle ... ..	1	—
Knee ... ..	5	—
Finger, Skin and Left Cheek ... ..	1	—
Right Great Toe ... ..	—	1
Spine and Urinary Tract ... ..	—	1
Left Shoulder ... ..	—	1
Chest and Toe ... ..	—	1
Abdomen ... ..	—	1
Ovaries and Tubes ... ..	—	1
Peritoneum ... ..	—	2
Peritoneum and Intestines ... ..	—	1
Genito Urinary ... ..	1	—
Urinary Tract ... ..	—	1
Epididymis ... ..	1	—
Skin ... ..	—	1
Meninges ... ..	5	4
Kidney ... ..	2	—
Miliary ... ..	2	1
Ilium ... ..	—	1
Glands ... ..	3	2
	28	22

#### CLASSIFICATION OF NEW PATIENTS.

##### Pulmonary Tuberculosis.

During 1933, 190 new patients were examined at the Clinic and were found to be in the undermentioned stages of the disease on the first examination:—

T.B. minus (sputum negative or absent) ...	65 or 34.2%
T.B. plus 1 (early cases, sputum positive) ...	12 or 6.3%
T.B. plus 2 (intermediate cases, sputum positive) ... ..	84 or 44.2%
T.B. plus 3 (advanced cases, sputum positive) ...	29 or 15.3%
	190 or 100.0%

It is well known that Tuberculosis officers do not see many of the new cases in the early stages of the disease. The trouble about early diagnosis is that the disease can hardly ever be detected until it

has begun to produce symptoms and not always with certainty even then. The insidious onset of Pulmonary Tuberculosis and the fact that often considerable damage to the lungs is present before any definite symptoms develop makes it very difficult to detect it in its early stages. In the majority of cases, once symptoms have developed, the disease cannot be regarded as in an early stage.

The initiative to seek treatment when ill rests with the patient himself, and the remedy partly lies in the education of the public as to the symptoms and common dangers of Tuberculosis and the need for securing early treatment. It is unfortunate that 59.4% of the new cases were more or less advanced in the disease.

### Non-Pulmonary Tuberculosis.

There were 23 cases examined at the Clinic and found to have Non-pulmonary Tuberculosis in the following forms:—

Bones and Joints	...	10
Abdominal	... ..	5
Other Organs	... ..	4
Peripheral Glands	... ..	4
		—
		23
		—

Tables LXVI. and LXVII. summarise the condition of all patients whose records are at the Clinic at the end of 1933. These tables show that of patients who came under treatment for Pulmonary Tuberculosis before 1926, 376 adults and 103 children have been discharged as recovered. Of these all but 14 were early cases. Of the 1926 cases, 19 adults, and of the 1927 cases, 21 adults, have recovered.

Of patients who first attended in 1933, 13 have been lost sight of or otherwise removed from the Clinic Register. Of the 1932 cases 38 were lost sight of.

Of patients who attended prior to 1926, 241 adults and 13 children are known to have died; since 1926, 684 adults and 13 children are known to have died. Of patients attending for the first time in 1933 31 have died.

It will be seen that in the years 1926 to 1933 there have only been 41 cases of Pulmonary Tuberculosis in children—12 of these

had a positive sputum, and of the latter only 3 of these are alive. It is fortunate that such cases are very rare as remarkably few ever recover.

In sufferers from Non-pulmonary Tuberculosis who first attended prior to 1926, 43 adults and 555 children have been discharged as recovered, and of those first attending in 1926 and following years, 23 adults and 104 children. 13 adults and 9 children died in the pre-1926 class; 28 adults and 15 children died in the 1926 and following years group. One adult and one child attending for the first time in 1933 died during the year.

The contrast in the numbers recovered, arrested and died, as also the different incidence in adults and children, as between the Pulmonary and Non-pulmonary types of the disease, is most marked.

#### **Co-ordination with Medical Practitioners, and Other Branches of the Health Department.**

During the year 233 cases of suspected Tuberculosis were referred by private medical practitioners for the Tuberculosis Officer's opinion; 91 were diagnosed as suffering from Tuberculosis and were subsequently notified. In addition, 23 children were referred by the School Medical Service, and 15 cases from the Maternity and Child Welfare section of the Public Health Department. 79.3% of all notified cases were sent for examination to the Clinic or were seen at the request of the medical attendant at the patient's home, as compared with 78.9% in 1932, 81.2% in 1931 and 72.7% in 1930.

The number of reports sent in by Insurance medical practitioners on their domiciliary cases (Form G.P. 36) was 632. This is a duty laid on all Medical men accepting service under the National Health Insurance Act.

#### **Pregnancy and Tuberculosis.**

Women suffering from Pulmonary Tuberculosis who become pregnant are referred to the Assistant Medical Officer of Health for Obstetrics and recommended for admission to the Mayday Hospital under his care. After their confinement these patients are transferred to a sanatorium to the mutual benefit of the mother and baby. If interference with the course of pregnancy is not considered necessary or advisable and the patient requires sanatorium treatment this is arranged for a period prior to admission to the Hospital.

### The Clinic Register of Cases.

The number of cases of tuberculosis under the supervision of the Clinic at the end of the year was 942. This is equivalent to 3.93 persons per 1,000 of the population.

The Clinic Register has been revised yearly during the past six years, so as to make it a correct record of the cases in the Borough who are under the supervision of the Clinic. This has necessitated a lot of work in following up old cases, some of whom had not been seen for a number of years. By this yearly revision the Register is kept a "live" one.

By these means the number of persons on this register has been reduced from 1,965 on 1st January, 1928, to 963 on 31st December, 1933.

During the year 141 Clinic cases died; of this number, 33 or 23.4% were seen for the first time in 1933.

### Examination of Sputum.

This is done by the Council's Bacteriologist in the Laboratory at the Croydon General Hospital.

The results of examinations made in 1933 are as follows:—

	<i>For</i> <i>General</i> <i>For</i>	<i>For</i>	<i>Totals.</i>
	<i>Clinic.</i>	<i>Practi- tioners.</i>	<i>Mayday Hospital.</i>
Positive ( <i>i.e.</i> , tubercle bacilli present) ... ..	367	109	97
Negative ( <i>i.e.</i> , tubercle bacilli absent) ... ..	434	660	168
Total ...	801	769	265
	—————	—————	—————
			1,835

For each 100 new cases and contacts examined at the Clinic 94 specimens of sputum were examined.

The 769 examinations include a number from the Croydon General Hospital, in addition to those sent in by General Practitioners.

1933, however, shows a very slight increase in the number of examinations of sputa made for General Practitioners. It is difficult to understand why this simple test is not always made in any doubtful chest condition.

Too much reliance should not be placed upon one negative sputum examination. In any case in which it is considered advisable to have the sputum examined, at least three specimens should be submitted if the result is returned as negative.

### **X-ray Work.**

A greater number of doubtful and difficult cases were sent for radiological examination than in previous years. By this means the number of beds necessary for the observation of such cases has been reduced and cases of Bronchiectasis, Pulmonary tumour, etc., were discovered which otherwise would have been classed as suffering from Pulmonary Tuberculosis. These examinations are also useful in avoiding undue delay in reaching a definite diagnosis and in assessing the progress of cases already under treatment.

Without a good X-ray plate, properly interpreted, suspected tuberculosis can never be ruled out. Ordinary physical examination can find tuberculosis, but it cannot, except rarely, find early tuberculosis. It cannot demonstrate pathological changes and cannot follow accurately the progress of disease or of healing. X-ray plates, however, must be well made and accurately interpreted or they become a source of diagnostic errors.

258 X-ray examinations were made during the year. This is equivalent to 30.4 for every 100 new cases and contacts seen, and compares with a rate of 22.6 for every 100 new cases and contacts seen in 1932, and 21.4 per 100 new cases and contacts seen in 1931. In addition a certain number of cases who have already been examined at various Hospitals are referred to the Clinic. There were also a number of new cases examined in Mayday Hospital whose X-ray examinations are not counted.

### **Extra Nourishment.**

Provision of special nourishment in the form of milk was granted to a number of selected cases for varying periods.

### Sleeping Shelters.

The loan of such shelters is made to suitable cases. That is, to patients in an infectious condition or on account of overcrowding, but frequently one finds there is no available space for a shelter in the garden or yard attached to the patient's house. Lack of privacy sometimes is also an obstacle. When convenient to be used they form a useful continuation of Sanatorium practice for a conscientious patient.

## INSTITUTIONAL TREATMENT.

TABLE LX.

Cases of Pulmonary Tuberculosis Treated in Institutions, 1933.

	In at beginning of 1933			Admitted during 1933			Discharged during 1933			Died during 1933			In at end of 1933			
	Adults			Adults			Adults			Adults			Adults			
	M	F	C	M	F	C	M	F	C	M	F	C	M	F	C	
Coy. Boro' San., Cheam	55	31	...	91	77	...	83	68	...	20	6	...	43	34	...	
Mayday Hospital	...	16	7	...	57	41	3	34	22	2	22	17	1	17	9	...
Crosvenor	...	6	2	...	1	1	...	6	3	...	...	...	...	1	...	...
Burrow Hill Colony	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...
Brompton	...	1	1	...	11	4	1	9	1	...	...	1	...	3	3	1
Papworth	...	2	1	...	...	...	...	1	1	...	...	...	...	1	...	...
East Anglian San.	...	...	...	1	...	...	1	...	...	1	...	...	...	...	...	1
Harpden	...	...	...	1	...	...	1	...	...	2	...	...	...	...	...	...
Farmwood	...	2	...	...	...	...	...	2	...	...	...	...	...	...	...	...
Midhurst	...	4	...	...	...	...	...	4	...	...	...	...	...	...	...	...
Prior Place	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...
	86	42	3	161	123	6	139	95	6	42	24	1	66	46	2	

This Table shows that, compared with last year, 35 fewer patients were admitted to institutions during the year and 17 fewer cases remained in institutions at the end of the year.



TABLE LXI.

## Cases of Non-Pulmonary Tuberculosis Treated in Institutions, 1933.

	In on 1st Jan., 1933			Admitted during 1933			Discharged during 1933			Died during 1933			In on 31st Dec., 1933		
	Adults			Adults			Adults			Adults			Adults		
	M	F	C	M	F	C	M	F	C	M	F	C	M	F	C
Mayday Hospital ...	2	1	2	4	6	3	5	4	3	...	1	1	1	2	1
Royal Sea Bathing Hosp.	4	1	...	4	2	...	2	2	...	...	...	...	6	1	...
St. Anthony's Hosp. ...	2	1	...	1	1	...	1	2	...	1	...	...	1	...	...
St. Nicholas Hosp. ...	...	...	2	...	...	1	...	...	3	...	...	...	...	...	...
Tait Convalescent Home	...	...	...	...	3	...	...	3	...	...	...	...	...	...	...
Treloar Cripples' Hosp. ...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...
King George's San. ...	2	...	...	2	...	...	2	...	...	...	...	...	2	...	...
Croydon General Hosp. ...	...	...	...	...	1	1	...	1	1	...	...	...	...	...	...
Pyrford ... ..	...	...	10	...	...	7	...	...	7	...	...	...	...	...	10
Heatherwood Hospital ...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Heritage Craft School ...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	2
Royal National Orthopaedic Hospital	...	1	...	...	1	...	...	1	...	...	...	...	...	1	...
...	10	4	17	11	14	13	10	13	15	1	1	1	10	4	14

**The Immediate Results of Institutional Treatment.**

Table LXV. Form T. 145 (G) of the Ministry of Health summarises the immediate results of treatment of patients discharged from institutions during the year. From this table it is seen that among the Pulmonary cases 25.2% were classified as early cases; the percentage of early cases receiving treatment in institutions was in women, 10.5%; in men, 12.8%. 48.8% of the total cases were intermediate cases, the males showing an excess in this group—28.2% males to 20.6% females—and 25.9% were definitely advanced. Of the total Pulmonary cases treated in Institutions 78.5% were potentially infectious.

155 males, 105 females and 6 children, suffering from Pulmonary Tuberculosis, were discharged from or died in Institutions in connection with the Croydon Scheme during 1933.

### Types of Cases Treated.

In *Class T.B. Minus*, 20 males, 17 females and 4 children were discharged with the disease in a quiescent condition, *i.e.*, 71.9% of the total cases in this class; 4 males and 10 females were not in a quiescent condition, 24.5%; 1 male and 1 child died, 3.5%.

In *Class T.B. Plus, Group I.*, the corresponding figures were 4 males quiescent, 40%; 5 males and 1 female were not quiescent, 60%; there were no deaths in this group.

In *Class T.B. Plus, Group II.*, 13 males and 5 females quiescent, 13.8%; 46 males and 38 females not quiescent, 64.6%; and 16 males and 12 females died, 21.5%.

In *Class T.B. Plus, Group III.*, or advanced group, 1 female was discharged quiescent, 1.4%; 21 males and 9 females and 1 child not quiescent, 44.9%; and 25 males and 12 females died, 53.6%.

Taking all groups together, 24% of cases were discharged as quiescent; 50.7% as not quiescent; and 25.1% died.

An increase is recorded in the percentage of infectious cases, mostly advanced cases, dying in institutions. From the public health point of view this is to be desired as it keeps these patients away from their homes at a time when they are most infectious and most dangerous to those with whom they would normally come into contact. This factor, in conjunction with the removal of the strain and worry of nursing these cases at home, should help to reduce the incidence of new cases among the contacts.

These figures prove, what has been so often proved before, that if tuberculosis is to be cured and eradicated the first essential is to educate the patients themselves and the medical profession in the paramount necessity for early and thorough treatment.

*Non-Pulmonary Tuberculosis.*—32 patients were discharged during the year and 56.2% of these were quiescent.

Tuberculosis deaths in Cheam Sanatorium and Mayday Hospital during 1933, according to sex and stage of the disease:—

Classification.	CHEAM.		MAYDAY.	
	Males.	Females.	Males.	Females.
T.B. minus ...	1	—	—	1
T.B. plus 1 ...		Nil		
T.B. plus 2 ...	9	3	7	8
T.B. plus 3 ...	10	3	15	9
	—	—	—	—
Total ...	20	6	22	18
	—	—	—	—

### General Observations on the Results of Treatment.

The greatest factors making for success are patience on the part of the sufferer and helpful optimism on the part of his medical adviser. All who are unfortunately attacked sufficiently severely to cause symptoms should reconcile themselves to the fact that for the rest of their lives they will have to be circumspect, and that errors of judgment or carelessness will be visited by a retribution more severe than in the case of healthy people.

No Tuberculous person, able to work, should lead a life of idleness, but the occupation must be governed by the medical needs. The greater number of Tubercular persons are unable to compete on equal footing with healthy persons. If this is remembered and the principle of subsidization of these patients accepted, they can be made productive units of industry, with benefit to themselves and the community. Subsidization of Blind persons has been universally approved, and it is difficult to understand the non-recognition of the principle in another class of handicapped persons. Colonies for Tubercular patients, such as Papworth, or Preston Hall, are sensible expositions of this and are carrying on wonderfully effective work, which points the way along which any expansion of Anti-Tuberculosis campaigns should go. Sickness benefit under the National Health Insurance Act could serve as subsidy for tubercular persons and, in those medically certified as fit to do work of some kind, should be given conditionally on the patient endeavouring to do suitable work.

It is gradually becoming recognised that Sanatorium treatment of Pulmonary Tuberculosis requires to be supplemented by other methods of treatment. Eventually it will probably be necessary to have a Surgeon who has specialised in thoracic surgery as a Consultant on the staff of every sanatorium.

In this connection it is interesting to note that many Authorities are of the opinion that most of the sanatoria in this country are too small, and that it would be better in the interests of the patients to have much larger institutions, with say 250 to 1,000 beds. Such institutions could more easily be provided with specialists in the different branches of the work and be equipped to carry out every form of treatment and investigation, and would possibly be more efficient without increasing expenditure. Such proposals would necessitate various local Authorities combining. This method is at present in force in Wales where the treatment of Tuberculosis for the whole of the Principality is under one Authority. It, however, causes some dislocation of co-ordination with the rest of Public Health work and in so doing is disadvantageous.

The Medical Officer of Health and the Tuberculosis Officer visited the institutions belonging to other authorities in which Croydon patients were being treated (in addition to weekly visits to the Borough Sanatorium at Cheam by the Medical Officer of Health).

In addition, the Tuberculosis Officer paid 45 visits to Mayday Hospital, in a consultative capacity, and there examined 106 patients.

### **The Tuberculosis Clinic and Home Visiting.**

Table LXIII. gives a summary of the work done in connection with the Clinic.

466 new cases were examined during the year: this is equal to 253.2 for each 100 deaths from the disease. 197, or 42.3 for each 100 deaths, were found to be definitely tuberculous.

The contacts of definite cases are urged to attend the Clinic for examination (and subsequent supervision). This is an important preventive measure. During the year 383 contacts were examined, equal to 208 for each 100 deaths, compared with 464 in 1932, or 279.5 per 100 deaths. Of these, 14 were considered to be tuberculous. This is equal to a tuberculosis rate per 1,000 contacts of 36.5, compared with 1.44 per 1,000 of the general population. In 210 adult contacts examined the tuberculosis rate per 1,000 contacts was 66.6. Included in the 14 contacts found to be tuberculous are 4 who had been under observation from previous years.

The total number of attendances at the Clinic was 5,596. The Tuberculosis Officer paid 207 home visits, and the district health visitors 4,085 visits for Clinic purposes. In addition, the health visitors made 289 primary visits for the purpose of the Notification Register.

Patients requiring home nursing or surgical dressings are attended to by nurses from the Croydon Nursing Service, by arrangement with that organisation, and 468 such visits were made during the year.

The number of contacts examined and the number of patients visited in their homes by the Tuberculosis Officer shew a decided decrease below those for 1932. This year shews a considerable falling off in both these branches of the Clinic's activities owing to the absence of any help from other members of the medical staff in consequence of the reduction in the medical staff under the economy measures it has been found necessary to introduce. As mentioned previously contact examinations are held to be essentially preventive and play an important role in any Tuberculosis scheme.

### SUMMARY OF CLINIC STATISTICS FOR 1933.

No. of persons on Clinic Register, January 1st, 1933 ...	...	...	1,028
„ Notified Cases examined for the first time ...	...	...	50
„ Cases sent for an opinion ...	...	...	304
„ First attendances, including 41 transfers in ...	...	...	890
„ Consultations of T.O. with private practitioners ...	...	...	30
„ Visits paid by T.O. to homes of patients ...	...	...	207
„ Visits paid by T.O. to Mayday Hospital ...	...	...	45
„ Patients examined by T.O. at Mayday Hospital ...	...	...	106
„ Visits paid to homes of patients by Health Visitors & Nurses	...	...	4,374
„ Attendances of patients at the Clinic—			—
Men ...	...	...	1,643
Women ...	...	...	2,448
Children ...	...	...	1,505
		Total ...	5,596
No. of patients under Domiciliary Treatment at end of year—			—
Pulmonary ...	...	...	208
Non-Pulmonary ...	...	...	5
		Total ...	213
No. of reports received from Panel Practitioners (G.P.36) ...	...	...	632
„ report forms sent to Panel Practitioners (G.P.36) ...	...	...	869
„ reports received from Panel Practitioners on forms G.P.17 and 35 ...	...	...	Nil
„ X-rays taken ...	...	...	258
„ reports made to Ministry of Pensions by the T.O. on general progress of Tuberculous Discharged Ex-Service men ...	...	...	13
„ cases referred for "Light" Treatment ...	...	...	4
„ cases referred to Orthopaedic Clinic ...	...	...	21
„ cases receiving extra nourishment at end of year ...	...	...	46

PULMONARY TUBERCULOSIS.

TABLE LXII.

Shewing the Condition at the end of 1933 of cases discharged from Sanatoria during the years indicated.

	1929.		1930.		1931.		1932.		1933.		Totals.	
	T.B.	T.B. +	T.B.	T.B. +	T.B.	T.B. +	T.B.	T.B. +	T.B.	T.B. +	T.B.	T.B. +
Dead ... ..	2	75=71.4%	5	70=65.4%	2	56=42.7%	1	36=28.3%	1	15=16.1%	11	252=44.7%
	63.6%		56.4%		36.0%		22.8%		11.8%		36.9%	
Working or Fit for Work...	13	10=9.5%	20	18=16.3%	24	32=24.4%	31	43=33.8%	34	41=44.1%	122	144=25.6%
	19.0%		28.6%		34.8%		45.6%		55.1%		37.3%	
Not able to Work	1	20=19.0%	1	19=17.8%	4	43=32.8%	3	48=37.8%	8	37=39.8%	17	167=29.6%
	17.4%		15.0%		29.2%		31.4%		33.1%		25.8%	
Left District ...	5	27	6	22	8	13	7	18	6	13	32	93
	21	132	32	129	38	144	42	145	49	106	182	656

145

Of the cases whose records are at the Clinic, it will be seen that of the total number that received sanatorium treatment during the past five years only 37.3% are working or fit for work. The remainder are dead or too ill to work. In those cases with a positive sputum, i.e., those in whom tubercle bacilli have been found in the sputum, only 25.6% or just over a quarter are working or fit for work.

656, or 78.2% of the total cases discharged, were T.B. + cases; 125, or 14.9% of the total cases discharged, have removed from the Borough, and as we have no information about their condition at the end of 1933 they have been ignored in working out the above percentages.

From consideration of the above Table and similar reports that have been obtained in previous years, it would appear that the time is not far distant when it might be advisable for another Royal Commission to be held, to assess the value of present Tuberculosis schemes and also to consider whether any alterations could be made which would lead to greater success.

#### **Tuberculosis Care Committee Report.**

During the year 1933 more use than formerly was made of the facilities afforded by the Tuberculosis Care Committee. Assistance and advice are particularly valuable at early stages of disability, for not only is the patient suffering from the shock of finding himself Tubercular but he has to grapple with a collection of difficult and unfamiliar problems at a time when he is mentally and physically upset. There are domestic problems, such as keeping the home together and the disposal of children when the patient is away; financial problems, such as the continuance of building society instalments and insurance premiums, and the like. Some require direct financial assistance, but there are a number of difficulties soluble by the patients themselves if they only knew the right course of action. It is surprising how ignorant many people are in these matters. Even when patients have been put into touch with the proper quarters, there may be gaps to be tided over and arrears to be made up. There are many opportunities for helping patients at this stage by sympathetic advice and assistance, and it is satisfactory to note how knowledge of the Committee's work is filtering through the Borough. As a tangible result of their efforts, 974 interviews involving advice and assistance took place during the year, and 80 families were helped financially. Financial inquiries numbered over 175, and £300 was disbursed.

### Dental Treatment.

Considering the difficulties under which dental treatment is carried out, and the fact that some patients when called up do not feel fit, and treatment has to be postponed for sometimes a week or even longer, the statistics for the year are very gratifying.

### Patients Referred From Tuberculosis Dispensary.

			Males.		Females.		Total.
Attendances	...	...	34	...	57	...	91
Extractions	...	...	48	...	51	...	99
Fillings	...	...	3	...	12	...	15
Dressings	...	...	—	...	4	...	4
Scalings	...	...	1	...	10	...	11
Denture Dressings	...	...	11	...	13	...	24
Dentures Fitted	...	...	3	...	8	...	11

No. of cases referred—14.

£1 2s. 6d was received from patients for treatment.

TABLE LXIII.

(A) Return showing the work of the Dispensary.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.				GRAND TOTAL.
	Adults.		Children.		Adults.		Children.		Adults.		Children.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A.—NEW CASES examined during the year (excluding contacts):													
(a) Definitely tuberculous...	90	80	1	3	7	8	7	1	97	88	8	4	197
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	7	4	2	1	14
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	64	99	43	49	255
B.—CONTACTS examined during year:—													
(a) Definitely tuberculous...	4	10	—	—	—	—	—	—	4	10	—	—	14
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	1	5	—	1	7
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	69	121	86	86	362
C.—CASES written off the Dispensary Register as:—													
(a) Recovered ...	18	16	1	5	5	4	17	18	23	20	18	23	84
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous)...	—	—	—	—	—	—	—	—	139	231	135	141	646
D.—NUMBER OF CASES on Dispensary Register on December 31st:—													
(a) Definitely tuberculous...	400	324	13	22	34	41	62	46	434	365	75	68	942
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	8	9	2	2	21



1. Number of cases on Dispensary Register on January 1st ...	1,028	2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ... ..	59
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ...	102	4. Cases written off during the year as Dead (all causes) ... ..	141
5. Number of attendances at the Dispensary (including Contacts) ...	5,596	6. Number of Insured Persons under Domiciliary Treatment on the 31st December ... ..	213
7. Number of consultations with medical practitioners :—		8. Number of visits by Tuberculosis Officers to homes (including personal consultations) ... ..	207
(a) Personal ... ..	30	10. Number of :—	
(b) Other ... ..	570	(a) Specimens of sputum, etc., examined ... ..	801
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes ... ..	4,085	(b) X-ray examinations made in connection with Dispensary work ... ..	258
11. Number of "Recovered" cases restored to Dispensary Register, and included in A(a) and A(b) above ... ..	1	12. Number of "T.B. plus" cases on Dispensary Register on 31st December ... ..	486

(B) Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment)

Provided by the Council ... ..	1
Provided by Voluntary Bodies... ..	Nil

(C) Number of beds available for the treatment of Tuberculosis on the 31st December in Institutions belonging to the Council

Name of Institution.	For Pulmonary Cases		For Non-Pulmonary Cases		Total.
	Adults	Children under 15	Adults	Children under 15	
Croydon Borough Sanatorium, North Cheam, Surrey	93	...	...	...	93
Mayday Hospital, Mayday Road, Thornton Heath	Beds reserved for used for Pulmonary patients, as		Tuberculosis cases are or Non-Pulmonary pa- required.		64

(d) Return showing the extent of Residential Treatment and Observation during the year in Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis

	In Institutions on Jan. 1st. (1)	Admitted during the year (2)	Discharged during the year. (3)	Died in the Institutions. (4)	In Institutions on Dec. 31st. (5)
Number of doubtfully tuberculous cases admitted for observation :					
Adult males ... ..	—	7	4	—	3
Adult females ... ..	—	7	7	—	—
Children ... ..	—	2	2	—	—
Total ... ..	—	16	13	—	3
Number of definitely tuberculous patients admitted for treatment :					
Adult males ... ..	96	138	118	43	73
Adult females ... ..	46	120	91	25	50
Children ... ..	20	17	19	2	16
Total ... ..	162	275	228	70	139
GRAND TOTAL ... ..	162	291	241	70	142

It will be seen that only 275 definitely Tubercular patients have been admitted to institutions during the year, compared with 357 during 1932. The difference is not so great as would appear, as in the previous year if a case was transferred from one institution to another it was counted as a new admission, whereas this year such cases were not counted as fresh admissions. For the same reason the difference in discharges appears greater than is actually the case. In spite of this new method of recording fewer cases received institutional treatment than in 1932.

TABLE LXIV.

Return showing the results of observation of doubtfully tuberculous cases discharged during the year from Institutions approved for the treatment of Tuberculosis.

Diagnosis on discharge from observation.	FOR PULMONARY TUBERCULOSIS.						FOR NON-PULMONARY TUBERCULOSIS.						TOTALS.				
	Stay under 4 weeks.			Stay over 4 weeks.			Stay under 4 weeks.			Stay over 4 weeks.			M.	F.	Ch.		
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.					
Tuberculous ... ..	1	1	—	1	1	—	—	—	—	—	—	—	—	—	2	2	—
Non-tuberculous ... ..	2	1	1	—	4	1	—	—	—	—	—	—	—	—	2	5	2
Doubtful ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS ... ..	3	2	1	1	5	1	—	—	—	—	—	—	—	—	4	7	2

Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions approved for the treatment of Tuberculosis.

## PULMONARY TUBERCULOSIS.

Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.															Grand Totals
		Under 3 months.			3-6 months.			6-12 months.			More than 12 months.			Totals.			
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Class T.B. minus.	Quiescent ...	3	2	1	9	12	—	8	3	2	—	—	1	20	17	4	41
	Not quiescent	—	5	—	1	2	—	2	3	—	1	—	—	4	10	—	14
	Died in Institution	1	—	1	—	—	—	—	—	—	—	—	—	1	—	1	2
Class T.B. plus Group I.	Quiescent ...	—	—	—	2	—	—	1	—	—	1	—	—	4	—	—	4
	Not quiescent	—	—	—	2	—	—	2	1	—	1	—	—	5	1	—	6
	Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Class T.B. plus Group II.	Quiescent ...	1	1	—	5	1	—	5	2	—	2	1	—	13	5	—	18
	Not quiescent	16	10	—	15	13	—	5	9	—	10	6	—	46	38	—	84
	Died in Institution	8	6	—	6	1	—	1	2	—	1	3	—	16	12	—	28
Class T.B. plus Group III.	Quiescent ...	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	1
	Not quiescent	4	3	—	9	2	—	8	3	—	—	1	1	21	9	1	31
	Died in Institution	16	5	—	1	3	—	8	4	—	—	—	—	25	12	—	37
Totals (pulmonary) ...		49	32	2	50	35	—	40	27	2	16	11	2	155	105	6	266

## NON-PULMONARY TUBERCULOSIS.

Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.															Grand Totals
		Under 3 months.			3-6 months.			6-12 months.			More than 12 months.			Totals.			
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Bones and Joints.	Quiescent ...	—	—	2	1	1	2	—	—	1	1	1	4	2	2	9	13
	Not quiescent	1	2	—	—	—	—	—	—	—	1	2	1	3	2	6	6
	Died in Institution	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	1
Abdominal.	Quiescent ...	—	—	—	1	1	—	—	—	—	—	—	—	1	1	—	2
	Not quiescent	—	1	—	—	—	—	—	1	—	—	—	—	—	2	—	2
	Died in Institution	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	1
Other Organs.	Quiescent ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Not quiescent	—	—	—	—	1	—	1	1	—	—	—	—	1	2	—	3
	Died in Institution	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Peripheral glands.	Quiescent ...	—	—	—	—	—	—	—	—	2	—	—	1	—	—	3	3
	Not quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals (non-pulmonary)		1	3	3	2	4	2	2	2	3	1	2	7	6	11	15	32

TABLE LXVI. PULMONARY TUBERCULOSIS.

Condition at the time of the last record made during the year to which the return relates.	Previous to 1926				1926				1927				1928				1929				1930				1931				1932				1933.												
	Class T.B. plus				Class T.B. plus				Class T.B. plus				Class T.B. plus				Class T.B. plus				Class T.B. plus				Class T.B. plus				Class T.B. plus																
	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)										
Adults M	7	4	3	1	8	1	2	3	—	5	1	5	2	—	7	4	1	5	—	6	7	4	4	—	8	13	3	4	—	7	2	—	1	—	1	—	—	—	—	—					
Disease Arrested F	10	8	7	—	15	3	—	1	—	1	2	—	2	—	2	15	3	1	—	4	9	2	1	—	3	15	—	4	—	4	6	—	—	—	—	—	—	—	—	—					
Children	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	3	—	1	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Adults M	—	14	15	3	32	—	3	2	—	5	1	4	1	—	5	1	6	13	1	20	2	3	10	1	14	6	4	15	2	21	12	4	28	4	36	15	9	45	6	60	24	8	33	8	49
Disease not Arrested F	1	7	9	3	19	—	—	3	—	3	—	1	4	—	5	1	1	3	1	5	1	1	8	—	9	3	1	15	1	17	12	1	22	1	24	23	4	21	4	29	29	3	34	4	41
Children	—	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	6	—	—	—	—	5	—	—	—	—	3	1	—	1	2	3	—	—	—	—
Condition not ascertained during the year	1	—	1	2	3	1	1	1	—	2	1	—	—	—	—	2	—	—	—	—	3	1	1	—	2	4	2	3	—	5	8	—	1	—	1	—	—	3	—	3	—	—	—	—	—
Total on Dispensary Register at 31st December	23	33	37	9	79	5	6	10	—	16	5	10	9	—	19	24	11	22	2	35	26	11	25	1	37	48	10	41	3	54	45	5	52	5	62	41	14	69	11	94	56	11	67	12	90
Adults M	176	23	5	1	29	6	6	1	—	7	7	6	—	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Discharged as Recovered F	154	9	6	2	17	5	1	—	—	1	6	2	—	—	2	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Children	102	1	—	—	1	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Lost sight of, or otherwise removed from Dispensary Register	218	42	44	8	94	31	17	28	7	52	18	19	16	1	36	33	13	15	—	28	33	5	26	—	31	22	10	27	6	43	15	3	24	6	33	17	—	20	1	21	4	—	9	—	9
Adults M	19	27	46	49	122	4	23	26	12	61	2	10	33	8	51	1	4	27	7	38	3	3	38	16	57	5	—	30	11	41	5	2	23	30	55	1	—	17	14	31	4	—	6	9	15
Dead F	17	5	23	55	83	9	15	19	14	48	2	3	22	15	40	3	1	29	8	38	2	2	29	9	40	5	2	18	10	30	3	1	23	22	46	7	2	18	6	26	—	1	2	8	11
Children	3	1	3	6	10	—	—	1	—	1	—	—	2	2	4	1	—	—	—	—	1	—	—	—	—	—	—	2	2	—	—	—	1	—	1	1	—	—	—	—					
Total written off Dispensary Register	989	108	127	121	356	55	62	75	33	170	37	40	73	26	139	43	18	71	15	104	39	10	94	25	129	32	12	75	29	116	23	6	71	58	135	26	2	55	21	78	9	1	17	17	35
GRAND TOTALS	712	141	164	130	435	60	68	85	33	186	42	50	82	26	158	67	29	93	17	139	65	21	119	26	166	80	22	116	32	170	68	11	123	63	197	67	16	124	32	172	65	12	84	29	125

(69) Not now on Dispensary Register and reasons for removal therefrom.

TABLE LXVII.

NON-PULMONARY TUBERCULOSIS.

Condition at the time of the last record made during the year to which the return relates.	Previous to 1926					1926				1927				1928				1929				1930				1931				1932				1933												
	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total											
	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults	Adults										
Disease Arrested	M	1	—	—	1	1	—	—	—	1	1	—	—	—	1	1	1	—	—	3	2	—	1	—	3	3	1	—	—	4	1	1	—	2	4	—	1	—	—	1						
	F	—	3	2	5	1	—	—	—	1	2	—	—	—	2	—	—	—	—	—	—	3	1	3	7	1	—	—	2	3	2	1	2	—	5	—	2	—	—	2						
	Children	7	—	—	5	12	1	—	—	7	8	3	—	—	4	7	8	—	—	11	10	4	1	—	4	9	5	1	—	10	16	3	1	—	4	8	2	1	—	1	4	—	—	—	1	
Disease not Arrested	M	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	1	—	1	—	—	2	4	—	2	—	6	4	—	—	—	1	5				
	F	2	—	2	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	1	—	—	—	—	1	2	1	1	—	—	—	4				
	Children	1	—	—	1	—	—	—	—	—	1	—	—	—	1	1	—	—	—	—	—	1	1	—	—	1	1	—	—	1	2	—	1	3	2	—	—	3	5	3	—	1	2	6		
Condition not ascertained during the year	2	—	—	—	2	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Total on Dispensary Register at 31st December	13	—	6	7	26	3	—	—	8	11	6	—	1	4	11	10	—	—	12	22	6	3	5	5	19	9	5	2	13	29	10	2	1	8	21	12	3	4	6	25	9	4	2	4	19	
Transferred to Pulmonary	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Discharged as Recovered	M	7	—	4	2	13	3	—	—	3	2	1	—	1	4	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	F	14	5	4	7	30	1	—	—	4	5	1	1	—	3	5	—	—	—	3	3	1	—	—	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Children	36	4	5	510	555	5	3	2	48	58	1	1	—	29	31	—	—	—	10	10	1	—	1	1	3	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lost sight of, or otherwise removed from Dispensary Register	19	10	10	133	172	4	6	4	25	39	6	3	2	20	31	4	1	—	6	11	4	—	3	3	10	4	—	1	3	8	3	2	1	2	8	3	1	—	1	5	1	—	1	—	2	
Dead	M	3	1	3	1	8	2	—	1	1	4	2	—	1	3	2	1	1	—	4	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	F	3	—	1	1	5	1	—	—	1	2	—	1	—	1	1	—	—	—	2	3	—	1	—	—	1	1	—	1	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Children	5	1	1	2	9	—	2	1	3	6	—	—	1	—	1	2	2	1	1	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total written off Dispensary Register	87	21	28	656	792	16	11	8	82	117	12	7	4	53	76	10	4	4	20	38	7	1	4	5	17	5	1	2	5	13	3	4	2	2	11	5	1	1	1	8	1	1	2	—	4	
GRAND TOTALS of (a) and (b) (excluding those transferred to Pulmonary).	100	21	34	663	818	19	11	8	90	128	18	7	5	57	87	20	4	4	32	60	13	4	9	10	36	14	6	4	18	42	13	6	3	10	32	17	4	5	7	33	10	5	4	4	23	

## CHEAM SANATORIUM.

TABLE LXVIII.

Authority.	In-patients on Jan 1st, 1933		Admitted during year 1933.		Discharged during year 1933, including deaths.		In on Jan. 1st 1934.		Died during year 1933	
	M	F	M	F	M	F	M	F	M	F
Croydon C. B. ...	55	31	91	79	103	76	43	34	20	6
	55	31	91	79	103	76	43	34	20	6

No. of Artificial Pneumothorax cases begun ...	23
No. of Refills given ...	611
No. of X-ray Screenings ...	570
No. of Films taken ...	105
No. of Sputum tests ...	923
No. of Gas Replacements ...	4

## Immediate Results of Treatment.

Group	Total number of cases discharged 1933.		Quiescent		Improved		No Material Improvement.		Died in institution		Average duration of stay in days	Discharged before completion of treatment	
	M	F	M	F	M	F	M	F	M	F		M	F
Class T.B. Minus	13	23	6	7	6	12	...	2	1	...	133	...	2
Class T.B. Plus. Group I	7	3	2	...	5	2	...	.	...	...	150	...	1
" " " Group II	36	23	2	...	24	14	8	6	...	...	218	2	3
" " " Group III	39	16	...	...	4	5	14	4	19	6	173	2	1
Observation Non T B. ...	2	3	...	...	...	...	...	...	...	...	...	...	...
	97	68	10	7	39	33	22	12	20	6		4	7

At the beginning of 1933 there were 86 patients in Cheam. During the year 170 were admitted and 153 discharged, whilst 26 died, thus leaving 77 patients in at the beginning of 1934.

There were 9 observation cases sent in, 4 males, 5 females. Of the 4 males 2 were not Tubercular, and of the 5 females 2 were

not Tubercular, therefore there were 5 observations in Non-Tuberculars which are shown above, the 4 that were Tubercular are in with the Tubercular cases and are not shown as observation.

Artificial Pneumothorax cases discharged but still under treatment, 6 males, 8 females, see above, making total discharges males 103, females 76.

These 14 Artificial Pneumothorax cases only refer to cases discharged in 1933, those discharged in 1932 and still having refills have not been included.

### Cheam Sanatorium Dental Report.

Of the patients in Cheam Sanatorium examined during the year, 77% were found to be suffering from dental disease. The number of patients who availed themselves of treatment was 41. The number of attendances totalled 363. This at first glance may seem a large number of attendances for the patients treated, but it must be realised that dental treatment for tuberculosis patients is a most difficult form of dentistry. A certain amount of the treatment time is sometimes taken up by the need of explaining dental attention.

Treatment for these patients is divided into two classes (a) those cases in the acute wards suffering from toothache in which, in view of their condition, treatment is limited to the relief of pain, and (b) those in which the prognosis of the case is good. In these cases an effort is made to complete all the treatment necessary.

	Males.	Females.	Total.
Number Examined ...	34	19	53
Referred for Treatment	27	14	41
Treated ... ..	34	19	53*
Attendances ... ..	189	174	363
Extractions ... ..	123	80	203
Fillings ... ..	31	40	71
Dressings ... ..	4	7	11
Scalings and Gum Treatments ... ..	45	49	94
Denture Dressings ...	18	34	52
Dentures Fitted ...	6	9	15

\* Including 12 from previous year.

Sessions—36.

## SECTION VII.

## VENEREAL DISEASES.

The scheme in operation in the Borough consists of the Clinics held at the Croydon General Hospital. Males attend on Saturday afternoons and Thursday evenings, women and children on Wednesday afternoons.

The Clinic is conducted by Dr. P. W. Hamond, who is not otherwise connected with the Health Department. Croydon is also one of the participating authorities in the London County Council's scheme, under which clinics for the treatment of venereal diseases are provided at a large number of London Hospitals, and at resident hostels; the cost being apportioned among the ten participating authorities in the scheme on a basis of user.

TABLE LXIX.

*Attendances at the Croydon Clinic.*

	1925.	1926.	1927.	1928.	1929	1930.	1931.	1932.	1933.
New male patients	116	141	145	121	101	196	263	235	242 <sup>a</sup>
New female patients	156	192	160	158	94	171	205	241	214 <sup>a</sup>
Attendances, male patients ...	2713	2360	2643	3502	3581	5050	4923	4691	4578 <sup>a</sup>
Attendances, female patients ...	1230	1351	1417	1631	2127	3029	3271	2724	2677 <sup>a</sup>

<sup>a</sup> Includes 118 new cases and 1640 total attendances by patients from outside areas.

*Attendances of Croydon Patients at various London Hospitals under the General Scheme.*

	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.
New patients ...	138	130	132	139	131	125	139	119	134
Total attendances	2648	2767	3160	3080	3089	3150	2384	2835	2407

Of the 134 new patients in 1932, 16 had syphilis, 1 soft chancre, 46 gonorrhoea, and 71 were not suffering from venereal disease.



*Pathological Examinations at London Hospitals for Croydon Patients.*

	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.
Tests for Clinics	642	542	540	716	924	715	829	900	855
Tests for practitioners	1069	799	667	570	932	2197	3'98	1680	1775

Two Croydon patients were admitted to an approved hostel under the L.C.C. scheme, with an aggregate of 80 days in residence.

*Attendances of Patients at Venereal Diseases Clinic at the Croydon General Hospital.*

Authority	1928		1929		1930		1931		1932		1933.	
	In-Patients (days)	Out-Patients	In-Patients (days)	Out-Patients	In-Patients (days)	Out-Patients	In-Patients (days)	Out-Patients	In-Patients (days)	Out-Patients	In-Patients (days)	Out-Patients
Croydon ...	74	3586	132	3998	...	6159	...	6395	159	5405	...	5615
Surrey C. C.	137	1451	46	1676	...	1686	...	1491	...	1512	...	1280
Kent C. C. ...	40	77	...	11	...	184	...	232	...	74	...	87
London C. C. ...	...	2	...	23	...	46	...	72	...	426	...	255
Other Authorities ...	...	...	...	...	...	4	...	4	...	19	...	18
	251	5116	178	5708	...	8079	...	8194	159	7436	...	7255

TABLE LXX.  
*Croydon Cases attending London Hospitals.*

Hospital	Cases seen for the first time.			Conditions other than Venereal	Total No. of Attendances	Aggregate No. of In-Patient Days	No. of doses of N.A.B. compounds
	Syphilis	Gonorrhœa	Soft Chancre				
St. Thomas's ... ..	7	27	1	40	1259	22	29
Gay's ... ..	6	11	...	12	520	...	60
King's College ... ..	2	2	...	2	151	28	18
Great Ormond Street ... ..	...	...	...	10	108	...	70
Royal Free ... ..	...	1	...	1	15	...	...
S. London Hospital for Women ... ..	...	...	...	1	132	...	...
Whitechapel Clinic (L.C.C.) ... ..	...	...	...	...	98	...	...
St. Paul's ... ..	1	2	...	4	119	...	2
Westminster Hospital ... ..	...	1	...	1	5	...	...
Children's Home, Waddon ... ..	...	2	...	...	...	44	...
Total ... ..	16	46	1	71	2407	94	179

TABLE LXXI.  
*Bacteriological Examinations carried out at London Hospitals for Croydon Patients.*

Hospital	Detection of Spirochetes		Detection of Gonococci		Wassermann Re-action		Other Exams.		Total
	For Clinic	For Priv. Prac.	For Clinic	For Prac.	For Clinic	For Prac.	For Clinic	For Prac.	
St. Thomas's ... ..	7	...	293	4	113	...	40	...	457
Great Ormond Street ... ..	...	...	4	1	29	1	15	...	50
South London Hospital for Women... ..	...	...	25	1	...	1	...	...	27
Royal Free ... ..	...	...	6	...	...	...	2	...	8
King's College ... ..	...	...	14	...	9	...	...	...	23
Whitechapel Clinic, L.C.C. ... ..	...	...	32	...	2	...	5	...	39
Milner Green ... ..	...	...	...	...	...	2	...	...	2
Westminster Hospital ... ..	...	...	3	...	1	2	1	5	12
St. Paul's ... ..	...	...	4	...	3	...	...	...	7
Guys Hospital ... ..	1	...	124	981	56	391	66	386	2005
Total ... ..	8	...	505	987	213	397	129	391	2630

TABLE LXXII.

Return relating to all persons who were treated at the Treatment Centre at Croydon General Hospital during the year ended the 31st December, 1933.

	Syphilis		Soft Chancre		Gonorrhoea		Con- ditions other than venereal		Totals		
	M	F	M	F	M	F	M	F	M	F	Totals
1. Number of cases on 1st January under treatment or observation ... ..	46	40	...	...	25	24	5	2	76	66	142
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection ... ..	3	...	...	...	4	...	4	...	11	...	11
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from :—											
Syphilis, primary ... ..	4	...	...	...	...	...	...	...	4	...	4
" secondary ... ..	2	...	...	...	...	...	...	...	2	...	2
" latent in 1st year of infection ... ..	...	...	...	...	...	...	...	...	...	...	...
" all later stages ... ..	15	21	...	...	...	...	...	...	15	21	36
" congenital ... ..	6	1	...	...	...	...	...	...	6	1	7
Soft Chancre ... ..	...	...	...	...	...	...	...	...	...	...	...
Gonorrhoea, 1st year of infection ... ..	...	...	...	...	112	48	...	...	112	48	160
" later ... ..	...	...	...	...	4	...	...	...	4	...	4
Conditions other than venereal... ..	...	...	...	...	...	...	70	127	70	127	197
4. Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection	6	7	...	...	17	9	6	1	29	17	46
TOTALS OF ITEMS 1, 2, 3 AND 4 ... ..	82	69	...	...	162	81	85	130	329	280	609
5. Number of cases discharged after completion of treatment and final tests of cure (see Item 15) ...	15	1	...	...	53	26	82	127	150	154	304
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance suffering from :—											
Syphilis, primary ... ..	4	...	...	...	...	...	...	...	4	...	4
" secondary ... ..	1	2	...	...	...	...	...	...	1	2	3
" latent in 1st year of infection ... ..	...	...	...	...	...	...	...	...	...	...	...
" all later stages ... ..	11	7	...	...	...	...	...	...	11	7	18
" congenital ... ..	2	...	...	...	...	...	...	...	2	...	2
Soft Chancre ... ..	...	...	...	...	...	...	...	...	...	...	...
Gonorrhoea, 1st year of infection ... ..	...	...	...	...	30	9	...	...	30	9	39
" later ... ..	...	...	...	...	1	1	...	...	1	1	2
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure (see Item 15) ... ..	...	2	...	...	29	12	...	...	29	14	43
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners ...	7	8	...	...	10	11	...	...	17	19	36
9. Number of cases remaining under treatment or observation on 31st December ... ..	42	49	...	...	39	22	3	3	84	74	158
TOTALS OF ITEMS 5, 6, 7, 8 AND 9 ... ..	82	69	...	...	162	81	85	130	329	280	609
(These totals should agree with those of Items 1, 2, 3 and 4)											
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment :—											
Syphilis, primary ... ..	...	...	...	...	...	...	...	...	...	...	...
" secondary ... ..	...	...	...	...	...	...	...	...	...	...	...
" latent in 1st year of infection ... ..	...	...	...	...	...	...	...	...	...	...	...
" all later stages ... ..	2	2	...	...	...	...	...	...	2	2	4
" congenital ... ..	...	...	...	...	...	...	...	...	...	...	...
11. Number of attendances :—											
(a) for individual attention of the medical officers	1425	1091	...	...	1036	398	102	171	2563	1660	4223
(b) for intermediate treatment, e.g., irrigation, dressing ... ..	36	9	...	...	1966	1004	13	4	4205	1017	5032
TOTAL ATTENDANCES ... ..	1461	1100	...	...	3002	1402	115	175	4578	2677	7255

	Syphilis		Soft Chancre		Gonorrhoea		Conditions other than venereal		Totals			
	M	F	M	F	M	F	M	F	M	F	Ttls	
<b>12. In-patients :—</b>												
(a) Total number of persons admitted for treatment during the year ... ..	...	...	...	...	...	...	...	...	...	...	Nil	
(b) Aggregate number of "in-patient days" of treatment given ... ..	...	...	...	...	...	...	...	...	...	...	Nil	
	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals			
	M	F	M	F	M	F	M	F	M	F		
<b>13. Number of cases of congenital syphilis in Item 3 above classified according to age periods ...</b>	...	...	...	...	3	1	3	...	6			
	Arsenobenzene Compounds				Mercury				Bismuth			
<b>14. Chief preparations used in treatment of Syphilis :</b>	Novarsenobenzene				Pil. Hyd.				Bismostab			
(a) Names of preparations ... ..	Stabilarsan				...				531			
(b) Total number of injections given (out-patients and in-patients) ... ..	852				...				218			
(c) Number of injections included in (b) given to patients who on first attendance at this Centre were suffering from primary and secondary syphilis ... ..	279				...				6			
<b>15. Are the tests recommended in Memo. V21 as amended by Memo. V21A followed in deciding as to the discharge of the patient after treatment and observation for syphilis and gonorrhoea? Yes.</b>												
	Microscopical				Serum Tests							
	for spirochetes		for gonococci		Wassermann	Others for Syphilis		for Gonorrhoea				
<b>16. Pathological Work :—</b>	3		...		...	...		...				
(a) Number of specimens examined at and by the medical officer of the treatment centre	...		694		523	...		6				
(b) Number of specimens from patients attending at the centre sent for examination to an approved laboratory ... ..	...		...		...	...		...				

TABLE LXXIII.

Statement showing the services rendered at the Treatment Centre during the year, classified according to the areas in which the patients resided.

Name of County or County Borough (or Country in the case of persons residing elsewhere than in England and Wales) to be inserted in these headings.	Croydon	Surrey	Kent	London	Essex	Bradford.	Total
<b>A. Number of cases in Item 3 and 4 from each area found to be suffering from :—</b>							
Syphilis ... ..	47	11	1	3	...	...	62
Soft Chancre ... ..	...	...	...	...	...	...	...
Gonorrhoea ... ..	127	43	5	14	1	...	190
Conditions other than venereal ... ..	164	29	2	7	1	1	204
<b>TOTAL ... ..</b>	<b>338</b>	<b>83</b>	<b>8</b>	<b>24</b>	<b>2</b>	<b>1</b>	<b>456</b>
<b>B. Total number of attendances of all patients residing in each area ... ..</b>	5615	1280	87	255	17	1	7255
<b>C. Aggregate number of "In-patient days" of all patients residing in each area ... ..</b>	Nil	...	...	...	...	...	...
<b>D. Number of doses of arsenobenzene compounds given in the out-patient Clinic and In-patient Department to patients residing in each area</b>	591	246	...	15	...	...	852

**SECTION VIII.**  
**MATERNITY AND CHILD WELFARE.**  
**TABLE LXXIV.**

**INFANT CENTRES AND CLINICS.**

Address	Whether Sessions are held weekly, fortnightly, etc.	Day and time of Meeting *	Present arrangements for medical supervision
Municipal, Lodge Road, Croydon ... ..	Twice wkly.	Mon. & Thur.	A Doctor and Nurse are in attendance at each Session.
Boston Road, Mission Hall ... ..	Weekly	Thur.	
Sylverdale Road Parish Hall ... ..	„	Mon.	
Wesleyan School Room, Bartlett Street ... ..	„	Thur.	
Parish Hall, Wickham Road, Shirley ... ..	„	Mon.	
St. Luke's Hall, Spring Lane ... ..	„	Fri.	
Wesleyan School Room, Lower Addi-combe Road...	„	Tues.	
Holy Innocents Parish Room, South Norwood ...	Twice wkly.	Tues. & Fri.	
Forester's Hall, Westow Street, S.E. 19 ... ..	Weekly	Wed.	
All Saints' Parish Hall, Moffatt Road, Thornton Heath ... ..	„	Tues.	
St. Alban's Hall, Whitehorse Lane ... ..	Twice wkly.	Wed. & Fri.	
St. Paul's Hall, Norfolk Road, Thornton Heath ...	Weekly	Mon.	
Salvation Army Hall, Whitehorse Road ... ..	„	Fri.	
Wesleyan School Room, London Road, S.W. 16 ...	„	Wed.	
St. George's Hall, Barrow Road, Waddon ... ..	„	Wed.	
St. Oswald's Hall, Green Lane, Thornton Heath ...	„	Thur.	
St. Jude's Hall, Thornton Road ... ..	„	Tues.	

\* 2 p.m.

**Notification of Births Act, 1915.**

This Act requires all births to be notified to the Medical Officer of Health within 36 hours of their occurrence. The whole system of health visiting rests on this Act.

Notifications were received from—

	<i>Live Births.</i>	<i>Still Births.</i>	<i>Total.</i>
Midwives ... ..	2,404	77	2,481
Doctors, parents, and others ... ..	779	14	793

As the total number of births and still births registered during 1933 was 3,490 (Live 3,391, Still 99), 208 births and 8 still births were not notified in accordance with the provisions of the Act. The relevant section of the Act lays down that it is the duty of the

father of the child or of any person in attendance upon the mother at the time of, or within thirty-six hours after the birth, to give notice in writing of the birth to the Medical Officer of Health of the district in which the child is born, and any person who fails to give notice of a birth in accordance with the Act shall be liable to a penalty.

### Maternal Mortality.

There were 12 deaths associated directly with pregnancy, as compared with 7 in 1932. The maternal mortality rate was consequently 3.7 per 1,000 births, compared with 2.1 per 1,000 in 1932. In other words, one mother died for every 262 living babies born.

The deaths directly associated with pregnancy were caused by: Puerperal Eclampsia, 2 cases; Puerperal Septicæmia, 5 cases; Hyperemesis, 1 case; Ectopic Gestation, 1 case; Pulmonary Embolism, 1 case; Pyelitis, 1 case; Miscarriage, 1 case.

In the Table below only deaths directly due to pregnancy are included.

TABLE LXXV.

YEAR.	BIRTHS.	Puerperal Toxæmias.		Hæmorrhages.			Other Causes.						TOTAL.	Maternal Mortality.	Infant Mortality.	
		Puerperal Infection.	Eclampsia.	Hyperemesis.	Ectopic Gestation.	Placenta Prævia.	Post-partum Hæmorrhage.	Pulmonary Embolism.	Caesarian Section.	Shock.	Heart Disease. Syncope.	Renal Trouble.				Other Causes.
1918	2626	3	1	...	...	1	2	...	1	...	...	...	3	11	4.2	76
1919	2965	5	1	...	...	...	...	...	...	...	...	...	...	6	2.0	73
1920	4351	6	2	...	...	2	...	2	...	3	1	2	18	4.1	63	
1921	3631	4	2	...	...	1	2	...	...	2	...	3	...	14	3.9	74
1922	3505	8	1	...	...	1	1	1	...	...	2	...	1	15	4.3	64
1923	3373	4	2	...	...	1	...	...	2	...	...	...	1	10	3.0	52
1924	3456	2	1	...	...	...	3	2	...	...	1	...	...	9	2.6	56
1925	3406	5	1	...	...	...	3	2	1	...	...	1	...	13	3.8	55
1926	3477	13	...	...	...	2	1	1	1	2	1	...	3	24	6.9	61
1927	3174	5	...	...	...	1	...	1	...	...	...	1	1	9	2.9	55
1928	3374	2	4	...	...	...	1	3	...	...	...	...	3	13	3.9	53
1929	3399	4	...	1	1	1	2	1	...	...	...	...	1	11	3.2	65
1930	3514	1	...	...	...	...	2	1	...	...	...	...	3	7	2.0	48
1931	3400	11	3	2	3	1	2	1	...	...	...	...	...	23	6.2	57
1932	3311	2	3	...	...	...	...	...	...	1	...	...	1	7	2.1	49
1933	3147	5	2	1	1	...	...	1	...	...	...	1	1	12	3.8	47
		80	23	4	5	11	19	16	5	5	7	7	20	209		

### Puerperal Fever and Puerperal Pyrexia.

Thirteen cases of Puerperal Fever, and 39 cases of Puerperal Pyrexia were notified. This is a rate of 4.0 per 1,000 births for the former and 12.0 per 1,000 for the latter. The death-rates were:—Puerperal Fever, 2.16 per 1,000 births. There were no deaths attributed to Puerperal Pyrexia.

The following Table gives fuller details concerning these cases.

TABLE LXXVI.

	Puerperal Fever.	Puerperal Pyrexia.
No. of cases notified	13	39
„ „ attended by doctor alone at confinement	3	16
„ „ attended by doctor and midwife	2	2
„ „ attended by midwife alone	5	20
„ „ B.B.A.	3	—
„ „ attended in an institution	3	16
„ „ attended in Private Nursing Homes	2	6
„ „ treated at home only	3	16
„ „ treated at hospital	4	16
„ „ treated at Private Nursing Home	2	4
„ „ treated partly at home and partly in hospital	4	11
„ „ who died	—	—

Under Section 2 (1) of the Midwives and Maternity Homes Act, 1926, a midwife is enabled to claim compensation for loss of practice on account of suspension from work to prevent the possible spread of infection. Two applications were granted, and a sum of £3 18s. paid.

The Committee also assist necessitous patients in the payment of the midwife's fee. 14 applications were made for assistance by midwives on behalf of the patients, and a total sum of £23 19s. was allowed.

TABLE LXXVII.

### Accommodation for Confinement.

The following table gives information concerning the accommodation utilized for confinements.

	Number.	Percentage.
In Private Houses	1540	46.9
In Public Institutions...	1109	33.7
Registered Maternity Homes..	637	19.4

There is a distinct trend towards confinement taking place in an institution or maternity home.



## THE OBSTETRIC SERVICE.

The obstetric scheme in Croydon is perhaps the most complete of any of the schemes conducted by local authorities. It aims at, and to a very large extent achieves, the ideal of complete ante-natal, natal and post-natal medical supervision under the same whole time medical officer. It has proved its workability and its public health usefulness. From the mother's first visit to her last the aim is prevention and where for some reason or other preventive measures fail, then immediate treatment. The ante-natal clinics, Mayday Hospital and St. Mary's Maternity Hospital, and the post-natal clinics are all links in the chain, working with one another under the clinical guidance of the specialist Assistant Medical Officer of Health for Obstetrics.

The Ante-Natal Clinics are held in the Centre in Lodge-road on four mornings a week. There are in attendance one lady assistant Medical Officer of Health, the lady almoner and one health visitor who is assisted by a second on two mornings a week. The obstetric officer attends each session for part of the time to see abnormal cases. Pupil midwives from Mayday Hospital and from St. Mary's Maternity Hospital attend for instruction on three mornings a week.

The expectant mothers are sent to these clinics from a variety of sources. In 1933, 10% were directed by other departments of the Public Health Service, 14% were sent by midwives, 8% came from medical practitioners and the remaining 68% were from other sources or came on their own initiative. Of this remainder, a large number of mothers had been cared for by the service in previous pregnancies.

An income limit is made for those booked to be delivered in the Council's beds, and this in the case of a couple without other children or monetary commitments is £300 per annum.

Most of the cases are supervised throughout the ante-natal period from about the 20th week; the remainder come for one consultation at the 36th week, a time when an obstetric opinion can be given and when examination is most informative.

The patients who attend the ante-natal clinics arrange for their confinements to take place at Mayday Hospital, at St. Mary's Maternity Hospital, or at their own homes in the care of private medical practitioners or midwives.

Mayday Hospital is the Croydon Public Health general hospital and the Lying-in ward has 22 beds. In addition, two wards consisting of 36 beds are utilised for ante-natal, post-natal and gynaecological cases. The hospital is recognised by the General Nursing Council as a training school and by the Central Midwives Board. About 12 pupil midwives are trained each year. The clinical work in these beds is directed by the Obstetric Officer. Normal maternity cases are now discharged on the fourteenth day.

St. Mary's Maternity Hospital is a 32 bedded hospital in which 30 beds are retained by the Borough Council. All the cases booked there are now supervised in the Council's ante-natal clinics. The hospital is autonomous and fully equipped with two labour theatres, nurseries, sterilization plant, isolation flat and laundry. It is recognised by the Central Midwives' Board and takes about 12 pupil midwives each year. The in-patients are in the care of the obstetric officer except for abnormalities of labour. These are treated by a rota of six medical officers who are practitioners in the town. The obstetric officer submits cases, in whom abnormal labour is anticipated, to the medical officer on the rota for the week and the hospital midwives call upon the rota medical officer when aid is required during labour. Normal cases are discharged on the 14th day.

There is no external midwifery service conducted by the Council. Information regarding the confinements that take place in the patients' own homes following supervision in the Council's ante-natal clinics is supplied by doctors and midwives in a space provided on the patients' attendance cards.

All the patients attending the ante-natal clinics are instructed to attend the post-natal clinic six weeks after delivery. The post-natal clinic holds two sessions a week and is conducted by the Obstetric Officer. Abnormal cases are treated as out-patients at these clinics or as in-patients in the Mayday Hospital. All mothers with babies are passed on to the Infant Welfare Centres if they desire this assistance.

The whole of the Council's obstetric service is thus in the clinical control of the Obstetric Officer, except the actual confinements and their complications in St. Mary's Maternity Hospital. His duties comprise a daily ward round of the obstetric and gynaecological wards at Mayday Hospital, a daily ward round at St. Mary's Maternity Hospital, the supervision of the ante-natal clinics

on five mornings a week, the conduct of one morning and one afternoon session of the post-natal clinic, and operations at Mayday Hospital on three afternoons a week. He directs the Puerperal Infection unit at the Borough Hospital and visits maternity cases in other institutions of the Council. As Borough Consulting Obstetrician, he is called into consultation by practitioners whose patients are unable to pay for the services of a specialist. This scheme approaches very nearly the requirements of a complete obstetric service. It works smoothly and well and ensures a continuity of supervision which influences mothers to use it to their full advantage. The disinclination of many mothers to avail themselves of expert guidance before and after confinement is one of the chief factors in the persistence of a high maternal mortality and morbidity.

In the following report, an effort is made to indicate the relation of the obstetric service to the obstetric activity of the whole borough. The form of the report is that recommended by the Committee of the Section of Obstetrics and Gynæcology of the Royal Society of Medicine for the Unification of Clinical Reports of Maternity Hospitals (1928). This is intended to facilitate the compilation of aggregate statistics which include all the hospitals, and to compare the results obtained by hospitals situated in different parts of the country and dealing with populations working under different industrial conditions.

The small number of abnormalities diminishes the intrinsic value of the tables and percentages, but the method of setting out the results brings out many striking facts; and as the same tables will be repeated over a period of years, valuable statistics will be obtained. Some of the tables are probably of interest only to the medical and nursing professions. One salient feature is that the cases are divided into "Booked" and "Emergency" groups. A case that attends the ante-natal clinic more than once is a "Booked" case. An "Emergency" case is one sent into hospital severely ill or with some complication, by an outside doctor.

The patients themselves signify whether they wish to book for Mayday Hospital or for St. Mary's Maternity Hospital. Apart from this, five special groups of abnormal "Booked" cases are dealt with only at Mayday Hospital; and if they have already booked for St. Mary's, they are transferred to the Mayday Hospital list. These are:—

- (1) Cases supervised by the Ante-Natal Clinics for delivery at home under the care of doctors or midwives.
- (2) Cases referred to the Service by doctors because of some ante-natal abnormality or anticipated difficulty, and supervised by the Ante-Natal Clinic before delivery in hospital. These appear in the "Mayday Hospital Booked" list.
- (3) Cases who are delivered before 28 weeks.
- (4) Cases of venereal disease or other infectious disease.
- (5) Cases of special difficulty requiring X-Ray or other investigation or special medical or surgical treatment by a resident medical officer.

Cases admitted more than once during the same pregnancy are counted as one case only, for all statistical purposes.

Twenty-eight weeks is taken as the dividing line between abortion and labour except when a foetus of less than 28 weeks breathes. In this case, no matter what the duration of pregnancy may have been, the delivery is labelled as premature labour.

In the year 1933 the service has continued along the lines pursued in previous years. The new obstetric officer took up his duties on 28th April. In the ante-natal clinics, a system of giving each patient an appointed time to attend has been instituted, thus avoiding much tedious waiting. In accordance with modern medical views the blood pressure of each patient is now taken at every visit. In the latter half of the year, posterior positions of the vertex have been treated at the 38th week with Buist's pads. This has given good results and difficult "posterior" labours have been fewer. The supervision of expectant mothers at the ante-natal clinics is not yet as detailed as is desirable. This has been due to insufficient nursing staff. The lady medical officer has been obliged to do work that a nurse usually does, so that she has not been able to devote sufficient time to the medical and obstetric part of the examination. With the additional health visitor to be appointed in 1934, this will be remedied. The other deficiency in the Ante-Natal work is the lack of a Mothercraft scheme organised and conducted by a trained staff to instruct and assist expectant mothers in their preparations. For this, it is essential to have instructresses who have had special training in Mothercraft work.

Towards the end of the year, two other innovations were made at Mayday Hospital. The length of stay of normal cases was increased by one day so that normal cases now go home on the 14th day. For some years all mothers have received postural treatment to encourage normal involution of the uterus. The assistance of the Massage Department of Mayday Hospital has now been obtained to give lying-in cases exercises and treatment to improve the abdominal and pelvic musculature.

During the first four months of 1933 when the Obstetric Officer's post was filled by a locum tenens, the Post-Natal Clinic was very poorly attended. After that, the attendance gradually rose, and at the end of the year about two-thirds of mothers attended the post-natal clinic six weeks after their confinements.

### General Statistics for 1933.

Number of Births Registered in the Borough of Croydon ... ..	3,391
Number of Stillbirths registered in the Borough of Croydon ... ..	99
Total ... ..	3,490

Number of Expectant Mothers who attended the Borough Ante-Natal Clinics ... ..	1,645
Number of cases delivered in Mayday Hospital as Booked Cases ...	368
Number of cases delivered in Mayday Hospital as Emergency Cases	144
Total cases delivered at Mayday Hospital ... ..	512

Number of cases delivered in St. Mary's Maternity Hospital as booked Cases ... ..	598
Number of cases delivered in St. Mary's Maternity Hospital as Emergency Cases ... ..	—
Total cases delivered in St. Mary's Maternity Hospital ... ..	598

Number of cases admitted to the Puerperal Infection Unit, Borough Hospital and Mayday Hospital Isolation Wards, including four from Mayday Hospital and two from St. Mary's Maternity Hospital ... ..	28
Number of Maternal Deaths in Borough of Croydon ... ..	13
Number of Maternal Deaths in Booked Cases from Borough Ante-Natal Clinics ... ..	2
Number of Maternal Deaths in Emergency Cases Mayday Hospital ...	5
Number of Maternal Deaths in cases admitted as Puerperal Sepsis <i>per se</i> ... ..	6

The total number of patients treated by the Obstetric Service was—

(a) In Mayday Hospital ... ..	558
(b) In St. Mary's Maternity Hospital ... ..	601
(c) In the Borough Hospital (Puerperal Infection) and Mayday Hospital Isolation Wards, excluding four from (a) and 2 from (b) ... ..	22
(d) At the Ante-Natal Clinics and delivered outside the above Hospitals ... ..	380
(e) At the Post-Natal Clinics, excluding those included in (a), (b), (c), and (d) ... ..	27
(f) At the Ante-Natal Clinics and undelivered on December 31st, 1933 ... ..	388
	<hr/>
	1,976
	<hr/> <hr/>

### ANTE-NATAL SUPERVISION.

	1932.	1933.
Number of Sessions of Ante-Natal Clinics held ... ..	254	252
Number of individuals who attended ... ..	1,729	1,645
Number of previous year's cases, continuing Attendance ... ..	343	322
Number of New Cases ... ..	1,386	1,323
Number of cases undelivered on December 31st ... ..	322	388
Total Attendances made ... ..	7,820	8,518
Average Attendance per Session ... ..	30.8	33.8
Proportion of Old to New Cases per session—		
New ... ..	5.46	5.25
Old ... ..	25.34	28.55
Number of Cases delivered in Hospital as Booked Cases ... ..		966
Number of Cases delivered at other places under the care of Private Doctors or Midwives ... ..		380
Number of Patients found not to be pregnant ... ..		33
Number of Patients referred to Hospital for Ante-Natal Treatment ... ..		169

The condition for which these were admitted can be ascertained by reference to the "Booked" columns of the Numerical Summary of Cases.

### MAJOR ANTE-NATAL CONDITIONS TREATED AT CLINIC.

#### BREECH PRESENTATION.

External version successful ... ..	62
External version unsuccessful ... ..	16
Referred to Hospital for external version under Anæsthesia ... ..	14
Allowed to go to term as breech ... ..	10
Not recognised as breech before labour ... ..	8

#### Posterior Positions of the Vertex.

	Cases.
Successful Correction with Buist's pads at about 38 weeks ... ..	30
Buist's pads unsuccessful ... ..	7
Correction not attempted (since treatment instituted) ... ..	8

**Dental Treatment.**

Number of cases referred to Borough dental surgeon ... ..	186
Number of cases referred to private dental surgeons ... ..	66
Number of cases refusing dental treatment ... ..	72
Number of cases seen too late for necessary dental treatment ... ..	14

**Tuberculosis.**

Referred by Tuberculous Officer because of pregnancy ... ..	9
Referred to Tuberculous Officer ... ..	7

**X-Ray Examinations.**

58 cases were referred to Mayday Hospital X-Ray Department and 87 films were used.

Reasons for reference were :—

Breech for attitude ... ..	20 cases
For attitude, presentation, etc. ... ..	22 "
Twins ... ..	10 "
Renal calculus ... ..	4 "
Maturity ... ..	2 "

**Pathological Investigations.**

Blood for Wassermann and Kahn Reactions ... ..	48
Blood for Gonococcus Fixation test ... ..	8
Catheter urine for routine examination ... ..	15
Urine for Aschhiem—Zondek test ... ..	2
Urethral smears for Gonococci ... ..	64
Cervical smears for Gonococci ... ..	12

**Venereal Disease.**

Gonorrhœa—Total cases ... ..	8
Transferred to Borough V.D. Clinic ... ..	3
"    "    Mayday Hospital ... ..	4
"    "    Special Hospital for delivery ... ..	1
Syphilis—Total cases ... ..	7
Transferred to Borough V.D. Clinic ... ..	2
"    "    Mayday Hospital ... ..	5
"    "    Special Hospital for delivery ... ..	—

All the cases, except one, were delivered in Mayday Hospital in Isolation Wards, and all were transferred to the Borough V.D. Clinic on discharge.

**Other Conditions Treated as Out-Patients.**

	<i>No. of Cases,</i>
Retroverted Gravid Uterus ... ..	3
Chronic Rheumatic Carditis ... ..	5
Cervical Polypus ... ..	1
Parenchymatous Goitre ... ..	2

**Midwives' Cases.**

— 14 Midwives' cases were ordered into Hospital for delivery on medical grounds as follows:—

<i>Indication.</i>	<i>No. of Cases.</i>
Breech for version ... ..	1
Disproportion .. .. .	4
Albuminuria ... .. .	3
Abortion ... .. .	2
Missed abortion ... .. .	1
Exophthalmic goitre and heart disease ... .. .	1
Home conditions unsuitable ... .. .	2

**IN-PATIENT TREATMENT.****A.—Patients "Booked" in the Ante-Natal Department.**

	<i>Mayday Hospital.</i>	<i>St. Mary's Maternity Hospital.</i>	<i>Total.</i>
(1) Delivered in Hospital after 28th week ...	358	598	956
(2) Delivered in Hospital before 28th week ...	10	—	10
(3) Admitted after delivery ... .. .	6	1	7
(4) Discharged undelivered after ante-natal treatment and not subsequently delivered in Hospital ... .. .	4	2	6
(5) Died undelivered ... .. .	1	—	1
Totals ...	379	601	980

B.—"Emergency" Patients sent into Hospital with some complications by outside doctors or midwives. No "Emergency" Cases were sent to St. Mary's Maternity Hospital.

	<i>Mayday Hospital.</i>
(1) BEFORE LABOUR—	
(a) Delivered in Hospital after 28th week ... .. .	28
(b) Delivered in Hospital before 28th week ... .. .	6
(c) Discharged undelivered ... .. .	12
(d) Died ... .. .	4
(2) IN LABOUR—	
(a) Delivered in Hospital after 28th week ... .. .	27
(b) Delivered in Hospital before 28th week ... .. .	83
(c) Died ... .. .	—
(3) AFTER DELIVERY ... .. .	16
(4) ECTOPIC PREGNANCY ... .. .	3
Total ...	179



TABLE LXXVIII.

A Numerical Summary of Cases admitted for treatment, delivered in Hospital or admitted after delivery.

Some cases appear in more than one category in the Summary.

	<i>Mayday Hospital Booked.</i>	<i>Mayday Hospital Emergency.</i>	<i>St. Mary's Maternity Hospital Booked.</i>	<i>Total.</i>
<b>1. Conditions chiefly Ante-Natal.</b>				
Albuminuria ... ..	24	13	27	64
Eclampsia... ..	—	4	2	6
Persistent vomiting of Pregnancy	—	6	1	7
Chorea Gravidarum ... ..	2	—	—	2
Pyelitis and Urinary Infection ...	11	7	5	23
Malnutrition, Debility, Simple Anaemia, etc. ... ..	15	1	2	18
Ante-partum thrombo-phlebitis	3	1	3	7
Breech presentation for version	8	2	6	16
Disproportion ... ..	13	3	23	39
Post-maturity ... ..	8	2	17	27
Retroverted Gravid Uterus ...	—	3	—	3
<b>2. Intercurrent Diseases.</b>				
Chronic Nephritis ... ..	3	3	3	9
Pulmonary Tuberculosis ...	4	2	—	6
Venereal Disease ... ..	14	3	—	17
Pneumonia ... ..	1	3	—	4
Chronic Rheumatic Carditis ...	2	2	—	4
Ovarian Tumour ... ..	—	1	—	1
Exophthalmic Goitre ... ..	2	—	—	2
Insanity ... ..	3	2	—	5
<b>3. Conditions chiefly Natal.</b>				
Presentations at Delivery—				
Anterior Positions of the Vertex ... ..	308	34	514	856
Posterior Positions of the Vertex ... ..	35	4	62	101
Breech ... ..	13	11	21	45

	Mayday Hospital Booked.	Mayday Hospital Emergency.	St. Mary's Maternity Hospital Booked.	Total.
Shoulder ... ..	2	4	—	6
Face and Brow ... ..	—	—	—	—
Complex ... ..	—	2	3	5
Caesarean Section ... ..	4	2	5	11
Twins ... ..	5	2	7	14
Accidental Haemorrhage ...	4	5	5	14
Placenta Praevia ... ..	2	7	3	12
Hydramnios ... ..	—	—	4	4
Prolapse of Cord ... ..	—	3	2	5
Retained Placenta ... ..	2	2	9	13
Post-Partum Haemorrhage ...	2	2	3	7
B.B.A. ... ..	6	16	1	23
Lacerated Perineum ... ..	76	9	118	203
Obstructed Labour ... ..	—	4	1	5
Precipitate Labour ... ..	2	—	—	2
Premature Labour ... ..	28	20	36	84
Abortion ... ..	18	96	—	114
Ectopic Gestation ... ..	—	3	—	3
<b>4. Conditions chiefly Post-Natal excluding re-admissions from Post-Natal Clinic.</b>				
Retroversion ... ..	6	4	20	30
Delayed Involution ... ..	17	3	8	28
Post-partum Nephritis ... ..	6	1	8	15
Breast Abscess ... ..	3	1	1	5
Puerperal Pyrexia ... ..	3	13	4	20
Puerperal Fever ... ..	2	2	2	6

In addition 6 cases of Puerperal Fever *per se* were admitted to Mayday Hospital Isolation Wards and 16 cases to the Puerperal Infection Unit at the Borough Hospital.

**Cardiac Disease.**

There were four cases. One mother died, an "emergency" case at Mayday Hospital: a mortality of 25 per cent.

One infant was undelivered when the mother died.

**Hydramnios.**

There were four cases all "booked" at St. Mary's Maternity Hospital. There were no maternal deaths and two infants were still-born: a foetal mortality of 50 per cent.

**Cases of Albuminuria.**

Every patient attending the Ante-Natal Clinic has the urine tested and the blood pressure recorded at each visit. All cases of albuminuria (confirmed by catheter specimen) or hypertension with a diastolic blood pressure of 90 or over, are admitted to hospital. The routine treatment adopted in hospital was rest, meat-free diet with a high vitamin content, copious fluids, alkalis and aperients. Labour was induced if the symptoms and signs did not disappear in about 10 days, or if they become progressively worse.

TABLE LXXIX.

	<i>Mayday Hospital Booked.</i>	<i>Mayday Hospital Emergency.</i>	<i>St. Mary's Maternity Hospital Booked.</i>	<i>Total.</i>
Number of Cases ... ..	23	14	27	64
Number of Stillbirths and Infant Deaths ... ..	2	1	3	6
Foetal and Infant Mortality ...	8.7%	7.1%	11.1%	9.4%
Number of Maternal Deaths ...	—	2	—	2
Maternal Mortality ... ..	—	14.3%	—	3.1%
Number of Cases—				
Responded to treatment and delivered spontaneously near term ... ..	10	—	11	23
Responded to treatment and discharged to return abnormal ... ..	1	1	1	3
Responded to treatment and discharged to return normal ... ..	3	—	1	4
Responded to treatment and discharged, delivered else- where ... ..	—	2	1	3
Spontaneous premature labour	4	4	6	14
Not responding to treatment and labour induced ...	5	2	7	14
Not responding to treatment, abortion <i>per vaginam</i> induced ... ..	—	1	—	1
Not responding to treatment, hysterectomy performed	—	1	—	1
Died undelivered ... ..	—	1	—	1

**Eclampsia.**

	Mayday Hospital.			St. Mary's Mty. Hpl.		Total.
	Booked.	Emergency.		Booked.		
Number of Cases ... ..	0	...	4	...	2 (1 twins)	6
Maternal Deaths ... ..	0	...	2	...	0	2
Maternal Mortality ... ..	0	...	50%	...	0	33%
Number of Foetal and Infant Deaths ... ..	0	...	4	...	0	4
Foetal and Infant Mortality...	0	...	100%	...	0	67%

**Accidental Ante-Partum Hæmorrhage.**

	Total.	Mayday Hospital.			St. Mary's Mty. Hpl.	
		Booked.	Emergency.		Booked.	
No. of Cases ... ..	14	...	4	5	...	5
No. of Stillbirths and Infant Deaths ... ..	6	...	1	3	...	2
Foetal and Infant Mortality...	43%	...	25%	60%	...	40%

Method of Treatment—	Mayday Hospital.						St. Mary's Hospital.		
	Booked.			Emergency.			Booked.		
	No. of Cases	No. of Deaths.	Child	No. of Cases	No. of Deaths.	Child	No. of Cases	No. of Deaths.	Child
Sedatives, no intervention, eliminative, etc.	3	—	1	5	—	3	4	—	1
Rupture of membranes.	1	—	—	—	—	—	—	—	—
Cæsarean Section ... ..	—	—	—	—	—	—	1	1	1

There was one maternal death in a St. Mary's Hospital booked case.

**Placenta Prævia.**

	Total.	Mayday Hospital.			St. Mary's Mty. Hpl.	
		Booked.	Emergency.		Booked.	
No. of Cases ... ..	12	...	2	7	...	3
No. of Stillbirths and Infant Deaths ... ..	8	...	1	6	...	1
Foetal and Infant Mortality...	66.7%	...	50%	85.7%	...	33.3%

There were no maternal deaths.

**Contracted Pelvis (including relative disproportion between the pelvis and the foetal head).**

39 cases of contracted pelvis or disproportion were treated during the year. There were no maternal deaths and three infants were stillborn, or died, an infant mortality of 8%.

In first degree contractions "booked" cases at Mayday Hospital (including those sent to the obstetric service because of pelvic contraction) were treated by trial labour, while in "booked" cases at St. Mary's Maternity Hospital induction of premature labour was generally employed.

### Vertex Presentations at Delivery.

The number of deliveries in which the occiput was anterior at the beginning of labour including 30 corrected before labour by Buist's pads ... 856

The number of deliveries in which the occiput was posterior at the beginning of labour ... 101

TABLE LXXX.

### Treatment and Results of Posterior Position.

#### A.—Booked Cases Mayday Hospital.

Mode of Delivery.	No. of Cases.	Result to Mother.		Result to Child.			Remarks.
		L.	D.	L.	S.B.	D.	
Spontaneous Rotation and Delivery ...	23	23	—	23	—	—	
Spontaneous Delivery Face to Pubes ...	2	2	—	1	1	—	
Spontaneous Rotation Forceps Delivery ...	2	2	—	2	—	—	
Manual Rotation, Forceps Delivery ...	2	2	—	2	—	—	
Forceps Rotation and Delivery ...	6	6	—	5	1	—	Kielland's forceps
Forceps Delivery Face to Pubes ...	—	—	—	—	—	—	
Internal Version and Extraction ...	—	—	—	—	—	—	
Caesarean Section ...	—	—	—	—	—	—	
Craniotomy ...	—	—	—	—	—	—	
<b>TOTALS ...</b>	<b>35</b>	<b>35</b>	<b>—</b>	<b>33</b>	<b>2</b>	<b>—</b>	

Two infants were still-born : a foetal mortality of 5.7 per cent. There were no maternal deaths.

## B.—Emergency Cases Mayday Hospital.

Mode of Delivery.	No. of Cases.	Result to Mother.		Result to Child.			Remarks.
		L.	D.	L.	S.B.	D.	
Spontaneous Rotation and Delivery ...	—	—	—	—	—	—	
Spontaneous Delivery Face to Pubes ...	—	—	—	—	—	—	
Spontaneous Rotation Forceps Delivery ...	—	—	—	—	—	—	
Manual Rotation, Forceps Delivery ...	1	1	—	1	—	—	
Forceps Rotation and Delivery ...	2	2	—	2	—	—	Kielland's forceps
Forceps Delivery Face to Pubes ...	—	—	—	—	—	—	
Internal Version and Extraction ...	—	—	—	—	—	—	
Caesarean Section ...	—	—	—	—	—	—	
Craniotomy ...	—	—	—	—	—	—	
TOTALS ...	3	3	—	3	—	—	

There were no maternal or foetal deaths.

## C.—Booked Cases St. Mary's Maternity Hospital.

Mode of Delivery.	No. of Cases.	Result to Mother.		Result to Child.			Remarks.
		L.	D.	L.	S.B.	D.	
Spontaneous Rotation and Delivery ...	35	35	—	35	—	—	
Spontaneous Delivery Face to Pubes ...	12	12	—	11	—	1	Premature Infant died. One twin.
Spontaneous Rotation Forceps Delivery ...	7	7	—	6	1	—	
Manual Rotation, Forceps Delivery ...	5	5	—	5	—	—	
Forceps Rotation and Delivery ...	—	—	—	—	—	—	
Forceps Delivery Face to Pubes ...	2	2	—	2	—	—	
Internal Version and Extraction ...	—	—	—	—	—	—	
Caesarean Section ...	—	—	—	—	—	—	
Craniotomy ...	1	1	—	—	1	—	Contracted pelvis Induction.
TOTALS ...	62	62	—	59	2	1	

There were no maternal deaths. Two stillbirths and one neonatal death made the infant mortality 4.8 per cent.

**Breech Delivery.**

(Ante-Natal treatment of breech cases, see page ).

TABLE LXXXI.

	<i>Mayday Hospital Booked.</i>	<i>Mayday Hospital Emergency.</i>	<i>St. Mary's Maternity Hospital Booked.</i>	<i>Total.</i>
Number of Breech Deliveries ...	13	11	21	45
Number of Stillbirths and Infant Deaths ... ..	5	10	5	20
Foetal and Infant Mortality ...	39%	91%	24%	44%
Maternal Deaths ... ..	—	—	—	—

An uncomplicated breech delivery is one where an additional risk to the life of the foetus is not present—such conditions as ante-partum hæmorrhage, prematurity, monstrosity, prolapse of the cord, etc.

TABLE LXXXII.

	<i>Mayday Hospital Booked.</i>	<i>Mayday Hospital Emergency.</i>	<i>St. Mary's Maternity Hospital Booked.</i>	<i>Total.</i>
Number of Uncomplicated Breech Cases ... ..	8	1	12	21
Number of Stillbirths and Infant Mortality ... ..	2	1	2	5
Foetal and Infant Mortality ...	25%	100%	16.7%	24%
Number of Complicated Breech Cases ... ..	5	10	9	24
Number of Stillbirths and Infant Deaths ... ..	3	9	3	
Foetal and Infant Mortality ...	60%	90%	33.3%	62.5%

### Face and Brow Presentation.

There were no cases.

### Shoulder Presentations.

There were six cases, two "booked" and four "emergency" cases at Mayday Hospital. No mothers died. Four infants were stillborn, a mortality of 66.7%.

### Prolapse of Cord.

There were five cases, two "booked" cases at St. Mary's Maternity Hospital and three "emergency" at Mayday Hospital. No mothers died. Three infants were stillborn, a mortality of 60%.

### Post-Partum Hæmorrhage.

There were two cases in Mayday Hospital "booked" cases; two in Mayday Hospital "emergency" cases and three in St. Mary's Hospital "booked" cases.

There were no maternal deaths and no infants died or were stillborn.

### Abortion.

The service dealt with 114 cases of abortion during the year; all were treated at Mayday Hospital (18 booked cases and 96 emergency), none at St. Mary's Maternity Hospital and none in the puerperal sepsis unit at the Borough Hospital.

There were no maternal deaths.

In addition 3 cases of incomplete abortion were admitted to Mayday Hospital Isolation wards as puerperal sepsis and are recorded in the puerperal fever section (one maternal death).

Conditions for which abortion was induced:—

Pulmonary tuberculosis	...	...	3 cases
Chronic nephritis	...	...	2 cases



### Ectopic Pregnancy.

Three cases of ectopic pregnancy were treated, all "emergency" cases at Mayday Hospital. There was one maternal death, giving a maternal mortality of 33%.

### Laceration of Perineum.

The perineum was lacerated in 203 cases.

<i>Place of Delivery.</i>	<i>1st and 2nd degree.</i>	<i>3rd degree.</i>	<i>Total.</i>
Mayday Hospital—Booked ... ..	75	1	76
Mayday Hospital—Emergency (2 B.B.A.) ...	8	1	9
St. Mary's Maternity Hospital—Booked ...	116	2	118
			203

### Induction of Labour.

Labour was induced 68 times; 47 were medicinal and 21 instrumental. 13 were in Mayday Hospital "booked" cases; 5 in Mayday Hospital "emergency" cases and 49 in St. Mary's Hospital "booked" cases. One mother died owing to eclampsia, one baby was stillborn and two died after birth in Mayday Hospital "emergency" cases; and one baby was stillborn in a St. Mary's Maternity Hospital "booked" case.

### Forceps Delivery.

Forceps were applied 46 times (16 Mayday Hospital "booked," 5 Mayday Hospital "emergency" and 25 St. Mary's Maternity Hospital "booked" cases). In 4 cases, forceps were applied after induction of labour (all St. Mary's Hospital cases).

There were no maternal deaths.

1 baby was stillborn and none died at Mayday Hospital, an infant mortality of 5%.

1 baby was stillborn and none died at St. Mary's Maternity Hospital, an infant mortality of 4%.

TABLE LXXXIII.

## ANALYSIS OF FORCEPS CASES.

<i>No. of Cases.</i>	<i>Indication.</i>	<i>Mother.</i>		<i>Result. Child.</i>	
		<i>L.</i>	<i>D.</i>	<i>L.</i>	<i>S.B.</i>
<b>Mayday Hospital Booked.</b>					
4	Disproportion ... ..	4	—	4	—
8	Persistent Occipito-Posterior ...	7	—	6	1
2	Rigidity of Soft Parts ...	2	—	2	—
1	Foetal Distress ... ..	1	—	1	—
1	Prolonged 2nd Stage R.O.P. ...	1	—	1	—
1	Threatened Inertia ... ..	1	—	1	—
<b>Mayday Hospital Emergency.</b>					
3	Disproportion ... ..	3	—	3	—
2	Persistent Occipito-Posterior	2	—	2	—
<b>St. Mary's Maternity Hospital Booked.</b>					
2	Disproportion ... ..	2	—	2	—
7	Persistent Occipito-Posterior	7	—	7	—
4	Rigidity of Soft Parts ...	4	—	4	—
3	Foetal Distress ... ..	3	—	3	—
2	Threatened Inertia ... ..	2	—	2	—
2	Maternal Distress ... ..	2	—	2	—
3	Prolonged 2nd Stage R.O.P. ...	3	—	2	1
1	Prolapsed Hand (2nd Twin) ...	1	—	1	—
1	Eclampsia ... ..	1	—	1	—

### **Caesarean Section.**

Caesarean Section was performed 11 times, 4 "booked" and 2 "emergency" cases at Mayday Hospital and 5 "booked" cases at St. Mary's Maternity Hospital. In 6 cases on account of contracted pelvis; 1 placenta praevia; 1 ovarian cancer; 1 concealed accidental hæmorrhage; 1 large fibroids and 1 chronic nephritis. There was one maternal death and two babies died, all in "booked" cases at St. Mary's Maternity Hospital.

Caesarean Hysterectomy was performed twice, once for fibroids at term and once for recurrent albuminuria due to chronic nephritis at 24 weeks. Both these cases were at Mayday Hospital.

### **Bipolar and Internal Version.**

Internal version was performed 6 times, 2 "booked" and 4 "emergency" cases at Mayday Hospital: for shoulder presentation in a second twin, on one occasion; for shoulder presentation in three cases; for shoulder presentation and placenta praevia in one case and for placenta praevia in one case. There was no maternal death. Infant mortality for internal version 67%.

### **Embryotomy.**

Embryotomy was performed four times, thrice in "emergency" cases admitted with obstructed labour to Mayday Hospital and once in a "booked" case at St. Mary's Maternity Hospital.

There were no maternal deaths.

### **Manual Removal of Placenta.**

Manual removal was performed 13 times, twice in Mayday Hospital "booked" cases, twice in Mayday Hospital "emergency" cases and 9 times in St. Mary's Maternity Hospital "booked" cases.

There was no maternal death.

### **Maternal Morbidity.**

All cases of pyrexia and all maternal deaths after delivery are included as morbid except cases dealt with for the first time as puerperal fever after delivery elsewhere. These are given in the puerperal fever section.

In the 966 "booked" cases there were 7 cases of pyrexia and no deaths without a rise of temperature. The morbidity rate for "booked" cases was 0.72 per cent. (Mayday Hospital 0.81 per cent.; St. Mary's Maternity Hospital 0.67 per cent.).

In the 144 "emergency" cases at Mayday Hospital, there were 13 cases of pyrexia and no deaths without a rise of temperature. The morbidity rate for Mayday Hospital "emergency" cases was 9.0 per cent.

The Strassburg Convention standard of pyrexia as adopted by the Ministry of Health has been used, namely, "a temperature of 100.4 degrees F. or more, sustained during a period of 24 hours or recurring during that period."

### Puerperal Fever.

28 cases of puerperal fever were admitted after delivery to the Borough Hospital Puerperal Infection Unit (18 cases) or to the Isolation Wards at Mayday Hospital (10 cases) including 4 cases delivered at Mayday Hospital and 2 cases delivered at St. Mary's Maternity Hospital.

One case (No. BH/116) died of Broncho-pneumonia caused by a fracture of the base of the skull which brought on premature labour (not a maternal death).

7 of the other 27 patients died, a mortality of 25.9 per cent.

No. of cases admitted to Service's beds as Puerperal Fever <i>per se</i> ...	22
No. of deaths in admissions	6
Mortality	27.3
No. of cases delivered in Service's beds and transferred to isolation beds with Puerperal Fever ... .. 5	
No. of deaths in these cases	1
Mortality	20%

	Cases.	Deaths.	Mortality Rate.
Source of the Cases (with mortality rates)—			
From Mayday Hospital—Booked cases ...	2	—	—
"    "    "    Emergency cases..	2	—	—
From St. Mary's Maternity Hospital—			
Booked cases ... ..	2	1	50%
From other Hospitals—	(1)	(1)	(Fractured skull).
From Private Doctors—delivered in Nursing Homes ... ..	3	1	33.3%
From Private Doctors—delivered at home.	18	5	27.8%

#### Day of Admission after Labour—

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	After
—	1	4	4	3	3	2	—	4	—	7

24 cases followed labour with 6 deaths (25.0%)

3 cases followed abortion with 1 death (33.3%)

### Maternal Mortality.

These cases are dealt with in two categories, the first including all cases delivered in the care of the Service or attended before delivery and the second those cases admitted after delivery as puerperal sepsis *per se* and treated at Mayday Hospital or in the Borough Hospital Puerperal Infection Unit. (See page 185 for second category).

Maternal deaths excluding cases admitted as puerperal sepsis *per se*:—

Booked cases	... 2.	Mortality : 2.1 per 1,000.
Emergency cases	... 5.	Mortality : 34.7 per 1,000.
Total deaths...	... 7.	Total Mortality : 6.3 per 1,000.

The maternal deaths were due to the following conditions. (All the cases were undelivered except the second case).

#### BOOKED.

- (1) Bilateral purulent pyelitis and pyelonephritis (P.M.)
- (2) Concealed accidental hæmorrhage. Cæsarean Section and Pulmonary Embolus.

#### EMERGENCY.

- (3) Eclampsia.
- (4) Chronic rheumatic carditis.
- (5) Ectopic gestation—cardiac failure. Foetus weighed 8 lbs. 14 ozs.
- (6) Persistent vomiting of pregnancy. P.M. showed chronic nephritis, old pleural adhesions and broncho-pneumonia.
- (7) Eclampsia.

### Infants.

	Mayday Hospital.		St. Mary's Mty. Hpl.		Total.	Per cent.			
	Booked.	Emergency.	Booked.						
Total number of Live Births, Still Births, and Infants admitted with mother (B.B.A.)	368	64	...	606	...	1,038	...	100	
Living—alive on discharge from Hospital	347	38	...	587	...	972	...	93.6	
Stillborn (Fresh)	...	9	10	...	6	...	25	...	2.4
Stillborn (Macerated)	...	4	6	...	5	...	15	...	1.4
Died (born alive, but died in Hospital)	...	8	10	...	8	...	26	...	2.5

### Infant Feeding and Weight on Discharge from Hospital.

In both hospitals normal infants were breast fed every four hours, omitting the early morning feed.

Of 385 infants discharged from Mayday Hospital 248 were up to or over birth weight (64.4 per cent.).

Of 587 infants discharged from St. Mary's Maternity Hospital 363 were up to or over birth weight (61.8 per cent.).

### Twins and Triplets.

	Mayday Hospital.		St. Mary's Mty. Hpl.		Total.
	Booked.	Emergency.	Booked.		
No. of Cases ... ..	5	2	7		14
No. of Infants discharged alive ... ..	10	2	14		26
No. of Still Births and Infant Deaths ... ..	0	2*	0		2
Foetal Mortality ... ..	0	50%	0		7.7%

\*Both dead before admission.

There were no maternal deaths.

### Ophthalmia Neonatorum.

There were four cases of ophthalmia, two in Mayday Hospital "booked" cases, two in Mayday Hospital "emergency" cases and none at St. Mary's Maternity Hospital.

Three of the cases were transient; only the lids being affected. One Mayday Hospital emergency case was severe and was transferred to the Borough Hospital.

### POST-NATAL AND GYNAECOLOGICAL CLINIC.

As in former years, it has to be assumed that the incidence of abnormality in those who absented themselves from the Post-Natal Clinic is less than in those who did attend. The number of those attending fell while the Obstetric Officer's post was vacant. During the latter six months of the year it has risen higher than ever before; this is partly due to the system introduced of giving each case a definite appointment. The proportion of abnormality in cases attending has become considerably less, probably because since May, 1933, all cases from both hospitals have been examined before being discharged and many were detained for further treatment.

Number of Sessions held ... ..	86
Number of individuals presented ... ..	683
Number of subsequent attendances ... ..	529
Total number of attendances ... ..	1,212
Average attendance per session ... ..	14.1
Number of Post-Natal Cases ... ..	611
Number of Gynaecological Cases ... ..	72

TABLE LXXXIV.  
POST-NATAL CASES.

	After confinement at			Total.
	Mayday Hospital.	St. Mary's Hospital.	Elsewhere.	
Total Cases ... ..	216	342	53	611
Cases found to be normal ...	139	241	22	402
Cases found to be abnormal...	77	101	31	209
Cases treated as Out-patients.	58	89	21	168
Cases admitted to Mayday Hospital ... ..	16	6	7	29

TABLE LXXXV.  
CLASSIFICATION OF ABNORMAL POST-NATAL CASES.

Case Group.	Source of cases attending			Percentage of Abnormals.	Percentage of all cases attending.
	Mayday Hospital.	St. Mary's Hospital.	Elsewhere.		
Retroversion ... ..	34	46	7	41.6	14.2
Delayed Involution ...	11	13	8	15.3	5.2
Trauma ... ..	11	21	7	18.7	6.4
Infection ... ..	5	8	7	9.6	3.3
Chronic Nephritis ...	7	8	2	8.1	2.8
Other ... ..	9	5	0	6.7	2.3
Totals ... ..	77	101	31	100.0	34.2

### END RESULTS.

605 cases were treated to their termination (other than death) during the year, and the results were classified as follows:—

RESULT I.—Health unimpaired as a result of recent confinement (*i.e.*, no symptoms and no anatomical or functional disability).

RESULT II.—Health slightly impaired as a result of recent confinement (*i.e.*, no symptoms or disability, but anatomical damage likely to lead to disability in the future, particularly if increased by further pregnancies. This group includes cases impaired by previous confinements and further impaired by the recent confinement so as to make the total impairment, due to *all* previous confinements, equal to that described in Result III.).

RESULT III.—Health seriously impaired as a result of recent confinement (*i.e.*, symptoms or disability present due to trauma, infection, etc., or damage to vital organs, as in chronic nephritis).

	Mayday Hospital.	St. Mary's Hospital.	Elsewhere.	Totals.
Result I. ... ..	183	286	43	512
Result II. ... ..	25	38	6	69
Result III. ... ..	7	13	4	24
Totals, treated to con- clusion ... ..	215	337	53	605

### OBSTETRIC CONSULTATIONS.

As Consulting Obstetrician to the Borough, the Assistant Medical Officer of Health for Obstetrics was called in by medical practitioners to see 20 patients who could not afford to pay a private consultant.

The cases were as follows:—Placenta Prævia, Threatened Abortion, Puerperal Fever, Pre-eclampsia, Puerperal Fever, Puerperal Pyelitis, Pyelitis of Pregnancy, Puerperal Pyelitis, Puerperal Pyelitis, Femoral Thrombo-phlebitis, Prolonged Labour due to Posterior Position, Prolonged Labour due to Contracted Pelvis, Foetal Death, Prolonged Labour due to Posterior Position, Placenta Prævia, Suspected Disproportion, Retained Placenta and Hæmorrhage, Chronic Nephritis and Pre-eclampsia, Threatened Abortion, Threatened Abortion.

In addition, he was asked by the Medical Superintendent of Mayday Hospital to give an opinion on the obstetric and gynæcological aspects of 17 cases in the general, medical and surgical wards of the Hospital.

#### St. Mary's Maternity Hospital.

This institution has 32 beds. Thirty of the beds are reserved for cases sent by the Local Authority, for which a grant of £2,350 was made.

I am indebted to Dr. G. Genge, the physician in charge, for the following particulars:—

No. of cases admitted during 1933	...	...	624
Average duration of stay	...	...	14 days.
No. of cases delivered by (a) Midwives	...	...	564
(b) Doctors	...	...	40 (6.6%)



No. of cases in which medical assistance was sought by the midwife in emergency ...	100 (including 83 for suturing perineum).
No. of cases notified as Puerperal Fever or Puerperal Pyrexia ... ..	4
No. of cases notified as Pemphigus neonatorum	0
"    "    "    Ophthalmia neonatorum	—
No. of infants not entirely breast fed ... ..	31
No. of maternal deaths ... ..	0
No. of infant deaths (a) Still-born ... ..	12
(b) Within 10 days of birth	8
	Prematurity, 5.
	Atelectasis, 2.
	Convulsions and Meningitis, 1.

### The Retreat, Ross Road.

This is a home for unmarried mothers and their babies conducted by the National Free Church Women's Council, and aided by an annual grant of £650 from the Croydon Council. Although not bulking largely as a Maternity Hospital, the work done is an important branch of maternal care. Besides the matron and nursing staff, an honorary lady medical officer attends the home when necessary.

The following figures give the main details regarding the work carried out in 1933, and I am indebted to Dr. Sutherland, the Hon. Medical Officer of the Home, for them:—

No. of beds for patients ... ..	19
No. of cases admitted ... ..	28
Average duration of stay ... ..	4/5 months
No of cases delivered by (a) Midwives ... ..	20
(b) Doctor ... ..	1
No. of cases in which medical assistance was sought by a midwife ... ..	8
No. of cases notified as (a) Puerperal Fever, (b) Puerperal Pyrexia ... ..	Nil
No. of infants not entirely breast fed while in the institution	5
No. of cases notified of Ophthalmia Neonatorum ... ..	Nil
No. of cases notified as Pemphigus Neonatorum ... ..	Nil
No. of maternal deaths ... ..	Nil
No. of infant deaths (a) Still-born ... ..	Nil
(b) within 10 days of birth ... ..	2
(due to convulsions and congenital malformation and prematurity)	

As is seen the duration of stay much exceeds that in ordinary maternity homes. The girls are kept, with their babies, until suitable situations can be secured for them, and when necessary foster-mothers are found for the babies. Whilst the girls are in the Home they are employed in domestic work. Some of them go out to daily work, but reside in the Home.

It is becoming increasingly difficult to get the girls to stay the requisite period; many of them wanting to take up their former work or new work after two months' stay. Although undesirable, owing to the dislocation in breast feeding which results, the Authorities of the Home have had to reduce the length of stay in several cases.

### Still Births.

During 1933, 99 still births were registered in respect of Croydon, but of these 16 were outward transfers to other districts. There were 9 inward transfers, giving a total of 92 for the area. Of these 47 were male babies and 45 female; 5 male and 5 female were illegitimate. The proportion of still births to living children was as 1 to 34. The still birth rate was 2.8 of the total registered births. The rate in 1932 was 3.4%.

The still birth rate, on the same basis as for Infant Mortality was 28.4 per 1,000 births.

#### STILL BIRTHS, 1933.

Notified by Midwives, Home Cases	...	...	...	15
"    Doctors Home Cases	...	...	...	10
"    Institutions (Doctors or Midwives)	...	...	...	38*
Attended by Midwives alone	...	...	...	26
"    Doctors alone	...	...	...	7
"    Midwives and Doctors	...	...	...	32
Occurred at 9 months	...	...	...	45
"    8 months	...	...	...	12
"    6-7 months	...	...	...	11

\* Including registered Maternity Homes.

### An Analysis of 68 Still Births Occurring During the Year.

Of the 68 still births investigated 31 were males and 37 females.

*Type of Delivery.*—In 39 cases the confinement was difficult or prolonged. Normal confinement was noted in 26 cases; no information was obtainable in 3 cases. There was an abnormal presentation in 7 cases.

*Age of Mother.*—Under 20 years, 2; between 20 and 29 years, 29; between 30 and 39 years, 27; between 40 and 49 years, 7.

*The Health of the Mother* during her pregnancy was stated to be good in 60 cases and indifferent or poor in 6 cases; no particulars were obtained in 2 cases. In 7 cases, however, the mother

had had a shock or a fall before the still birth. In 28 instances the mother had attended the Ante-Natal Clinic. 40 cases had never attended the Clinic.

*Attendance at Confinement.*—Twenty-five of the still births investigated occurred in the Mayday Hospital; 10 in St. Mary's Hospital; 21 were attended in their own homes by a private medical practitioner either alone or in conjunction with a midwife; 6 were attended by a midwife alone, and 3 births occurred before any skilled help was available; 3 occurred in private nursing homes.

Forceps were reported to have been utilised in 16 of the cases, while in 5 no record was available.

In 44 cases the baby was born at full term; in 12 during the 8th month of gestation; in 10 during the 7th month; and in 1 under 7 months. One case was stated to be over the 9th month. The baby was apparently a normal child in 39 cases, abnormal in 9, whilst in 20 no record was available.

The still birth was the first pregnancy in 25 instances; the 2nd in 14; the 3rd in 7; the 4th in 9; the 5th in 2; the 6th in 4; the 7th in 5; the 8th in 1; and beyond in 1.

Previous still births had occurred in 8 cases.

### **Ophthalmia Neonatorum.**

Ten cases were notified during 1933. The fluctuations in the number of notifications since 1926, the date of the passing of the Ophthalmia Neonatorum regulations, is remarkable. Under these regulations notification by midwives ceased. Prior to 1926 the number of notifications remained fairly uniform, and it would appear as if only the most severe cases are now brought to the attention of the Authority.

The following table gives the notifications in Croydon during the past eleven years:—

TABLE LXXXVI.

	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
No. of cases	23	21	22	20	18	7	5	19	14	21	10
Rate per 1000 births ...	6.8	6.1	6.5	5.8	5.7	2.8	1.5	5.4	5.6	6.3	3.2

### Results of Treatment.

Cases treated.			Vision Unimpaired.	Vision Impaired.	Died.	Removed	Remaining under Treatment.
Notified.	At home	In hospital					
10	4	6	5	0	1	3	1

### Infant Mortality.

The Infantile Mortality rate was 47 per 1,000 births. This is 2 per 1,000 births less than in 1932, and is the lowest rate yet recorded in the Borough.

For the past 5 years the numbers of infant deaths have been : 1929, 221 ; 1930, 171 ; 1931, 196 ; 1932, 161 ; 1933, 148. 85 deaths of infants occurred in institutions, including Registered Nursing Homes.

### Neo-Natal Mortality.

Number of deaths within the first month of life :—

Year.	No. of Deaths.	No. of Births.	Rate.
1925	68	3506	19/1000 live births.
1926	80	3477	23 " " "
1927	83	3174	26 " " "
1928	66	3374	20 " " "
1929	88	3399	26 " " "
1930	82	3514	23 " " "
1931	88	3400	26 " " "
1932	82	3311	25 " " "
1933	83	3147	26 " " "

Among the 148 deaths, 93 occurred in boy babies and 55 in girls. Of the births 1,630 were males and 1,517 females. The infantile mortality rate for the two sexes was, therefore:—Boys, 57; girls, 36.

The rate of infant mortality amongst illegitimate children was 144 per 1,000. The rate in legitimate children was 43 per 1,000.

The following table gives the causes of death during the first month of life:—

I. COMPLICATIONS OF LABOUR—					
Cerebral Hæmorrhage	...	...	...	...	3
Trauma at Birth	...	...	...	...	2
					— 5
II. FOETAL STATES—					
Congenital Heart Malformation	...	...	...	...	3
Other Congenital Deformities	...	...	...	...	3
Atelectasis	...	...	...	...	9
Congenital Debility and Marasmus	...	...	...	...	3
Purpura Hæmorrhagica	...	...	...	...	1
Syphilis	...	...	...	...	2
					— 21
III. PREMATUREITY	...	...	...	...	46
					— 46
IV. POST-NATAL CAUSES	...	...	...	...	11
					— 11
					<hr/>
					83
					<hr/> <hr/>

The rate of infantile mortality for England and Wales in 1933 was 64, and for the 118 large towns 67. The rate for Croydon is therefore considerably lower than the average rate. An analysis of Table LXXXVII shows that, of the total infant deaths, 18.9% occurred on the first day of life and 56.1% before the completion of the first month, and it is probable that these deaths were due to causes operating before birth except in so far as accidents of birth (5) are concerned.

TABLE LXXXVII. DEATHS UNDER ONE YEAR, ARRANGED IN DAYS, WEEKS AND MONTHS.

CAUSES OF DEATH.	1st day.	2nd day.	3rd day.	4th day.	5th day.	6th day.	7th day.	1st-2nd wk.	2nd-3rd wk.	3rd-4th wk.	Under 1 month.	1-2 mths.	2-3 mths.	3-4 mths.	4-5 mths.	5-6 mths.	6-7 mths.	7-8 mths.	9-9 mths.	9-10 mths.	10-11 mths.	11-12 mths.	TOTAL.
	All Causes { Certified ... ..	28	7	9	1	3	2	1	16	10	6	83	11	7	7	5	5	4	8	4	6	4	4
Uncertified ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken-pox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria and Croup ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abdominal Tuberculosis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis (not Tuberculous) ... ..	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...
Convulsions ... ..	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Laryngitis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis ... ..	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia (all forms) ... ..	...	...	...	...	...	...	...	2	1	1	4	3	2	5	2	...	1	3	...	2	2	1	25
Diarrhoea and Enteritis ... ..	...	...	...	...	...	...	...	...	1	...	1	4	1	1	3	2	1	1	1	3	...	...	...
Gastritis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis ... ..	1	...	...	...	...	...	...	1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Rickets ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital Malformations ... ..	...	1	...	...	...	...	...	4	1	...	6	1	...	1	...	2	...	...	!	...	...	...	11
Premature Birth ... ..	18	4	8	1	2	...	1	5	5	2	46	...	1	...	...	...	...	...	...	...	...	...	47
Atrophy, Atelectasis, Debility, and Marasmus ... ..	7	1	1	...	1	...	...	1	...	1	12	1	1	...	...	...	...	...	...	...	...	...	...
Injury at birth ... ..	2	1	...	...	...	...	1	...	1	...	5	...	...	...	...	...	...	...	...	...	...	...	...
Other causes ... ..	...	...	...	...	...	...	...	2	...	2	4	1	2	...	...	1	...	1	1	...	1	1	12

### Deaths Under One Month.

An analysis of Table LXXXVII shows that 18.9 of the infant deaths occurred before the baby was 24 hours old; 34.4% during the first week of life; and 56.1% before the end of the first month. In 1932 the corresponding figures were 21%, 38%, and 51%. These figures relate to infant deaths due to causes probably operating before birth and do not vary greatly as between different localities in England. The chief individual cause was premature birth, which was the assigned cause in 57% of deaths under 1 month of life. In the same group can be placed debility which was the cause of 14%. Injury at birth is rather different, inasmuch as it is, by skilled ante-natal and natal attention, avoidable; injury caused 6.0% of the deaths. Deaths under one month due to congenital deformities constituted 6.0% of the whole during this age period. It is interesting to see that conditions probably brought on by faulty feeding played practically no part in this mortality. This group of deaths contributed 12.1 per 1,000 births towards the total infantile mortality rate.

### Deaths Under Three Months.

One hundred and one babies died during the first three months of life, a percentage of the total infant deaths of 68%, and an infant mortality rate of 32 per 1,000 births. As the total infantile mortality rate was 47, it is seen that two-thirds of that rate was due to deaths in infants under 3 months of age. A perusal of the causes of death between the end of the period dealt with in the preceding section, and the end of the third month shows the chief of these to be: Diarrhœa, 5 deaths and Pneumonia, 5 deaths. The effects of improper feeding, and exposure to infection, are commencing to make themselves felt, and Pneumonia is the outstanding cause of death.

Deaths between the 4th month and the end of the first year of life were caused chiefly by Diarrhœa (25.5%) and Pneumonia (34.0%).

The Pneumonia deaths occurred in the following months:—  
January 5, February 3, March 4, April 1, June 1, July 1, September 1, October 1, November 2, December 6.

Taking the figures in the table as a whole, the outstanding features are :—

(1) The predominance of premature birth, and conditions classified as debility and marasmus. Between them they accounted for 41% of the total deaths, and contributed 19.4 deaths per 1,000 births towards the infantile mortality rate.

(2) Next to these come Pneumonia and Diarrhoea with 36% of the total deaths and a contribution of 16.8 per 1,000 to the infantile mortality rate.

(3) The influence of pre-natal causes is exerted mainly during the first two months of life, whilst the influence of environment and nurture, after that time. The causes of death change after the second month in a quite distinct manner.

(4) Whooping Cough caused only 1 death. In 1932 it caused 8 deaths. There were 3 deaths from Measles.

(5) In the tabulated deaths of children under 1 year of age, the child who died was a first child in 36.1% ; a second child in 20.5% ; a third child in 13.1% ; a fourth child in 12.3% ; a fifth child in 6.6% ; a sixth child in 3.3% ; a seventh child in 1.6% ; an eighth in 0.8% ; a ninth in 1.6% ; a tenth in 0.8% ; and a fourteenth in 0.8%. In 2.5% of total deaths no data were forthcoming owing to the parents having moved, or for other reasons.

The following table gives the chief causes of infant deaths, as compared with 1932 :—

TABLE LXXXVIII.

	Percentage Deaths per Total Infantile Deaths.		Deaths per 1,000 Births.	
	1933.	1932.	1933.	1932.
Premature Births ...	31.8	29.8	14.9	14.5
Respiratory Diseases ..	18.9	21.7	8.9	10.6
Infectious Diseases (inc. Tuberculosis) ... ..	5.4	5.6	2.5	2.7
Atelectasis, Debility and Marasmus ... ..	9.5	10.6	4.4	5.1
Diseases of Digestion..	12.2	10.6	5.7	5.1
Accidental & Congenital	11.5	13.0	5.4	6.3



TABLE LXXXIX.

	Births	Deaths	1933			1932			1931			1930		
			Mortality per 1000 Births	General Birth Rate	General Death Rate	Mortality per 1000 Births	General Birth Rate	General Death Rate	Mortality per 1000 Births	General Birth Rate	General Death Rate	Mortality per 1000 Births	General Birth Rate	General Death Rate
January ..	261	20	78	14.5	17.9	79	15.5	15.9	88	15.1	20.0	42	16.9	11.6
February ...	255	17	72	14.2	19.5	49	14.9	16.3	101	16.8	18.7	75	14.2	12.9
March ...	337	16	48	15.0	11.8	45	15.0	14.0	109	13.9	17.5	60	15.1	13.8
April ...	294	19	61	16.3	10.9	39	16.8	10.4	55	18.7	13.8	44	14.7	11.6
May... ..	276	5	19	15.1	8.6	33	16.0	9.6	38	15.7	10.1	50	20.7	11.7
June... ..	378	9	24	16.6	7.9	15	18.0	8.3	67	16.3	12.3	54	19.8	8.6
July... ..	259	5	20	14.2	7.6	26	17.3	7.7	41	16.2	9.5	26	16.3	8.7
August ...	347	4	12	15.2	7.1	43	16.9	8.5	14	17.2	10.3	50	16.7	9.3
September ..	269	8	35	14.7	7.7	42	13.8	8.6	20	14.9	9.0	37	17.4	8.6
October ...	235	8	36	12.9	9.4	27	14.2	8.6	52	18.6	12.3	44	15.6	10.7
November ...	263	12	45	11.5	10.6	31	14.9	9.0	61	14.9	12.3	36	16.3	9.7
December ...	217	12	54	11.8	14.7	60	12.5	10.9	87	17.4	16.8	89	13.7	11.2

The Birth Rate was highest in March, April, June, and August, and the Infantile Mortality was lowest during May, June, July and August.  
 The Death Rate was highest in January, February and December. Infantile Mortality was highest during January, February, and April.

## Infantile Mortality in Wards from 1927 to 1933.

TABLE XC.

	1927	1928	1929	1930	1931	1932	1933	Average over 7 years.
Upper Norwood ... ..	73	80	70	108	80	76	57	78
Norbury ... ..	27	37	20	48	39	27	30	33
West Thornton .. ..	34	94	63	29	66	75	33	56
Bensham Manor ... ..	97	45	55	39	72	28	19	51
Thornton Heath ... ..	60	75	99	66	66	69	44	68
South Norwood ... ..	39	53	54	51	48	32	42	46
Woodside ... ..	57	42	59	40	37	30	50	45
East ... ..	32	25	63	40	30	68	46	43
Addiscombe ... ..	58	45	71	33	47	31	35	46
Whitehorse Manor ... ..	75	59	74	62	74	48	62	65
Board Green ... ..	50	48	76	38	46	60	57	54
Central ... ..	29	58	42	51	91	22	15	44
Waddon ... ..	46	46	63	56	53	55	63	55
South ... ..	68	66	61	25	63	34	91	58

The wards with the highest average infant mortality over a seven year period are: Upper Norwood, Thornton Heath, and Whitehorse Manor; the lowest averages are recorded in Norbury, East and Central.

Any infant death occurring in an institution has been allocated to the Ward in which the infant lived prior to admission.

### Midwives Acts, 1902 and 1918.

93 midwives notified the Local Supervising Authority of their intention to practise within the Borough during 1933; 17 ceased practising in the Borough, so that 76 remained on the Register at the end of the year. Of these 72 were trained and held the certificate of the Central Midwives Board, and 1 was a bona-fide midwife, *i.e.*, she was in practice as a midwife at the time of the passing of the Midwives Act, 1902, while 3 held the certificate of the London Obstetrical Society.

**Confinements Attended by Midwives.**

Cases attended by midwives alone ... ..	2188	<i>i.e.</i> , 66.8% of total births.
Cases attended by Midwives when a doctor was also engaged ... ..	496	
Cases attended by midwives when a doctor was also summoned ... ..	318	
	Total ...	
	3002	<i>i.e.</i> , 91.7% of total births.

The Rules of the Central Midwives Board lay down that the Local Supervising Authority must be informed, within 36 hours, by a midwife if she has summoned medical help during pregnancy, in a confinement or within ten days afterwards. The following table gives details of the reasons for sending for medical aid.

The Council assists in the payment of the midwife's fees for attendance on a necessitous patient in her confinement. No attempt is made in such cases to recover from the patient. The object of this is that even the poorest mother can engage the services of a competent midwife, whilst the latter will have no cause to hesitate to attend on the grounds that she will probably receive no payment for her services. Midwives are also compensated if they lose a case through admission to a hospital or maternity home on the advice of the Ante-natal Clinic. The sum of £39 11s. 0d. was paid out during the year.

**FOR COMPLICATIONS DURING PREGNANCY :**

Albuminuria ... ..	2	Threatened Abortion ... ..	4
Abortion ... ..	2	Other causes ... ..	3
			— 11

**FOR COMPLICATIONS DURING LABOUR :**

Breech ... ..	7	Foot ... ..	2
Face ... ..	4	Occipito-Posterior ... ..	2
Extended Breech ... ..	5	Prolapsed Cord ... ..	3
Transverse ... ..	3	Undiagnosed ... ..	8
			— 34
Obstructed Labour ... ..	4	... ..	4
<i>Delayed Labour—</i>			
Uterine Inertia ... ..	3	Prolonged ... ..	42
Delayed ... ..	31		
			— 76
<i>Hæmorrhage—</i>			
Ante-Partum ... ..	14	Post-Partum ... ..	7
			— 21
<i>Other Causes—</i>			
Adherent Placenta .	13	Illness of Mother ... ..	13
Retained Placenta .	2	Twins ... ..	1
Torn Perineum ... ..	80	Eclampsia ... ..	2
			— 111

## FOR COMPLICATIONS DURING PUERPERIUM :

Pyrexia ... ..	14	Pain in Breasts	3
Pain in Legs ... ..	1	Other causes ... ..	3
			— 21

## FOR COMPLICATIONS IN REGARD TO THE BABY :

Inflammation of Eyes	9	Convulsions ... ..	2
Still-birth ... ..	1	Deformities ... ..	9
Feebleness ... ..	8	Skin Eruptions ... ..	4
Hæmorrhage ... ..	1	Other causes ... ..	8
Premature Birth ... ..	4		— 46

In accordance with Rule 12a of the Central Midwives Board, the following reasons for the discontinuance of breast feeding were received:—

Illness of Mother ... ..	3	Mother returning to business	
Weakness of Baby ... ..	1	life ... ..	4
			—
		Total ... ..	8
			—

**Inspection of Midwives.**

Dr. Falk is the inspector of midwives; she had 1 interview with a midwife at the 'Town Hall and paid 183 visits to the homes of midwives. Of these visits 96 proved ineffective, the midwife being out.

The cleanliness of the midwives' homes and the condition of their bags were on the whole satisfactory. The keeping of case records and temperature charts were not always found kept up-to-date.

The Rules of the Central Midwives Board impose an obligation on all certified midwives to take ante-natal records or in lieu thereof to send their cases to an ante-natal clinic, where the records may be made. Midwives have been urged to avail themselves of these facilities and if possible to attend themselves with their patient. When the midwife does not attend she is informed by letter of the findings at the Clinic. The midwives have availed themselves of the facilities offered, 191 mothers were sent for this purpose.

**Disinfection of Midwives Bags, Etc.**

This is done by the Local Supervising Authority, free of charge for any midwife asking for it. In 7 instances midwives availed themselves of these facilities.

TABLE XCI.

## Nursing Homes (Registration) Act, 1927.

	<i>Maternity Homes.</i>	<i>Other Nursing Homes.</i>	<i>Combined Maternity and other Nursing Homes.</i>	<i>Total.</i>
No. of Homes on Register, on 31/12/32 ... ..	16	13	25	54
No. of Applications for Registration during 1933 ... ..	1	—	1	2
No. of Homes registered during 1933 ... ..	1	—	1	2
No. of Orders made :				
(a) Refusing Registration ...	—	—	—	—
(b) Cancelling Registration...	3	—	1	4
No. of Appeals against such Orders ... ..	—	—	—	—
No. of Cases in which Orders have been :				
(a) Confirmed on Appeal ...	—	—	—	—
(b) Disallowed ... ..	—	—	—	—
No. of Applications for exemption from registration ...	—	—	—	—
No. of Cases in which exemption has been :				
(a) Granted ... ..	—	—	—	—
(b) Withdrawn ... ..	—	—	—	—
(c) Refused ... ..	—	—	—	—
No. of Homes on Register on 31/12/33 ... ..	14	13	25	52
No. of Beds available ... ..	64	197	(a) Mat. beds 54 (b) Other Beds 90	(a) 118 (b) 287

**Doctors' Accounts Under Section 14 (1) of the Midwives Act, 1918.**

140 accounts were received from doctors for services rendered under the provisions of this section. This compares with 153 in 1932, 136 in 1931, 149 in 1930, and 112 in 1929. The total amount of the accounts was £225 0s. 0d. £52 5s. 6d. was ultimately recovered from the patients. In 1932 the amount paid to doctors was £230 1s. 6d., and in 1931, £224 5s. 6d.

### **The Maternity and Child Welfare Clinics.**

There are 17 Maternity and Child Welfare Centres, 16 of which are conducted by the Croydon Mothers' and Infants' Welfare Association, and 1 by the Local Authority. A total of 20 sessions per week are held and at all of these a doctor and a nurse on the staff of the Health Department attend.

During 1933, 2,194 new cases under 1 year of age, and 1,027 over a year of age attended for the first time; this is a decrease of 84 in the first class and of 25 in the second class. The total attendances of babies and infants from 0.5 years increased from 73,136 in 1932 to 77,463 in 1933. Consultations with doctors increased in numbers from 24,652 to 25,251. Three hundred and five expectant mothers were seen, a decrease of 29 on 1932, and a total of 1,211 visits to the centres were paid by them. The total of all visits to the Centres was 78,674, an increase of 4,169 over 1932. This is the greatest total yet reached and serves to indicate the appreciation of the services rendered.

The highest average attendance of mother and babies at each session was recorded at Lower Addiscombe Road (108.6), West Croydon (107.8), Municipal (98.7), and Norbury (96.5). Such large numbers, although indicating an appreciation on the part of the mothers, throw a great strain on the organisation of the centres. It is impossible for the doctor to devote as much time as is desirable to individual cases, whilst the nurse cannot talk to each mother at the length which is sometimes needed.

The foundation of new centres has not had any appreciable effect, in the past, on the attendances at older centres. At some of the centres, situated on the borders of the town, such as Norbury, Upper Norwood and Shirley, a certain proportion of mothers attend whose place of residence is outside the Borough. In order to curtail the numbers, instructions were given that mothers living outside the Borough should not be permitted to see the doctor or to obtain dried milk, etc., at the centres. Some of the centres have shown, in consequence, a reduced attendance.

TABLE XCII.  
Attendances at Infant Centres—1933.

	Municipal.	Boston Road.	Silverdale Road	South Croydon.	Shirley.	Woodside.	Lr. Addiscombe Road.	South Norwood.	Westow Street.	Moffatt Road.	St. Alban's.	St. Paul's.	St. Oswald's.	West Croydon.	Norbury.	Waddon.	St. Jude's.	Total 1933.	Total 1932.	Total 1931.	Total 1930.	Total 1929.
<b>INFANTS :</b>																						
New cases under 1 year ...	343	93	101	120	72	121	154	210	77	69	208	75	66	151	121	95	118	2194	2278	2217	2148	1991
No. of re-attendances ...	5335	1205	1549	1944	955	1667	2364	3831	1424	1229	3669	1560	1336	2527	2275	1473	2277	36620	35161	33237	31418	27431
New cases over 1 year ...	137	69	43	48	30	58	91	81	61	25	104	31	18	40	44	97	50	1027	1052	895	708	813
No. of re-attendances ...	3905	2371	1633	1775	1164	1669	2473	3990	1803	1542	4103	1745	1545	2529	2331	1897	1147	37622	34645	31434	28025	25559
Attendances of children 0-5	9720	3738	3326	3887	2221	3515	5082	8112	3365	2865	8084	3411	2965	5247	4771	3562	3592	77463	73136	67783	62299	55794
Consultations with Doctor	2864	1013	1208	1235	836	1450	1570	2692	1280	1270	2781	1296	1047	1355	927	1233	1194	25251	24652	23068	21697	21088
No. of Sessions ...	100	50	48	50	48	48	48	99	50	47	100	48	48	49	50	48	48	979	972	928	927	881
<b>EXPECTANT MOTHERS :</b>																						
No. of new cases ...	77	—	2	2	14	7	29	32	22	19	43	20	9	3	16	4	6	305	334	398	531	573
No. of re-attendances ...	78	49	30	6	34	1	102	117	79	91	106	53	24	34	36	38	28	906	1035	1038	1121	881
Total attendances of Expectant Mothers ...	155	49	32	8	48	8	131	149	101	110	149	73	33	37	52	42	34	1211	1369	1436	1652	1730
Total attendances ...	9875	3787	3358	3895	2269	3523	5213	8261	3466	2975	8233	3484	2998	5284	4823	3604	3626	78674	74505	69219	63951	57524
Average attendance per Session ...	1933	1932	1931	1930	1929	1933	1932	1931	1930	1929	1933	1932	1931	1930	1929	1933	1932	1931	1930	1929	1933	1929
	98.7	75.7	70.0	77.9	47.3	73.4	108.6	83.4	69.3	63.3	82.3	72.6	62.5	107.8	96.5	75.1	75.5	*80.4				
	88.0	79.2	71.4	71.1	46.4	79.4	97.1	78.4	74.4	66.6	74.6	68.0	67.7	98.1	102.3	70.6	52.9		*76.7			
	82.7	68.0	67.3	76.0	48.0	78.0	76.7	87.0	75.7	55.1	73.2	74.3	62.7	88.2	98.0	59.7	...			*74.6		
	81.2	58.7	68.4	78.0	37.7	66.4	70.9	78.5	73.6	55.8	72.4	74.3	40.3	78.3	93.1	50.0	...				*69.0	
	72.3	46.2	56.4	67.7	32.9	62.1	66.5	74.3	62.0	59.0	62.8	77.5	34.5	71.2	106.4	47.3	...					*65.3

\* Total average attendance each week at all the Centres.

The following table is intended to show the deaths of babies who at one time or another during their first year attended a clinic, as compared with deaths among those who never attended. If a baby only attended once it is included in the clinic returns :—

TABLE XCIII.

Deaths	Attended M. & C. W centre		Attended at Birth by				Full Time Baby			Births during the same period	Deaths in Institutions				
	Yes	No	Doctor	Mic wife	Doctor & Mid-wife	Not Known, etc.	Yes	No	Not Known		Mayday Hospital	Sick Nursery	Regd. Maternity Homes	St. Mary's Hospital	Other Institutions or Elsewhere
122	25	97	28	49	40	5	71	51	—	3147	44	3	4	6	8

2,194 babies under one year of age attended the clinics for the first time during 1933. Within the same period 3,147 babies were born and 148 died; 26 of these latter are not included in the above table, as information concerning them was not obtainable. Although the clinic attendance figures and the births and deaths figures do not cover exactly the same periods, the attendances of new cases at the clinics do not fluctuate so greatly as to cause serious error. Of the 122 babies who died, 25 had attended a clinic in Croydon and 97 had not attended, *i.e.*, 20.5% of the deaths were in clinic babies and 79.5% in non-clinic babies. Of the 3,147 babies born, approximately 70% attended or would attend on calculation based on past attendances. The infantile mortality, estimated on this basis is only 11.6 per 1,000 births for the "clinic" babies, and 101.8 per 1,000 births for non-clinic babies.

The following table is interesting, especially when the figures for under 1 year are contrasted with those for over 1 year. Approximately 89% of the former group of babies were found healthy on their first visit and were presumably brought because their mothers desired expert opinion and advice quite apart from treatment; in the latter group, only 80% were found healthy on the first visit, which may be interpreted to mean that when a mother first attends a clinic with a child over a year old she does



so because progress is not satisfactory; 69% of babies under 1 year were being breast fed at their first visit, this figure being less than 1932 (70), 36.3% of the ailing babies were suffering from digestive troubles, 13.1% from respiratory trouble, and 8.6% from rickets.

The individual centres showing the highest percentage of babies found healthy on their first visit were East Croydon (100) and Woodside (99). Waddon and Municipal, with 98 and 95 respectively, were next. The centres showing the highest percentage of babies found ailing on their first visit were Upper Norwood, All Saints' and St. Alban's, followed by South Croydon, Central, and Shirley.

Breast feeding seemed most usual in babies living in the St. Paul's, South Croydon, Municipal, East Croydon, and St. Oswald's districts, and least usual in the Shirley, Central, and Boston Road districts. In children over one year of age, attending for the first time, the highest percentages healthy were shown by East Croydon (97), Municipal (96), and Woodside (95); the highest percentages found unhealthy were at Sylverdale (53), All Saints' (52), South Croydon (45), Upper Norwood (39), and St. Alban's (37).

The largest number of first attendances was recorded at the Municipal Centre, followed by South Norwood, East Croydon, and St. Alban's. These centres hold two sessions weekly, with the exception of East Croydon.

The Conditions of Babies on First Attendance at a Maternity and Child Welfare Centre.

TABLE XCIV.

	BABIES UNDER ONE YEAR.										CHILDREN OVER ONE YEAR.															
	No. found healthy on 1st visit.	Percentage	No. found ailing on 1st visit	Digestive Troubles.	Rickets.	Respiratory Troubles	Other Causes.	Babies on Breast Feeding only.	Percentage.	Babies Bottle fed only.	Babies partly breast and partly bottle fed.	No. found healthy on 1st visit.	Percentage.	No. found ailing on 1st visit.	Digestive Troubles.	Rickets.	Respiratory Troubles	Other Causes.	No. still on Breast at 1st visit.	No. Weaned and on solid food.	Percentage.	No. not Weaned and on bottle entirely	No. on solid food and the breast.	No. on solid food and the bottle.	Total first attendances tabulated.	
Municipal (2) ...	279	95	14	8	0	1	5	225	76	45	23	115	96	5	1	0	3	2	117	97	90	0	1	0	0	413
St. Albans (2) ...	128	78	35	18	0	3	14	111	68	46	6	88	63	22	6	1	3	12	53	88	88	0	0	5	223	
Boston Road ...	64	88	8	6	1	1	0	42	58	20	10	41	80	10	2	5	3	0	44	86	86	1	1	5	123	
West Croydon ...	112	88	14	8	0	1	5	90	71	30	6	41	79	11	2	3	3	0	45	86	86	0	1	6	178	
Norbury ...	86	86	14	7	0	1	6	60	60	16	24	31	70	13	2	4	0	7	0	44	100	0	0	0	144	
St. Paul's ...	53	87	8	7	0	0	1	48	79	10	3	19	87	3	0	1	1	0	22	100	100	0	0	0	83	
All Saints... ..	49	77	14	6	0	1	7	39	62	20	4	15	48	16	3	2	2	9	0	23	74	0	1	7	94	
Shirley ...	58	83	12	1	1	0	10	40	57	20	10	20	74	7	1	1	0	5	0	27	100	0	0	0	97	
South Croydon ...	94	82	20	8	0	2	10	89	78	21	4	23	55	18	2	4	1	11	1	31	75	0	1	8	155	
South Norwood(2)	167	90	19	14	0	4	1	134	70	42	10	49	80	12	4	0	0	8	0	59	96	1	1	0	247	
Silverdale Road ...	92	82	20	8	1	5	6	64	57	36	12	9	47	10	1	2	2	5	0	17	89	0	0	2	131	
Upper Norwood . .	43	76	13	4	0	4	5	35	62	15	6	35	61	22	3	5	2	12	0	47	82	1	1	8	113	
Waddon ...	101	98	2	1	1	0	0	76	72	12	15	58	92	5	1	1	2	1	0	57	90	3	3	0	166	
East Croydon ...	147	100	0	0	0	0	0	109	74	11	27	94	97	3	0	2	0	1	6	90	93	0	0	1	244	
Woodside ...	142	99	2	1	0	0	1	102	71	26	16	40	95	2	0	0	2	0	39	93	93	1	1	1	186	
St. Oswald's ...	56	92	5	3	0	1	1	45	73	11	5	14	93	1	0	0	0	1	0	10	67	0	0	5	76	
St. Jude's ...	91	86	15	7	0	2	6	69	65	25	12	51	86	8	2	0	4	2	0	51	86	0	0	8	165	
Totals ...	1762	89	215	107	4	26	78	1378	69	406	193	693	80	168	32	29	24	83	11	776	90	7	11	56	2838	

**Clinic Sessions Attended by Health Visitors.**

TABLE XCV.

Nature of Clinic.	Health Visitor—District Number.																				Total.
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	XII.	XIII.	XIV.	XV.	XVI.	XVII.	XVIII.	XIX.	XX.	
Maternity & Child Welfare Clinics	95	48	36	53	54	44	55	12	51	52	56	40	3	49	53	47	83	51	54	43*	979
Ante-natal and Post-natal Clinics	...	...	...	2	...	...	44	...	61	...	...	...	264	...	...	...	..	...	...	...	371

\* Temporary visitors.

TABLE XCVI. The Work of the Health Visitors.—Home Visiting.—Maternity and Child Welfare Only.

	I. C.W.	II. R.A.	III. D.H.	IV. B.W.	V. A.W.W.	VI. J.T.	VII. M.S.	VIII. A.P.	IX. V.B.	X. A.W.	XI. J.C.	XII. E.H.	XIII. C.G.	XIV. A.H.	XV. A.C.	XVI. K.I.	XVII. V.C.	XVIII. L.M. & K.H.	XIX. M.C.	XX. R.S.	TOTAL VISITS
Visits to Expectant Mothers.																					
First visits ... ..	32	6	12	10	25	14	21	2	29	11	12	5	34	5	27	14	7	6	48	1	321
Re-visits ... ..	20	5	19	16	6	6	17	...	9	1	3	16	12	1	33	2	6	11	25	1	209
Infants under 1 year.																					
First visits ... ..	256	104	145	61	115	202	108	110	232	328	193	84	230	236	102	210	142	64	325	196	3443
Re-visits ... ..	418	272	529	204	299	364	217	306	394	380	558	784	214	602	525	247	384	216	798	476	8187
Children 1—2 years.																					
First visits ... ..	7	...	1	1	1	7	2	61	6	1	25	1	5	8	23	63	10	2	2	5	231
Re-visits ... ..	470	289	422	232	232	407	256	120	229	385	396	693	302	368	447	190	391	205	814	563	7411
Children 2—5 years.																					
First visits ... ..	5	...	...	...	1	4	2	24	16	...	10	6	1	8	20	92	10	5	12	3	219
Re-visits ... ..	1082	567	361	650	613	665	630	549	279	753	271	897	425	537	554	608	493	473	777	1114	12298
Ophthalmia Neonatorum.																					
First visits ... ..	...	1	1	...	...	...	1	...	1	1	...	...	1	1	...	...	...	...	1	...	8
Re-visits ... ..	...	...	1	19	...	1	1	...	1	4	...	...	3	4	...	2	...	...	...	...	36
Still Births ... ..	7	1	1	8	1	7	1	2	3	11	3	1	8	5	...	9	3	3	9	4	87
Milk (Mothers' and Children's Order) ... ..	4	37	76	33	...	4	4	1	12	9	6	15	11	5	...	13	2	16	9	97	354
Puerperal Fever and Pyrexia Visits ... ..	...	...	...	...	...	...	...	...	...	...	9	...	...	...	...	...	...	...	...	...	9
Houses where deaths of Infants occurred ... ..	19	5	3	17	5	12	3	6	6	16	1	6	11	8	1	10	14	5	17	25	190
Miscellaneous Visits ... ..	21	33	11	355	15	96	141	1	23	21	38	10	32	23	2	109	6	15	10	5	967
Ineffective Visits ... ..	465	300	319	457	511	470	575	402	421	339	362	402	299	267	169	244	488	282	264	963	7999
Post Natal Visits ... ..	...	...	3	...	...	...	13	...	75	101	...	1	...	...	...	...	...	...	...	...	193
Totals—1933 ... ..	2806	1620	1904	2063	1824	2259	1992	1584	1736	2361	1887	2921	1588	2078	1903	1813	1956	1503	3111	3453	42162
1932 ... ..	1942	1662	2122	1766	2107	2854	1949	2123	2034	2634	1443	2826	1609	2533	3757	2298	2278	349	2843	...	42512

### Milk (Mothers and Children) Order.

The table below gives the number of families who were in receipt of assistance under the provisions of the above-named order during the year. The Borough Council pay for all dried milks sold below cost price or given free whether it is ordered at the Voluntary Centres or at the Municipal Centre. All wet milk ordered under cost price is paid for by the Council.

TABLE XCVII.

	On Dec. 31st, 1932.	New cases during the year.	Cases discontinued.	On Dec. 31st, 1933.
Free ... ..	479	751	864	366
Half-price ... ..	109	184	217	76
Total	588	935	1081	442

The effect of the depressed industrial conditions is reflected in the increase in the number of free cases over 1932.

In cases where there has been a change from free milk to milk at half-price it has been counted as a new case.

### Assisted Fluid Milk Scheme.

There has been an increase in the amount of free milk granted from 117,089 pints to 121,392 pints.

Supplied to Families.	No. of Pints.	Corporation Liability.
Milk at 1½d. pt.	23090	£ s. d. 164 16 9½
Milk Free	98302	1316 15 5
	121392	1481 12 2½

### Dried Milks for Year 1933.

I am much indebted to Mrs. Chambers, of the Croydon Mothers' and Infants' Welfare Association, for the figures relating to dried milk sold or given at all the Centres with the exception of the Municipal Centre. There is a noticeable increase over 1932 in the amount of dried milk given free, and a decrease in the amount sold at full or half-price.

TABLE XCVIII.

	Mothers and Infants Welfare Association. (17 sessions per week).			Municipal Centre. (2 sessions per week).		
	Free.	Half- price.	Full price.	Free.	Half- price	Full price.
January ...	430	82	973	146	8	284
February ...	461	74	982	140	14	259
March ...	421	81	971	135	15	255
April ...	467	79	993	113	6	219
May ...	378	87	997	141	7	248
June ...	302	89	985	118	—	171
July ...	351	113	1003	130	—	181
August ...	363	136	901	143	2	179
September ...	336	119	919	103	13	198
October..	372	113	953	111	16	217
November ...	354	129	963	134	17	221
December ...	341	105	971	108	15	175
<b>Totals ...</b>	<b>4576</b>	<b>1207</b>	<b>11614</b>	<b>1522</b>	<b>113</b>	<b>2637</b>

### Observation Nursery.

110 babies and 8 mothers were admitted, as compared with 76 babies and 2 mothers in 1932. The average length of stay was 30 days, as compared with 38 days in 1932.

The following table gives particulars:—

No. of cases in on 1st January, 1933 ...	...	...	10
No. of cases admitted during 1933 ...	...	...	110
Average duration of stay ...	...	...	30 days
No. of cases discharged ...	...	...	98
(a) In good health ...	...	...	85
(b) Improved ...	...	...	9
(c) No improvement ...	...	...	4
No. of cases who died ...	...	...	3
No. in at end of 1933 ...	...	...	10

Three cases were transferred to Mayday Hospital for:—

(1) Glands of neck; (2) Syphilis; (3) Pyloric stenosis.

The causes of death were:—

Prematurity, 1; Cyst at base of tongue, 1; Gastro-enteritis (baby moribund on admission), 1.

The chief reasons for the admission of cases were as follows:—

Alimentary disorders ...	19	Acute gastro-enteritis ...	1
Failure to thrive ...	36	Prematurity ...	8
Re-establishment of breast feeding ...	2	Jaundice ...	1
Mismanagement ...	10	Pyloric obstruction ...	1
Marasmus ...	2	Congenital syphilis ...	1
Rickets ...	14	Cyst of tongue ...	1
Weaning troubles ...	2	Teething ...	2
Congenital deformities ...	2	Admitted from St. Mary's, with mother ...	6
Convulsions ...	2		

Total ... 110

### Massage Clinic.

The massage clinic in connection with the M. and C.W. Scheme is held at Lodge Road on five afternoons a week. Cases are referred thereto by the doctors at the Infant Welfare Centres. A few cases are also referred from the Orthopædic Clinic.

The following Table summarises the work done, and indicates the type of case referred.

Total number of female patients ... ..	45
"    "    male patients ... ..	41
	—
Total ... ..	86
	—

TABLE XCIX.

Conditions for which referred	Males.	Females.	Total.
Mouth Breathing ... ..	1	...	1
Scoliosis ... ..	...	1	1
General backwardness ... ..	2	1	3
Infantile Paralysis ... ..	2	1	3
Weak legs ... ..	7	7	14
Bow legs ... ..	15	15	30
Knock-knees ... ..	7	7	14
Flat-feet ... ..			
Hemiplegia... ..	1	...	1
Torticollis ... ..	...	1	1
Scar tissue ... ..	...	1	1
Valgus ankles ... ..	2	7	9
Spastic Paraplegia ... ..	2	1	3
Weak back ... ..	2	1	3
Congenital dislocation of hip ... ..	...	1	1
Constipation ... ..	...	1	1
Totals ... ..	41	45	86

Total number of sessions ... ..	251
"    "    attendances ... ..	1,575
Average attendance per session ... ..	7
Cases still under treatment at end of 1933 ... ..	25

### Dental Treatment of Maternity and Child Welfare Patients.

Expectant and nursing mothers and young children requiring treatment are referred by the Medical Officers attending the ante- and post-natal Clinics.

The dental surgeons also visit the Centres and give talks to mothers and inspect the teeth of young children.

It is to be regretted that it was impossible to visit all the Centres during the year, as these visits afford the dental surgeon a unique opportunity of educating the mothers in dental matters.

### EXPECTANT MOTHERS.

Month of pregnancy at which mother first examined :—

	Up to 3 months.	4-6 months.	7 & 8 months.
% of cases seen in 1932 ...	10.3 ...	53.9 ...	35.8
"    "    1933 ...	12.9 ...	56.7 ...	30.4

The above table shows that there is a decided improvement in the number of mothers who attend in the early months of pregnancy. A study of the table shows that 69.6% were examined and treated before the seventh month, compared with 64.2% in 1932. There appears to be every indication that women are beginning to realise the value of dental treatment before the child is born.

It is, of course, unfortunate that treatment has to be obtained during pregnancy, but as the majority of mothers have not had previous opportunities of having their teeth treated dental attention at such a time is inevitable. In most cases mothers have marked oral sepsis, and it is essential that dental disease should be eradicated to prevent a menace to the mother's health and that of the unborn child.



TABLE C.

	<i>Expectant.</i>	<i>Nursing.</i>	<i>Young Children.</i>	<i>Total.</i>	
				1933.	1932.
Number Examined ... ..	181	158	212	551	643
Referred for Treatment ... ..	151	145	208	504	553
Treated ... ..	128	140	206	474	467
Attendances ... ..	355	798	589	1742	1689
Fillings ... ..	60	110	207	377	376
Extractions ... ..	668	898	838	2404	1846
" Gas " Cases ... ..	91	115	151	357	310
Local Anaesthesia ... ..	87	86	130	303	184
Scalings ... ..	23	50	4	77	99
Dressings ... ..	42	95	34	171	} 565
Denture Dressings ... ..	36	233	—	269	
Gum Treatment ... ..	9	17	1	27	53
AgNo3 ... ..	—	—	43	43	14

Sessions at Centres—12.      Number of Dentures fitted—95.

The number of expectant and nursing mothers and young children examined decreased from 643 in 1932 to 551 in 1933. The number actually treated was 474, which was practically the same as the previous year. It is very gratifying that the attendances have increased and that the amount of conservative treatment has been maintained. Local anæsthesia shows an upward trend, due to its more frequent use in filling operations. The extractions show an increase, but this is inevitable, as so many mothers have teeth which are beyond any type of conservative dentistry. It should be borne in mind that these mothers have had little, if any, treatment since they left school; consequently, their teeth show much evidence of neglect.

The sessions devoted to treatment totalled 129, compared with 135 in 1932. This reduction in the number of treatment sessions is due to the illness of one of the dental surgeons.

## NURSING MOTHERS.

Age of baby when mother was first seen :—

	1-3 months.	4-6 months.	7-9 months.	Over 9 months.
% Mothers seen 1932 ...	36.7	36.2	18.3	9.8
„ „ 1933 ...	38.7	32.0	18.6	10.7

There are some mothers who seem to be alarmed at undergoing treatment during pregnancy, and wait until the nursing period before attending the Clinic. In such cases treatment must be confined to the elimination of pain and sepsis. The scheme was organised for the benefit of the child, and if mothers do not seek treatment during pregnancy, dental treatment must be restricted accordingly.

## THE PRE-SCHOOL CHILD.

The dental examination of young children in many cases reveals very advanced dental disease. Some of the dentitions are so ravaged by dental decay that impairment of health must result if the condition is not treated.

It would appear from a brief study of the number of young children examined that some mothers are not taking full advantage of the facilities for dental treatment of their children. There are mothers who forget that child welfare centres are institutions for the education and supervision of the health of the child up to the age of five years.

It seems that mothers are particularly keen on bringing their children to see the dentist up to the age of two years, and they appear very concerned about small defects that usually right themselves, but when the child gets older such attendance and keenness at the Centres appears to decline.

This apathy on the part of mothers throws an unnecessary burden on the School Dental Service, and it accounts for the high incidence of dental defects in the entrant school child. Only 10% of the entrant school children in 1933 were brought to the Clinic for dental treatment during the pre-school period.

The Centres at which patients were examined, or from which they were referred, are given in the following list:—

Ante-natal ... ..	146	Thornton Heath (1) ...	13
Addiscombe (East) ...	29	Thornton Heath (2) ...	38
Municipal ... ..	50	Waddon (1) ... ..	23
Shirley ... ..	4	Waddon (2) ... ..	23
Norbury ... ..	10	West Croydon ... ..	12
Upper Norwood ... ..	25	West Thornton (Boston	
Moffatt Road ... ..	31	Road) ... ..	23
South Croydon ... ..	24	St. Jude's ... ..	19
Woodside ... ..	31	The Retreat ... ..	5
South Norwood ... ..	48	Milton House ... ..	4
St. Oswald's ... ..	10		

The sum of £46 13s. 6d. was received in payment for the attendances made by mothers and children at Lodge Road and Selhurst Road Clinics.

#### **The Babies' Help Committee of the Croydon Mothers and Infants' Welfare Association.**

I am indebted to Mrs. W. Philpot for the particulars presented herewith. At the beginning of the year the Committee had 8 cases on the books; 15 cases were helped during 1933; 9 remained on the books.

The help given varied according to the need and was given at the Welfare Centres through the Health Visitors.

#### **Convalescence Committee of the Croydon Mothers' and Infants' Welfare Association.**

This Committee undertakes the arrangements for convalescence in cases of mothers and children referred for that purpose by the medical officers at the various Infant Welfare Clinics. I am indebted to the Convalescence Secretary, for the data given.

Children sent away with their mothers to	
Cottages or Homes ... ..	138
Children sent away alone to Convalescent	
Homes—	
(a) to Coombe Cliff ... ..	29
(b) to other Homes ... ..	18
	— 47

In addition, 5 children, with mothers, were sent away to relations.

A grant of £450 was made by the Council to the Association for this work in 1933. I am indebted to Mrs. W. Horn, Hon. Secretary of the Association, for the following particulars of the cost entailed by the Association. The year is the financial year :—

	<i>Children under 5 sent to Homes.</i>	<i>Total No. of weeks.</i>	<i>Cost.</i>			<i>Cost of other forms of convalescence.</i>		
			£	s.	d.	£	s.	d.
1928—1929 ...	18	86	107	10	0	261	10	7
1929—1930 ...	15	68	80	0	0	99	12	6
1930—1931 ...	31	217	201	7	6	173	0	0
1931—1932 ...	42	341	296	6	1	378	7	6
1932 (Apr. 1st to Dec. 31st) ...	32	291	219	11	7	302	2	3
1933 ...	47	361	322	18	11	379	7	7

#### **Croydon Rescue and Preventive Association.**

This Association has a home at 34, Morland Road. As the Council now make a yearly financial grant towards its conduction, it is open to periodical inspection by the Council's officers. Prospective mothers from this home attend the Municipal Ante-natal Clinic at Lodge Road.

I am indebted to the Superintendent, Miss Hammick, for the subjoined particulars. Number of beds in home, 12. Six beds are reserved for mothers and babies and 4 are reserved for expectant mothers. Total number of cases admitted in 1933 :—

- (a) Expectant mothers ... 19
- (b) Mothers and babies ... 13

#### **Wilford Road, Lighthouse Mission Crèche.**

The Council give an annual grant of £100 towards the cost of this Crèche. A total of 6,464 attendances was recorded.

The premises in which the Crèche is conducted are cramped and unsuitable.

#### **COOMBE CLIFF CONVALESCENT HOSPITAL.**

This home has carried out a useful function during the year and has enabled a number of children to be returned to school much sooner than they would have been otherwise.

The following is a summary of the cases dealt with. Cases under 5 years of age were sent by the Croydon Mothers' and Infants' Welfare Association who contributed 15s. weekly towards their maintenance.

No. of cases admitted during year : 143.

Total number of cases discharged : 151.

No. of patient days : 67.7 per patient (1933 cases).

TABLE CI.

Age groups of cases admitted:—

	0—4	5—8	9—12	Over 12	Total
Male ... ..	19	29	20	2	70
Female ... ..	20	26	23	4	73
Total ... ..	39	55	43	6	143

Average length of stay in similar age groups:—

	0—4	5—8	9—12	Over 12	Total (days)
Male ... ..	61.6	58.3	59.4	43.5	59.1
Female ... ..	72.4	84.8	71.8	59.0	75.9
Total ... ..	67.3	70.8	66.0	53.8	67.7

Condition on Discharge:—

	0—4		5—8		9—12		Over 12		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Improved ... ..	9	9	13	7	12	11	1	—	35	27
Much Improved ... ..	3	7	14	12	6	9	2	3	25	31
No change ... ..	5	3	5	4	4	4	—	2	14	13
Discharged at parent's request	1	1	2	—	—	1	—	1	3	3
Total ... ..	18	20	34	23	22	25	3	6	77	74

### CHILDREN'S ACTS, 1908—1933.

Since April 1st, 1930, this Act has been administered by the Health Department. The work has been delegated to the Health Visitors who are made responsible to the Medical Officer of Health for all foster children and foster mothers in their respective districts.

The tables below give figures for 1933.

TABLE CII.  
FOSTER CHILDREN.

No. as at Dec. 31st, 1933	Notice of Reception of Children during the year	Notice of Removal to—				Children Adopted	Died	Children reaching age of 9	No. as at December 31st, 1933
		Parent	Another area with Foster Parent	Another Foster Mother	Public Institution				
244	279	93	6	83	26	29	3	9	274

TABLE CIII.  
FOSTER MOTHERS.

No. as at Dec. 31st, 1933	Applications for Registration during the year	Removals during the year		Registration cancelled for other reasons	No. as at December 31st, 1933
		With Child	Without Child		
258	69	5	22	93	207

The Health Visitors paid 3,058 visits to Foster Mothers for the purposes of supervision.

### Blind Persons Act, 1920.

Under Section 102 (1) of the Local Government Act, 1929, the Minister of Health was required to make a scheme providing for payments of contributions of such amounts as might be specified in the scheme to any voluntary association which provided services for the welfare of the blind, by the Councils of Counties and County Boroughs in which are resident blind persons for whose benefit the services are provided.

The scheme, which came into force on April 1st, 1930, has continued during 1933.

Under this scheme the Council pays grants to twelve societies, among which by far the largest grant is made to the Croydon Voluntary Association for the Blind.

The visitation of home teachers, employees of workshops, home workers and inmates of homes subject to grant are now carried out by the Medical Officer of Health who reports from time to time to the Blind Persons Act Committee.

Close co-operation has been maintained with the Croydon Voluntary Association for the Blind. The Blind persons residing in Croydon are now visited at regular and frequent intervals by the Health Visitors and any circumstances in their reports justifying further investigation, are followed up by the Deputy Medical Officer of Health.

I am indebted to the Secretary of the Voluntary Association for the figures below.

Number of blind on Register ... ..	335
Number of blind who benefit from instruction in Braille or Moon Type (including those who already read) ... ..	71
Number of blind who benefit from part-time instruction ... ..	38
Number in remunerative handicrafts—	
(a) Home workers ... ..	25
(b) In workshops ... ..	8
Home Teacher ... ..	1

The Health Visitors paid 1,051 visits to blind persons during the year. The Medical Officer also paid home visits to blind persons during the year.

## SECTION IX.

## MENTAL DEFICIENCY.

The staff of the department dealing with the mentally defective consists of the Medical Officer of Health and the Deputy Medical Officer, who are certifying officers; one whole-time visitor; the teacher at the Occupation Centre, with three helpers.

In April, 1929, the Council established a small home at 5, Morland Road, for the reception of 20 low grade mentally deficient boys under the age of 16 years.

The population in this small institution does not vary much. During the year 6 patients were admitted and one discharged on leave. The average number in was 18.

The difficulties inherent in the conduction of a small institution of this kind have been various, more particularly in the matter of staffing, and the Committee will close the Home as soon as suitable alternative accommodation can be found for the inmates.

There are two main administrative groups of mentally defectives, viz.:—

(a) *The Statutory Cases*, who consist of certified mental defectives under 7 and over 16 years of age: ineducable mentally defective children between the ages of 7 and 16 years; and children referred to the Local Control Authority under the Mental Deficiency Act, 1913, as being incapable of further education at a Special School or of being incapable of such education without detriment to other children.

(b) *Education Cases*, who consist of mentally defective children between the age of 7 and 16 who are capable of instruction in a Special School.

The former group are dealt with by the Mental Deficiency Committee, and the latter by the Education Committee.

The largest number of notifications of children suspected to be suffering from mental defects are received from School Teachers and the School Attendance Officers. Sources of information regarding cases not coming within the category of school children are mainly the Infant Welfare Centres, Health Visitors, and Probation Officers.



TABLE CIV.

*Number of known Mentally Defective Persons in the Borough—*

*1. Statutory Cases —*

	1932.	1933.
Aged 0—5 years ... ..	4	4
„ 5—16 „ ... ..	83	71
Over 16 years ... ..	351	385
Total ... ..	438	460

*II. Education Cases—*

Aged 7—16 years ... ..	136	152
Combined Total ... ..	574	612

Compared with 1932, the Statutory cases show an increase of 22 and the Education cases an increase of 16.

The Statutory cases are distributed as follows:—

	1932.	1933.
In Certified Institutions ... ..	122	125
In Places of Safety or Approved Homes ... ..	6	4
On Leave from Institutions ... ..	14	9
Under Statutory Supervision at Home ... ..	216	217
Under Guardianship and on Leave	41	47
In Mental Hospitals ... ..	12	13
Cases Under Public Assistance ...	27	28
Observation Cases ... ..	—	17
		460

The Education cases were distributed as follows:—

	1932.	1933.
In Certified Residential Schools ...	11	10
In Certified Day Schools ... ..	103	110
At Private Schools ... ..	7	5
At Council Schools (10 waiting for vacancies at St. Christopher's) ... ..	6	14
At no school, resident at home ...	8	13
In other Institutions ... ..	1	—
		152

In connection with mentally deficient cases, the Medical Officers made examinations and paid visits to the number of 101 for Statutory cases and 237 for Education cases, a total of 338. The mental deficiency visitor paid 1,531 visits to Statutory cases, and 700 to Education cases, a total of 2,231.

During the year 37 names have been added to the Statutory list, 13 being new cases; 24 were referred on from the Education Authority—14 as ineducable or not further educable, 9 for supervision on leaving the Special School on attaining the age of 16; and 1 for Institutional care or Guardianship. Three boys and 3 girls died during the year; three of these deaths occurred in institutions, the other deaths were of cases: 1 guardianship, and 2 others at home under supervision; 5 left the Borough, viz., 2 boys and 3 girls.

Four cases chargeable to other Local Authorities are under supervision in the Borough.

There are 9 children under observation, ages from 1½ to 6 years.

Thirty Statutory cases were dealt with as follows:—

Sent to Certified Institutions	...	...	5
Placed under Guardianship	...	...	9
Sent to Places of Safety	...	...	4
Allowed home on long leave	...	...	2
Transferred from one Institution to another			8
Discharged from Order	...	...	2
			—
			30
			—

The number of cases sent to certified institutions shows a decrease of 5, owing to the difficulty of finding institutions with vacancies.

### Guardianship Cases.

There are 45 cases under Statutory guardianship and 2 on leave; 25 of these are under the care of relatives, and 20 are with guardians who are not relations. Eight males and 5 females are at work. Thirteen cases are out of the Borough: ten under the Brighton Guardianship Society, one with a guardian in Essex, one in Suffolk, and another in Maidstone. Six boys and six girls attend the Occupation Centre at Grangewood.

Sixteen of the Guardianship cases are doing useful work and fifteen are quite unemployable: one lad died, one was removed to a mental hospital and one absconded and has not yet been traced.

### Cases on Leave from Institution.

There are 9 cases on licence from institutions. Five are boys, and of these 3 are in regular employment and 2 are in Mayday Hospital. Four girls—2 in regular work, and 2 on trial in Homes.

### St. Christopher's Special School.

The year 1933 opened with 105 scholars on the roll. During the year 29 children have been admitted, and 24 have left, giving a number of 110 on December 31st—65 boys, 45 girls.

This is a School for Mentally Deficient children of the educable type, and in general appearance and behaviour they compare very favourably with normal children attending the Council's elementary schools.

The School has now been in existence for over 21 years, but 1933 marks a great advance in the work and status of the School. In October the School was moved from the Grange Wood Mansion to the old Rectory Manor School premises. These have been re-decorated and re-conditioned, and though, perhaps the School does not present a modern exterior, yet, the interior is now a satisfactory school building with a large hall, class-rooms, kitchen, bathroom and staff-rooms, etc. There is ample playground space, and each class has its own garden. The move has been a wise one, and it has been particularly interesting to observe the reaction of the children to their new environment, and to note that, unconsciously perhaps, they now take a pride in their School, and this is reflected in their demeanour, and in their attitude to work. They frequently remark:—"We have a School of our own now."

The year has been one of good steady progress. The teachers have been helped by the scholars' good attendance. It is very seldom that children are absent, except for some really good reason.

The children have had several outings in 1933. About 50 had a long day at Littlehampton in July, and visits were also made to the Zoo and Windsor Castle. These are very popular, and as far as possible, the poorest children are taken on these excursions.

The children's prowess in Country Dancing is especially to be commended. It would be an "eye-opener" to many to see what they can do in this part of their training. The School now forms a group with a few elementary schools, and the children frequently attend Country Dance Parties, and take part in the dances. The Head Teacher would welcome visitors to see the games and dancing.

Mention must be made of the very excellent mid-day meals provided by the Education Committee. There is much variety in the menu, and the provision of these meals is an important factor in the progress and happiness of the children.

It is suggested in the best interests of the School and the scholars that, although officially a School for the mentally defective, popularly it might always be referred to by its name, St. Christopher's, and thought of rather as a School for educationally backward children. Quite a number of the pupils pass out to do general work and become useful citizens.

### Town Hall Clinic for Mentally Defective and Backward Children.

93 children were examined during 1933. The classifications arrived at, together with the recommendations made, are summarised as under:—

I. (a) Certified as Mentally Defective	...	...	...	...	51
(b) Confirmed as Mentally Defective	...	...	...	...	4
					—
					55
Recommendations—					
(a) Recommended for Special Day School	...	...	...	...	40
(b) Recommended for Residential Schools	...	...	...	...	1
(c) Referred to Occupation Centre or Institution	...	...	...	...	8
(d) Supervision at home <i>pro tem.</i>	...	...	...	...	6
					—
					55
II. Found to be dull and backward	...	...	...	...	24
					—
(a) Referred to a Special Class	...	...	...	...	18
(b) Further trial in Ordinary Class	...	...	...	...	6
					—
					24
III. Found to be Physically Defective	...	...	...	...	3
					—
(a) Recommended for Residential School for Deaf and Dumb	...	...	...	...	1
(b) Recommended for Residential School for Blind	...	...	...	...	1
(c) Recommended for Hospital Treatment. No School <i>pro tem.</i>	...	...	...	...	1
					—
					3
IV. (a) Considered to be of normal intelligence and referred to ordinary school	...	...	...	...	2
(b) Considered to be of normal intelligence and referred to work	...	...	...	...	1
					—
					3
V. Referred for re-examination	...	...	...	...	8
VI. Mental and physical examinations at St. Christopher's School					144

### Grangewood Occupation Centre.

The Occupation Centre is under the control of the Mental Deficiency Committee, and deals only with cases ineducable in a Special School.

The Centre is open for five days a week from 9.30 a.m. to 3.30 p.m. and occupies rooms on the ground floor of Grangewood Museum. The special school which occupied the floor above removed to new premises at the old Rectory Manor School, Micham Road, toward the end of the year. Younger children attend daily mornings and afternoons (10 sessions) and the senior girls on Monday, Wednesday and Friday afternoons from 2 to 3.30 (3 sessions). Senior boys on Tuesday and Thursday from 2 to 3.30. The premises are not very suitable, as there are insufficient rooms available to allow of proper separation of the different grades of children. The premises vacated by the special school will be occupied by the Centre, by the permission of the Roads Committee, who however, have only granted the lease for one year. The Mental Deficiency Committee are considering the matter of alternative and more suitable accommodation.

The staff consists of a supervisor and three assistants. The subjects taught to the younger children are, rhythmic movement drill band, rhythmic singing games, singing, sense training memory, colour, sound, numbers, elements of stitching and rug making. As handicrafts are taught cork bead mat making, paper winding, mats, raffia weaving, knitting, raveling, wool sorting. In addition balancing exercises, team games, country dancing are indulged in.

The senior girls have instruction in hemstitching, English embroidery, wool embroidery, knitting of babies' woollies, vests, socks, making of plain frocks for children, overalls, plain sewing of pillow slips, tea cloths. As handicraft work, papier mache bowls, sea grass stools, baskets, simple pewter work, are made. Country dancing, drill and singing are also taught.

The senior boys learn basket making, making wool rugs, sea grass stools, raffia and cane work, papier mache bowls.

All grades have domestic duty in preparing meals, washing up, polishing, etc.

The Christmas Party was held as usual, tea being provided together with presents off the Christmas tree for the children. Three open days for parents were also held.

<i>Details.</i>	1933.	
	<i>Full Time.</i>	<i>Part Time.</i>
No. on register January 1st, 1933 ...	35	10
No. of pupils who left during year ...	6	—
No. of pupils admitted during year ...	16	—
No. of pupils on register January 1st, 1934	45	10
Total attendances ...	5809	790
Average morning attendance 28 (whole-time class)		
Average afternoon attendance senior girls' class ...		5
" " " boys' " ...		2
Sessions held ...	207	204

## SECTION X.

## ORTHOPÆDIC DEPARTMENT.

Cases referred for Orthopædic treatment from the Tuberculosis, the School Medical and other branches of the Public Health Department's work are seen and treated by Mr. A. Todd at the Croydon General Hospital every Thursday. The arrangement is based financially on payment to the Hospital, per attendance. The cases are referred to the Mayday Hospital, and various well-known Orthopædic institutions for in-patient treatment. The after care organiser of the Department attends at each session.

In addition to the Clinic at the General Hospital, concerning which only the tables below relate, there are remedial exercises clinics conducted under the School Medical Scheme (referred to in the school report) and a massage clinic for children under five years, referred by medical officers at the Welfare Centres.

TABLE CV.

*Summary of Cases Attending the Orthopædic Clinic.*

Jan. 1st, 1933.			New Cases, 1933.			Cases Discharged, 1933.			Cases on books, Dec. 31st, 1933.		
M.C.W.	S.M.S.	Tuberc.	M.C.W.	S.M.S.	Tuberc.	M.C.W.	S.M.S.	Tuberc.	M.C.W.	S.M.S.	Tuberc.
149	280	54	143	192	21	100	193	12	192	279	63
483			356			305			534		

The Clinic continues to expand steadily. On January 1st, 1928, there were 229 cases on the books, by January, 1934, this figure had risen to 534; on January 1st, 1931, the figure was 439, on January 1st, 1932, 458; and on January 1st, 1933, 483; 305 cases were discharged as compared with 254 in 1932, and there were 356 new cases compared with 279 in the latter year.

Cases of bone, joint and abdominal Tuberculosis in childhood are steadily declining and the number of new cases attributed to Tuberculosis declined from 51 in 1929 to 42 in 1930, to 31 in 1931, to 13 in 1932. In the year under review there was a small increase in the number, which was 21.

They would, in all probability, decline more rapidly if any milk found to contain Tubercle Bacilli could be condemned as unfit for human consumption.

TABLE CVI.

*Cases seen by the Orthopædic Surgeon.*

Defect.	School.		M.C.W.		Tuberculosis.		Total.	
	Cases.	Visits paid.	Cases.	Visits paid.	Cases.	Visits paid.	Cases.	Visits paid.
Infantile Paralysis ... ..	31	71	7	25	...	...	38	96
Scoliosis ... ..	57	108	4	7	...	...	61	115
Pes Cavus ... ..	4	6	1	1	...	...	5	7
Pes Planus ... ..	187	353	62	130	...	...	249	483
Talipes* ... ..	15	25	37	113	...	...	52	138
Genu Valgum ... ..	42	81	78	139	..	...	120	220
Obstetrical Paralysis ... ..	15	25	1	1	...	...	16	26
Tubercular Joint Disease ... ..	...	...	...	...	{ 33A 36S 6M	{ 73 82 4	75	159
Injuries... ..	36	37	9	12	...	...	45	49
Rickets ... ..	6	7	42	76	...	...	48	83
Wry Neck ... ..	7	7	5	9	...	...	12	16
Spastic Paraplegia ... ..	10	26	7	11	...	...	17	37
Other Deformities ... ..	62	90	39	79	...	...	101	169
	472	836	292	603	75	159	839	1598

\*Includes cases of ankle valgus, spasmodic valgus, and other predisposing causes of flat feet.

Summarised, the Table shows 472 school children attended and made 836 attendances; 292 babies made 603 attendances; and 75 tuberculosis cases made 159 attendances, a total of 839 cases, making 1,598 attendances.

The following Table shows the number of cases referred direct from the Orthopædic Clinic for massage, Swedish remedial, and electrical treatment, and also X-Ray examination at the Croydon General Hospital.



TABLE CVII.

Cases referred from Orthopædic Clinic for Remedial Treatment and X-ray at Croydon General Hospital.

Defects	School Cases			M.C.W. Cases			Tuberculosis Cases			Total		
	Cases	No. of Treatments	X-Rays	Cases	No. of Treatments	X-Rays	Cases	No. of Treatments	X-Rays	Cases	No. of Treatments	X-Rays
Infantile Paralysis ...	6	148	1	4	108	...	...	...	...	10	256	1
Scoliosis... ..	29	645	3	2	69	2	...	...	...	31	714	5
Pes Cavus ... ..	1	23	...	..	...	...	...	...	...	1	23	..
Pes Planus ... ..	35	518	...	1	23	...	...	...	..	36	541	...
Talipes ... ..	2	30	...	9	175	1	...	...	...	11	205	1
Genu Valgum .. ..	7	98	2	4	55	2	...	...	...	11	153	4
Obstetrical Paralysis ...	2	29	..	...	...	...	...	...	...	2	29	...
Tuberc. Joint Disease ...	..	...	...	...	...	...	27	17	30	27	17	30
Injuries ... ..	15	48	10	4	...	4	...	...	...	19	48	14
Rickets ... ..	...	...	...	4	...	4	...	...	...	4	...	4
Wry Neck ... ..	1	3	...	4	45	...	...	...	..	5	48	...
Spastic Paraplegia ...	5	69	...	2	2	...	...	...	...	7	71	...
Other Deformities ...	21	98	17	12	160	14	...	...	...	33	258	31
	124	1709	33	46	637	27	27	17	30	197	2363	90

TABLE CVIII.

Cases Sent to Residential Institutions.

Name of Institution	School Cases			M.C.W. Cases			Tuberculosis Cases			Total			No. in on Jan. 1st, 1934.
	No. in on Jan. 1st, 1933	Admitted	Discharged	No. in on Jan. 1st, 1933.	Admitted	Discharged	No. in on Jan. 1st, 1933.	Admitted	Discharged	No. in on Jan. 1st, 1933.	Admitted	Discharged	
Pyrford ... ..	2	5	2	...	3	1	11	8	8	13	16	11	18
Croydon General	1	13	13	1	9	10	...	7	7	2	29	30	1
	3	18	15	1	12	11	11	15	15	15	45	41	19

The following Table shows the conditions for which patients were admitted to Hospitals and the results of treatment.

TABLE CIX.

Condition.	In on Jan. 1st, 1933.	Ad- mitted.	Discharged				In on Jan. 1st, 1934.
			Cured.	Much Im- proved.	Im- proved.	Died.	
Infantile Paralysis ...	2	2	...	...	3	...	1
Talipes ... ..	...	5	...	2	3	...	...
Tuberc. Joint Disease ..	11	16	4	3	8	...	12
Congenital Dislocated Hip	...	1	1	...	...	...	...
Observation Joint Disease	...	5	1	...	...	...	4
Injuries ... ..	1	1	1	...	1	...	...
Rickets ... ..	...	5	4	...	...	...	1
Wry Neck ... ..	..	1	1	...	...	...	...
Spastic Paraplegia ...	...	2	...	...	2	...	..
Other Deformities ...	1	5	4	1	...	...	1
Scoliosis ... ..	...	2	1	...	...	1	...
	15	45	17	6	17	1	19

The percentage of cures for the whole series of cases was 41.5%, whilst 14.6% were much improved.

Table to show number of cases for whom appliances were ordered and how the expenses thereof were met:—

Total cases on books of the Clinic Jan. 1st, 1934	...	...	534
Total number actually in receipt of massage, electrical Swedish remedial treatment on Jan. 1st, 1934	...	...	31
New splints and appliances supplied	...	...	83
Repair of existing appliances	...	...	11
Part cost met by parents	...	...	20%
Full cost met by parents	...	...	42%
Full cost met by Local Authority	...	...	37%
Number of cases in which Hospital contributions were authorised	...	...	29

Mrs. D. B. Connor, the organiser of this department, attended 48 Clinic sessions, interviewed 2,134 people, made 312 enquiries into financial conditions of families, and sent out 954 letters in connection with her work.

Mrs. Connor's work, though interesting, calls for a considerable degree of tact and sympathy, and, I am happy to record, the success of the Orthopædic work carried out by the Local Authority is largely attributable to her aptness for the work.

### Maternity and Child Welfare Massage Clinic, Lodge Road.

One of the whole-time masseuses devotes 5 sessions a week to this work. The remainder of her time is devoted to the children at St. Giles' School which she attends each morning.

### ULTRA-VIOLET LIGHT CLINIC.

The Clinic is held at the Croydon General Hospital on two days a week under the superintendence of Dr. F. Hernaman-Johnson. Cases were referred from the Tuberculosis Dispensary (4), the M and C.W. Department (46), and the School Medical Service (30).

The following Table gives a summary of the attendances made :—

TABLE CX.

Department.	No. of Cases.	Aggregate duration of treatment in weeks.	Aggregate No. of Sessions Attended.	No. of Patients discharged.	No. continuing treatment end of 1933.
School Medical ...	30	285	897	23	7
M. & C. W. ...	46	374	1091	37	9
Tuberculosis ..	4	40	94	3	1
	80	699	2082	63	17

The Table under gives the complaints treated and the results achieved in completed cases. Nine cases ceased attending before completion of treatment, one case was transferred to Mayday Hospital, and one went to a Convalescent Home.

TABLE CXI.

Condition,	School Cases.				M. & C. W. Cases.				Total.
	Much Improved.	Improved.	Slight Impr.	I. S. Q.	Much Improved.	Improved.	Slight Impr.	I. S. Q.	
Debility ... ..	4	4	...	...	7	6	2	...	23
Asthma ... ..	1	1	1	...	2	...	...	...	5
Bronchitis ... ..	2	1	...	...	...	1	1	...	5
Glands ... ..	1	...	...	...	4	...	...	...	5
Rickets ... ..	...	...	...	...	1	1	...	...	2
Miscellaneous ... ..	3	1	...	...	2	2	1	...	9
	11	7	1	...	16	10	4	...	49

#### School Cases.

Seven School cases were still attending the Clinic at the end of the year. Asthma, 1; Alopecia, 1; Bronchitis, 2; General Debility, 2; Chronic Pulmonary Catarrh, 1.

#### Maternity and Child Welfare Cases.

Nine Maternity and Child Welfare cases were still attending the Clinic at the end of the year. These were suffering from the following conditions, viz.:—Debility, 3; Rickets, 2; Asthma, 1; Bronchitis, 1; Anaemia, 2.

TABLE CXII.

	Much Improved	Improvement	Slight Improvement	I.S.Q.	Still attending at end of 1933	Total
Lupus ... ..	...	...	...	1	1	2
Adenitis ... ..	1	...	...	...	...	1
Sinusitis ... ..	...	...	1	...	...	1
	1	...	1	1	1	4

Of the School cases, 17 were boys and 13 girls; the maternity and child welfare cases, 24 boys and 22 girls, and the Tuberculosis patients, 2 male and 2 female.

There is a tendency sometimes to exaggerate the therapeutic importance of this form of treatment. All the cases referred to the Clinic had been carefully selected as likely to benefit; of those discharged, 37.8% after completion of treatment, were much improved, 31.3% were improved, and 30.9% were not benefited. These figures show that it is by no means a panacea, though under expert supervision of dosage, exposure, etc., it is capable of assisting natural forces to bring about improvement in bodily health. In unskilled hands it is capable of causing bodily damage. Two types of lamps were used: the Mercury Vapour and the Carbon Arc: the former alone was used in 60 of the cases; the latter alone in 7 cases, and both lamps in 13 cases.

The use of artificial sunlight lamps in bathrooms is fraught with considerable risk and their installation should only be made under strict expert supervision.

## SECTION XI.

## CROYDON AERODROME.

**Aliens Acts.**

The London Terminal Aerodrome is situated in the area of Croydon. Medical duties in connection with the Aliens Acts are carried out on behalf of the Ministry of Health by a part-time medical officer on the staff of the Medical Officer of Health.

The duties of a medical officer at an Aerodrome differ considerably from those at a seaport; the type of passenger using air transport not being of the kind dealt with by sea-borne traffic. The majority of passengers are business people or tourists. The medical officer is on duty six hours daily from April to September inclusive, and two hours daily during the six winter months. He is under the administrative control of the Medical Officer of Health.

The arrangements made at the Aerodrome for the convenience of passengers and for the examination of aliens are satisfactory.

The arrangements work smoothly and efficiently, and much of this is due to the cordial co-operation and help at all times received from H.M. Immigration Officers, H.M. Customs Officers, and the management staff of the Aerodrome.

The Table below gives a summary of the traffic during the year.

TABLE CXIII.

## LONDON TERMINAL AERODROME.

## ALIENS ACT, 1930.

*Medical Officer's Return for the year ending  
31st December, 1933.*

Number of Planes.		Arrived from				
Arr.	Seen.	Paris.	Amsterdam.	Brussels.	Elsewhere.	
Total: 4,437	2,018	...	2,573	1,037	582	245
PASSENGERS.						Attendances
British.	Others.	Inspected.	Exd.	of M.O.		
26,751	17,790	...	19,245	32	...	364

These figures show a considerable increase on last year's figures both in the number of machines arriving and departing and in the number of passengers carried. This expeditious and safe method of travel is becoming steadily more popular.

## MEMBERS OF THE EDUCATION COMMITTEE.

NOVEMBER, 1932-1933.

The Mayor (Alderman W. Peet, J.P.).  
 Alderman A. Peters, C.B.E., J.P. (Chairman).  
 P. Squire, Esq. (Vice-Chairman).

Alderman T. Betteridge, J.R.	Councillor Major F. W. Rees.
Alderman H. J. Morland, M.A., J.P.	Councillor H. Regan.
Alderman T. W. Wood Roberts, J.P.	Councillor Dr. A. Sandison, O.B.E.
Alderman W. West.	Councillor Rev. A. J. Stubbs.
Councillor E. E. L. Arkell.	V. Boys, Esq.
Councillor E. S. Baker, O.B.E., J.P.	W. A. Clarke, Esq.
Councillor A. J. Carpenter.	Mrs. R. L. Gurner.
Councillor A. H. Harding.	Mrs. M. A. Hinks.
Councillor Eng.-Rear-Admiral Harrison.	Capt. H. Lethbridge-Abell, F.Z.S.
Councillor Mrs. Heighton, J.P.	Mrs. R. Lewis.
Councillor W. G. Higgins.	Mrs. M. M. Wood Roberts.
Councillor W. H. Jarvis.	G. Robinson, Esq.
Councillor G. Lewin.	Rev. G. M. Scott, M.A.
Councillor J. Marshall.	The Lord Bishop of Croydon.

J. M. Newnham, O.B.E., D.L., LL.D., Clerk to the Local Education Authority.  
 R. B. Morgan, M.A., M.Litt., Education Officer.

## STAFF OF THE SCHOOL MEDICAL SERVICE.

Medical Officer of Health and School Medical Officer:

Oscar M. Holden, M.D., D.P.H.

Deputy Medical Officer of Health and Deputy School Medical Officer:

W. B. Watson, L.R.C.P., L.R.C.S., D.P.H.

Assistant Medical Officers of Health and Assistant School Medical Officers:

Basil A. Dormer, M.B., B.S., D.P.H., B.Hy.

Olive B. Falk, M.B., B.S.

Iris Jenkin-Lloyd, M.R.C.S., L.R.C.P., D.P.H.

J. R. Draper, B.A., M.B. (part-time).

Specialist Part-Time Medical Officers:

J. S. Bookless, F.R.C.S. (Ophthalmic Surgeon).

Rota of 4 local medical practitioners for surgical treatment of tonsils and adenoids.

Senior Dental Surgeon: J. F. Pilbeam, L.D.S.

Assistant Dental Surgeons: J. K. R. Bryce, L.D.S., and K. C. B. Webster, L.D.S.

Remedial Gymnasts: Miss F. Davey and Miss M. K. Thomas (part-time).

Mental Deficiency Visitor: Miss E. A. McDougall (part-time).

Orthopædic Work Organiser: Mrs. D. B. Connor (part-time).

School Nurses: Two at clinics, 19 district nurses (part-time), and one supernumerary.

Clerks: Five full-time and six part-time.

**SCHOOL CLINICS.**

<i>Name.</i>	<i>Purpose.</i>	<i>Where held.</i>	<i>Times.</i>
INSPECTION ...	Special examination of cases referred by teachers, school attendance officers and school nurses and on application of parents.	Municipal Clinic, Lodge Road.	Wed. and Sat., 9 a.m.
MINOR AILMENTS	Treatment of Minor Diseases of Skin, etc.	Lodge Road. Selhurst Road.	Daily, 9 a.m. Mon., Wed. and Fri., 9 a.m.
OPHTHALMIC	Treatment of Visual Defects.	Lodge Road.	Tues. and Fri., 9 a.m.
DENTAL. ...	Dental Treatment.	Lodge Road and Selhurst Road.	Daily, 9 a.m. and 2 p.m.
EAR ...	Treatment of Chronic Ear Discharge.	Lodge Road.	Alternate Tues., 2 p.m.
DEFECTIVE CHILDREN	Examination . . .	Town Hall.	As required.
X-RAY ...	Treatment of Ring-worm.	Dr. Greig's Surgery.	By appointment.
ORTHOPÆDIC	Treatment of Crippling Defects.	General Hospital.	Thurs., 10 a.m.
THROAT ...	Operative Treatment of Enlarged Tonsils and Adenoids.	do.	Mon. and Wed., 2 p.m.
SYNTHETIC SUNLIGHT	Treatment of Rickets, etc.	do.	Tues., 2 p.m. & Fri., 9 a.m.
REMEDIAL EXERCISES	Treatment of Deformities.	St. Andrew's Hall, Pump Pail.	Daily.
CLEANSING STATION	Treatment of Scabies and Cleansing of Verminous Cases.	Factory Lane.	Arranged as required.
TUBERCULOSIS DISPENSARY	Treatment of Tuberculosis and Examination of Contacts.	13, Katharine Street.	Wed., Thurs., Fri. and Sat., a.m.
RHEUMATISM	Examination . . .	Lodge Road.	Alternate Thurs., 9 a.m.



# County Borough of Croydon.

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## ANNUAL REPORT

OF THE

## SCHOOL MEDICAL OFFICER

*For the Year ending December 31st, 1933.*

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LADIES AND GENTLEMEN,

I have the honour to present to you my sixth annual report on the work carried out by the School Medical Service.

The form of the report follows that adopted last year. The number of routine medical inspections has been maintained by the employment of a part-time medical officer for four sessions a week; and the actual number of children inspected exceeds the figure for 1932 by 21. The number of Clinic sessions, however, has had to be restricted.

The whole-time professional staff has remained unchanged during the greater part of the year. Dr. O'Connell, however, left the service of the Council in September, and his post was filled by the appointment of Dr. Dormer, who commenced his duties in November.

### Co-ordination with Other Health Services.

Close co-operation exists between the Public Health Department and the School Medical Service, as all the officers of the latter service are also engaged for a part of their time in Public Health work. Endeavours have been continued to obtain a closer continuity between the Maternity and Child Welfare work and the School Medical Service, but there appear to be inherent difficulties under the present system. If the facilities offered by the School Medical Service, in the way of routine medical and dental examinations, could be extended to the pre-school child much closer working, with consequent decrease in the number of defects found in the Entrant group of school children, would accrue. At present there does not seem, however, much chance of such an extension. The gap which exists between the actual—as opposed to the theoretical—supervision of the Maternity and Child Welfare Service and the commencement of the School Medical supervision, is a most unfortunate one, leading, as the figures in my report show clearly, to an unduly high incidence of defects found in the five year old group.

The continued co-operation of the Head Teachers and of the School Attendance Officers has been a valuable help without which much of the medical work and following up would have been difficult of proper fulfilment. As can be seen by the figures in Table I. parents have attended at the routine medical inspections whenever home duties allowed, and their presence at the examination is helpful because the doctor can explain personally any instructions he desires carried out. The Voluntary School Care Committees, and the Croydon Council of Social Service have also co-operated in the work. The Society for the Prevention of Cruelty to Children have, through Mr. Brown, their inspector, rendered assistance with a few difficult cases. 21 cases have been dealt with and of these 15 have been brought to a satisfactory conclusion, whilst 6 still remain under supervision. The inspector paid 47 visits during the year.

## Structural Work and Decorations Carried Out in Schools.

I am indebted to the Education Officer for the following particulars of work carried out at the various schools during the past year:—

### *External Painting at the following—*

Central Polytechnic.  
South Norwood Polytechnic.  
North Park Stores and Workshop.

### *Internal Painting and Distempering at the following Schools—*

Purley Oaks.  
South Norwood.  
Sydenham.  
Rockmount.  
Addington (St. Mary's).

### *New Schools or Departments Opened—*

St. Giles' (P.D.) School, Addington.  
St. George's Hall, Waddon (Temporary)  
South Norwood (Temporary).

### *Alterations and Additions at the following Schools—*

Christ Church—Reconstruction of W.C.'s.  
St. Christopher's—Adaptation of ground floor of Rectory  
Manor School.

## Cost of the School Medical Service.

The gross cost of the medical, dental and nursing services was £10,009; from this an income of £641 should be deducted, making a nett cost of £9,368. The rateable value of the Borough in 1933 was £2,070,619. The Government grant is 50 per cent. of the expenditure, hence the actual cost to the rates was £4,684, *i.e.*, a rate of 0.54 pence. The nett cost of these services to the rates for 1933 per child on the school registers was 3s. 5.5d.

The figures do not include £300 for Medical Inspection (Higher Education) and for Blind persons £490.

## Cost of Special Schools.

Schools maintained by the Council £5,735; Contributions to schools under other authorities £3,403; Loans charges, £364; Other expenses (travelling, etc.), £24; Income from parents' contributions and other receipts, £854; giving an actual cost of £8,672, of which £4,410 was payable out of local rates, giving a rate of 0.51 pence.

### Cost of Milk and Meals.

Milk and meals cost £2,290 4s. 4d.; Income from parents' contributions £19 18s. 7d.; giving an actual cost of £2,270 5s. 9d.

There has been a decrease in the cost of the actual medical services rendered in the Public Elementary Schools from 0.58 in 1932 and 0.61 of a penny rate in 1931 to 0.54 of a penny rate in 1933. The cost of maintenance in Special Schools has risen from 0.43 of a penny rate in 1932 to 0.51 in 1933. The cost of milk and meals has risen by £1,127.

The Elementary Schools are now classified as Senior, boys, girls and mixed; Junior, boys, girls and mixed and Infants. The Table below gives the number of schools and the number of pupils in attendance thereat. The school population as given by the average number on the registers has increased by 595. The average attendance was 90.0 per cent.

TABLE I.

	No. of Schools.	Average number on the Registers.	Average attendance.	Average attendance per cent.
Senior Boys ... ..	11 C. 2 N.P.	3556 451	3282 426	92 95
Senior Girls ... ..	11 C. 2 N.P.	3608 399	3262 373	90 94
Senior Mixed ... ..	6 C. 4 N.P.	2402 1288	2221 1130	93 88
Junior Boys ... ..	7 C.	2723	2505	92
Junior Girls ... ..	8 C. 3 N.P.	2916 726	2636 653	91 91
Junior Mixed ... ..	8 C. 4 N.P.	3452 889	3107 769	90 87
Infants (216 under 5) ... ..	16 C. 3 N.P.	4237 436	3663 362	86 85
Schools—				
Church of England ... ..	13	4189	3713	89
Roman Catholic ... ..	2			
Council ... ..	30	22894	20676	90
TOTAL ... ..	45	27083	24389	90

"C."—Council.

"N.P."—Non-Provided.

School closure has been proved in urban districts to have no influence on the spread of an epidemic. It is definitely disadvantageous in as much as a valuable means of keeping a close watch on the children is lost.

### **Medical Inspection in Schools.**

Some rearrangement of duties has been carried out, as the assistant medical officer who left at the end of 1931, and who spent 9/11ths of his time on school work, was not replaced. The deputy medical officer, Dr. Watson, relinquished some of his other work and devoted 5/11ths of his time to medical inspections; Dr. Falk devoted 2/11ths; Dr. Jenkin-Lloyd 3/11ths; Dr. O'Connell 7/11ths; whilst Dr. Draper acted as part-time medical officer for half the year, devoting 4 sessions a week to school medical inspections. Dr. O'Connell, however, left in September, and his successor did not commence his duties until the end of November.

The groups examined have been entrants, usually aged 5-7 years; intermediates 8 years; and leavers 12-14 years. These are the three statutory groups. Examinations of children outside these groups are classified as "others." Children brought forward by head teachers, attendance officers, school nurses, etc., are classified as "specials."

Table II. gives a summary of the number of children examined in the various classes in the different schools together with the parental attendance at the examinations. A total of 8,936 children were examined as compared with 8,532 in 1932, and 5,729 parents attended the examinations. The percentage attendance of parents in the entrants group was for boys 75 per cent., and girls 79 per cent.; in the intermediate group, boys 65 per cent., girls 71 per cent.; and in the leavers group, boys 37 per cent., girls 60 per cent.

As would be expected the percentage of parents attending is lowest in the leaver group, though this is unfortunate, for at this examination the medical officer can give the parent advice as to suitable future employment. With the present lack of continuity between the school medical services and the medical examination of young persons under the Factory Acts, advice given at the school leaving examinations assumes some degree of importance. The gap which also exists at present between the school leaving age of 14, and the adolescent coming under National Health Insurance Act at 16, is an unfortunate one. This period of life is one which may have an important bearing upon subsequent health both physical and mental.

The increase in the number of routine medical inspections was achieved by a reduction in the number of special treatment and inspection clinics.

TABLE II

Name of School.	Entrants 5 to 6 years of age.				Intermediates. 8 to 9 years of age.				Leavers.				Other Ages.			
	Number Examined		Parents present.		Number Examined		Parents present.		Number Examined		Parents present		Number Examined		Parents present.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1 Ashburton ...	13	35	20	35	52	26	36	21	42	23	17	18	...	...	...	...
2 Beulah ...	71	97	60	79	93	104	47	76	...	...	...	...	55	44	31	34
3 British ...	...	...	...	...	...	...	...	...	169	97	55	60	...	...	...	...
4 Davidson ...	37	39	29	34	37	44	27	29	57	67	18	37	...	6	...	3
5 Ecclesbourne ...	39	35	32	29	56	50	38	26	...	127	...	62	...	...	...	...
6 Elmwood ...	77	53	49	34	80	13	32	6	113	67	33	33	...	...	...	...
7 Gonville ...	29	34	27	33	42	40	29	37	...	...	...	...	...	...	...	...
8 Howard ...	22	20	13	18	15	21	14	14	...	...	...	...	...	...	...	...
9 Ingram ...	32	28	25	22	28	100	20	85	120	120	67	79	23	19	11	13
10 Kensington ...	31	34	20	21	35	36	26	32	...	...	...	...	...	...	...	...
11 Kingsley ...	130	143	105	119	95	63	46	52	94	64	25	24	7	11	7	8
12 Lanfranc ...	...	...	...	...	...	...	...	...	124	125	29	82	5	5	...	2
13 Norbury Manor	21	14	2	12	109	88	91	76	136	100	44	69	9	11	3	7
14 Oval ...	50	38	47	33	57	35	45	30	54	51	34	39	1	...	1	...
15 Portland ...	45	30	30	27	47	55	39	50	125	88	22	40	...	...	...	...
16 Purley Oaks ...	29	18	20	11	23	22	11	13	82	48	18	16	...	...	...	...
17 Rockmount ...	31	17	16	12	17	15	12	9	34	26	3	18	...	...	...	...
18 South Norwood	55	40	36	27	37	55	22	36	...	1	...	1	6	6	6	3
19 Sydenham ...	32	25	26	16	38	6	24	2	...	...	...	...	10	...	4	...
20 Tavistock ...	36	29	24	14	28	29	16	18	101	120	40	61	...	...	...	...
21 Waddon ...	100	82	78	60	80	65	52	31	99	100	63	78	...	...	...	...
22 West Thornton	84	89	55	67	80	119	49	70	...	...	...	...	...	2	...	2
23 Whitehorse M'r	65	59	51	45	41	50	25	33	92	...	47	...	...	29	...	16
24 Winterbourne	90	75	79	57	96	41	87	34	...	3	...	3	11	27	11	24
25 Woodside ...	71	66	37	33	84	37	54	19	...	23	...	23	5	...	4	...
26 Addington ...	...	2	...	2	6	1	1	1	...	...	...	...	...	...	...	...
27 All Saints' ...	31	51	27	43	31	19	26	16	34	24	18	18	...	...	...	...
28 Arch. Tenison's	...	...	...	...	...	...	...	...	...	46	...	33	...	...	...	...
29 Christ Church	42	39	31	38	24	28	...	11	...	...	...	...	...	...	...	...
30 Holy Trinity	...	60	...	53	...	36	...	15	...	...	...	...	...	3	...	2
31 Parish Church	44	40	34	41	37	28	29	28	37	...	29	...	...	4	...	2
32 St. Andrew's	12	19	8	16	23	...	11	...	...	3	...	...	...	...	...	...
33 St. Joseph's ...	2	1	2	1	8	9	6	7	3	7	...	5	6	10	2	7
34 St. Mark's ...	9	10	8	24	1	14	1	9	...	...	...	...	...	...	...	...
35 St. Mary's ...	8	16	8	12	13	7	5	2	4	17	...	5	...	...	...	...
36 St. Peter's ...	31	26	26	21	20	17	17	11	...	...	...	...	...	...	...	...
37 St. Saviour's ...	42	70	31	41	46	35	16	22	...	...	...	...	...	...	...	...
38 Shirley ...	27	20	21	15	38	36	30	33	...	...	...	...	...	...	...	...
	1438	1455	1077	1145	1517	1344	984	954	1520	1347	562	804	138	177	80	123
	2893		2222		2861		1938		2867		1366		315		203	

## PERCENTAGE OF PARENTS PRESENT AT MEDICAL INSPECTIONS.

Entrants ..	...	Boys	74.9	} 76.8	} 64.1
" ..	...	Girls	78.7		
Intermediate	...	Boys	64.9	} 67.7	
" ..	...	Girls	71.0		
Leavers ...	...	Boys	37.0	} 47.6	
" ..	...	Girls	59.7		
Other Ages	...	Boys	58.0	} 64.4	
" ..	...	Girls	69.5		

## FINDINGS AT ROUTINE MEDICAL INSPECTIONS

### Uncleanliness.

Frequent special inspections are made by the school nurses in the schools.

For these uncleanliness surveys the health visitors made 473 visits to schools. At the primary inspections they found vermin in 229, and nits alone in 2,187 children. On these inspections, 3.6 per cent. of the children showed evidence of infestation as against 4.0 in 1932 and 4.3 in 1931. In connection with these findings it must be stated that as children in unsatisfactory families are subject to repeated examinations, they naturally raise the total percentage found unclean. The figures are an improvement upon the 1932 findings.

### Clothing and Footgear.

At routine medical inspections 98.9 per cent. of the boys and 99.1% girls were clothed and shod properly. Close scrutiny has been exerted by the medical inspectors and the findings are satisfactory. The findings are the same as for 1932.

### Nutrition.

In the entrants 13.8 per cent. of the boys and 9.5 per cent. of the girls were below normal nutrition for the area. In the intermediate group 15.5 per cent. of the boys and 18.3 per cent. of the girls were under average; in the leavers group 13.0 per cent. boys and 16.4 per cent. girls, giving in the whole school groups examined 14.6 per cent. boys and 15.3 girls.

The figures are higher than in 1932. These figures, especially those relating to the entrant group, which show the highest increase in subnormal nutrition, appear to point to the effects of prolonged unemployment among the parents. These findings should be taken in conjunction with the more elaborate analysis contained in Table III.

The subject of child nutrition is a complex one and is dependent on many and diverse factors. Efficient mother-care is the dominant influence. This means a sensible realisation of the child as a growing, active being, who, although needing protection, will not benefit by coddling, and whose thoughts should be directed towards health and not ill-health.

Malnutrition may be due to improper food, although the total amount taken is adequate. Proteins and fats are expensive, carbohydrates relatively cheap. In times of financial stringency the cheapest foods must be bought, and thus children obtain an undue proportion of carbohydrate food and too little protein and fat. Milk is undoubtedly the most valuable food to make good the protein and fat deficiency, though the milk must be above bacteriological suspicion. If every child attending the Elementary Schools could be given one pint of milk per day in school, the benefit would amply repay any cost on the public funds.

During 1933, with very few exceptions, the scheme of the National Milk Publicity Council which commenced in September, 1929, was continued in the schools. In 1933 some 5,000 bottles of milk per day were supplied. This is a drop of 2,000 bottles per day on 1932.

This scheme has one grave defect inasmuch as, owing to financial reasons, children who would benefit most do not get the milk. This probably accounts for the drop in the number of bottles of milk supplied. A number of these, however, are dealt with direct by recommendations from the school medical officers and so come under another scheme by which milk, up to 1 pint, and malt and oil, are given at graduated prices, or free, to malnourished children. Through the co-operation of the teachers this extra nourishment is given at school so that the child is sure of a regular supply. Severe malnutrition in childhood leaves an indelible mark on physique. Childhood is the great growing period. Nutrition is a subject of fundamental importance and should always be of concern to parents, doctors and teachers. Much of the widespread ignorance among parents on economical and efficient catering would be dispelled in a future generation if every girl and boy was soundly grounded in the subject of food values and the science and art of cooking before leaving school. It cannot be repeated too often that unsuitable, badly chosen food may cause as much malnutrition as too little food. The science of buying wisely is one which deserves acknowledgment in educational curricula.

### **Heights and Weights.**

Table III. gives the results of an enquiry made to ascertain the average heights and weights of all children examined at routine inspection of 1933. The full value of this table will not be obtained until similar records for ten consecutive years have been analysed; when this is completed the rate of growth can be followed, so far as Croydon children are concerned, throughout school life.



TABLE III.  
HEIGHTS AND WEIGHTS.

Year of Birth.	BOYS.							GIRLS.						
	Number Examined	Average Height in inches.	Average Weight in lbs.	Average maximum Height in inches.	Average maximum Weight in lbs.	Average minimum Height in inches.	Average minimum Weight in lbs.	Number Examined.	Average Height in inches.	Average Weight in lbs.	Average maximum Height in inches.	Average maximum Weight in lbs.	Average minimum Height in inches.	Average minimum Weight in lbs.
1929	24	41.2	39.1	42.6	41.4	40.9	37.9	40	40.6	38.6	42.0	39.6	38.9	35.4
1928	734	41.7	41.3	46.6	50.9	40.7	34.3	769	41.2	39.7	46.4	48.7	38.8	32.4
1927	519	44.1	43.5	47.3	52.3	40.5	36.4	504	43.7	42.3	44.2	50.7	39.8	35.5
1926	150	45.8	47.5	48.2	53.7	44.1	42.3	173	45.6	45.9	48.6	53.6	43.4	39.5
1925	1109	48.6	53.7	53.1	61.1	44.1	42.6	985	49.1	51.3	53.1	69.2	43.4	40.2
1924	336	50.2	57.3	54.1	68.0	47.6	50.8	346	49.8	56.1	53.0	65.4	46.5	46.5
1923	97	52.4	63.7	54.8	74.1	50.1	55.9	91	52.1	60.4	54.5	69.7	49.4	54.3
1922	93	54.7	72.0	56.0	78.6	53.2	69.0	63	54.6	69.1	56.6	78.9	52.8	62.3
1921	901	56.2	76.8	62.1	104.5	51.4	59.1	771	57.1	81.3	63.7	110.5	52.1	56.2
1920	489	57.5	81.6	62.5	109.5	51.6	63.9	452	58.5	85.6	64.0	115.6	53.1	63.3
1919	89	58.3	88.7	63.9	112.2	56.2	79.0	61	59.5	90.3	61.0	96.5	56.0	74.9

*Children Born in 1928.*—The boys are 0.5 inches taller and 1.6 lbs. heavier on the average than the girls. The average minimum weight of the boys is 1.9 lbs. more and their average minimum height 1.9 inches taller than the corresponding figures for the girls. The average maximum weight of the boys is 2.2 lbs. more and their average maximum height 0.2 inches taller than for the girls.

*Children Born in 1927.*—The boys are 0.4 inches taller and 1.2 lbs. heavier on the average than the girls. The average minimum weight of the boys is 0.9 lbs. more and their average minimum height 0.7 inches taller than the corresponding figures for the girls. The average maximum weight of the boys is 1.6 lbs. more and their average maximum height 3.1 inches taller than for the girls.

*Children Born in 1925.*—The boys are 0.5 inches shorter and 2.4 lbs. heavier on the average than the girls. The average minimum weight of the boys is 2.4 lbs. more and their average minimum height 0.7 inches taller than the corresponding figures for the girls. The average maximum weight of the boys is 2.6 lbs. more than the girls and their average maximum height is the same as for the girls.

*Children Born in 1921.*—The boys in this group were 0.9 inches shorter and 4.5 lbs. lighter on the average than the girls. The average minimum weight of the boys is 2.9 lbs. greater and their average minimum height 0.7 ins. shorter than the girls. The average maximum weight of the boys is 6.0 lbs. lighter and their average maximum height 1.6 ins. shorter than for the girls. In this group as a whole the boys are shorter and lighter than the girls, but the former are a more uniform group: the girls exhibiting greater fluctuations around the mean average.

The average minima of heights and weights are taken by selecting the shortest and lightest scholar in any particular group for each school and taking the average of the figures so obtained. The average maxima heights and weights are also obtained in the same way.

The figures again show that the period of most rapid growth in stature is earlier in boys than in girls, the latter grow most rapidly and put on most weight during the last years of school life; boys, on the contrary, appear to grow most rapidly between 8 and 12 years of age.

During the period of growth from 5 years to 8 years the boys gained on the average 12.4 lbs. in weight and 6.9 inches in height. The girls gained 11.6 lbs. in weight and 7.9 inches in height. From 8 years to 12 years the corresponding gains are 23.1 lbs. for boys and 30.0 lbs. for girls; 7.6 inches for boys and 8.0 inches for girls.

During the period of growth from 5 years until the end of the 12th year the boys increased by 14.5 inches in height and 35.5 lbs. in weight; the girls increased 15.9 inches in height and 41.6 lbs. in weight.

### **Heart and Circulatory System.**

At routine medical inspections among the entrant group 12 boys and 9 girls were found to have organic disease. In the Intermediate group, the figures were 29 boys and 15 girls and in the Leaver group 23 boys and 28 girls. Functional disease was found in 61 boys and 35 girls in the Entrants; 22 boys and 39 girls in the Intermediate; 23 boys and 56 girls in the Leaver group. Anæmia was present in 99 boys and 53 girls in the Entrant group; 32 boys and 27 girls in the Intermediate, and 41 boys and 66 girls in the Leavers.

The percentage of all Heart and Circulatory defects among children examined at routine medical inspection was 7.7.

### **Chest Complaints (Other than Tuberculosis).**

In all the groups combined 3.6 per cent. of the boys and 3.5 per cent. of the girls had some minor affection of the lungs. This was usually a mild Bronchitis.

### **Tuberculosis.**

Twenty-three children were referred to the Tuberculosis Officer for further examination. No case was diagnosed as definitely tuberculous on further examination.

All contacts of known cases of Tuberculosis are kept under supervision and re-examined at each school medical inspection. 68 children were under such surveillance at the beginning of the year, 97 were added during the year, 38 were discharged, leaving 127 under observation at the end of the year.

Five cases of pulmonary Tuberculosis and 11 cases of non-pulmonary Tuberculosis in children of school age were notified to the Medical Officer of Health during the year. One child died of pulmonary Tuberculosis and 5 of non-pulmonary Tuberculosis. The ages at death of these cases were: Pulmonary, 13 years; Non-Pulmonary, 5 (two), 6, 8 and 11 years. The 5 Non-Pulmonary deaths were certified to be due to Tuberculous Meningitis.

Taking the total school population as 27,083 the mortality rate from Pulmonary Tuberculosis in school children was 4 per 100,000, and the incidence rate 18 per 100,000. For Non-pulmonary Tuberculosis the respective figures were 7 and 40.

### Nose and Throat.

In all the groups 587 boys and 596 girls had enlarged tonsils; 66 boys and 48 girls had adenoids only; 297 boys and 337 girls had adenoids and enlarged tonsils; 53 boys and 28 girls were mouth breathers; 666 boys and 578 girls exhibited enlarged glands in the neck.

Taking the two groups of cases of adenoids, and enlarged tonsils with adenoids as requiring operative measures, it is seen that 8.6 per cent. of all school children examined in the three groups were in need of surgical attention to the throat and nose. In 1932, dealing with another group of children, the figure was also 8.6 per cent. The importance of training in correct methods of breathing after the removal of adenoids and tonsils cannot be too strongly emphasised. All cases are invited to attend Breathing Exercises Classes held at St. Andrew's Hall and 216 attendances were made.

Of all children examined at Routine Medical Inspection, in the Entrant group 18.1% had enlarged tonsils; 1.8% had adenoids alone; 11.7% enlarged tonsils and adenoids, and 21.3% had enlargement of the submaxillary or cervical glands. In the Intermediate group the respective percentages were 12.5%, 1.2%, 6.0% and 12.7%; and in the Leaver group, 8.7%, 0.7%, 3.0% and 7.8%. The percentages for the three groups, in relation to the total number of children examined, were 13.1%, 1.2%, 7.3% and 14.0%.

Table IV. gives in summary the percentage of Nose and Throat defects and of enlarged glands in the various groups examined.

**TABLE IV.**  
SUMMARY.

Group.	*Nose and Throat Defects.		Enlarged Glands.	
	Boys.	Girls.	Boys.	Girls.
Entrants ... ..	83.2	33.0	22.5	20.1
Intermediates .. ..	20.4	22.2	12.1	13.4
Leavers ... ..	12.7	17.7	9.1	6.4
Other Ages ... ..	25.4	20.3	14.5	11.3

\*Does not include mouth breathers, but includes other defects of nose and throat.

### **Defective Hearing.**

The commonest causes of deafness in children are middle ear disease and adenoids. Routine medical inspection showed that 0.4% entrants, 0.4% intermediates and 0.5% leavers in the children examined had defective hearing.

### **Speech Defects.**

There are no special classes for stammerers in the Croydon Educational Scheme. Routine medical inspection findings showed in the Entrant group 0.9% children defective, in the Intermediate group 0.6% and 0.2% in the Leaver group.

### **Skin Diseases.**

The findings show only the incidence in the groups examined at a specific examination and must not be taken to indicate the total incidence of skin disease in school children. Entrants gave 3.5 per cent. incidence in boys and 2.1 per cent. in girls; Intermediate boys 1.8 per cent. and girls 2.3 per cent.; Leavers 2.9 per cent. boys and 1.4 per cent. girls; a total in all groups of 2.8 per cent. boys and 1.9 per cent. girls.

### **Deformities.**

Among children examined at Routine Medical Inspection 0.7 per cent. of the boys and 0.5 per cent. of the girls showed evidences of rickets; 3.0 per cent. boys and 4.3 per cent. girls had some abnormal degree of spinal curvature, and 4.2 per cent. boys and 4.0 per cent. girls showed some other physical deformity.

### **External Eye Diseases.**

Squint was present in 1.2 per cent. of all children examined in the various groups and was most frequently found in the Entrant group (1.4 per cent. boys and 2.1 per cent. girls). Its incidence declined as age advanced. Blepharitis occurred in 1.5 per cent. of all the children, being most prevalent in the Intermediate group (1.7% boys and 1.7% girls); Conjunctivitis was present in 0.2 per cent. of all the children, and other external eye defects were noted in 0.4 per cent.

The total percentages of eye defects in the various groups was 3.7 for Entrants; 3.5 for Intermediates; and 2.7 for Leavers. For 1932 the corresponding figures were 2.8, 2.7 and 1.5.

### Vision.

The Entrant group is not examined for visual acuity at routine medical inspection. If a child is wearing corrective glasses, the vision is tested with the glasses worn at the time of examination.

In the Intermediate group 4.3 per cent. of the boys and 5.2 per cent. of the girls were referred for treatment or observation for defective vision, and in the Leaver group 7.5 per cent. of the boys and 8.2 per cent. of the girls. The Leaver group of girls invariably gives the worst figures for vision.

TABLE V.

Extent of Defect.	Intermediates.				Leavers.				Total.	
	Boys.		Girls.		Boys.		Girls.		Boys.	Girls.
	No.	%	No.	%	No.	%	No.	%	%	%
Normal 6/6ths. o. 6/9ths.	R 1457	96.0	1279	95.2	1420	93.4	1249	92.7	94.4	93.9
	L 1462	96.4	1284	95.5	1426	93.8	1242	92.2	95.1	93.9
' /12ths or 6/24ths	R 54	3.6	59	4.4	90	5.9	92	6.8	4.1	5.6
	L 50	3.3	52	3.9	82	5.4	94	7.0	4.3	5.4
6/36ths. or worse	R 6	0.4	6	0.4	10	0.7	6	0.5	0.5	0.5
	L 5	0.3	8	0.6	12	0.8	11	0.8	0.6	0.7

TABLE VI.

### TEETH.

	Entrants.				Intermediates.				Leavers.			
	Boys.		Girls.		Boys.		Girls.		Boys.		Girls.	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Perfect set of Teeth...	499	34.7	519	35.7	654	43.1	542	40.3	939	61.8	823	61.1
One to four decayed	541	37.6	576	39.6	644	42.5	576	42.9	512	33.7	458	34.0
Four or more decayed	398	27.7	360	24.7	219	24.4	226	16.8	69	4.5	66	4.9
Total	1438		1455		1517		1344		1520		1347	

It is interesting to note that 3,976 children of all groups, or 44.5 per cent., were found to have sound teeth at medical inspection. The percentage of sound teeth found by the Dental Inspectors was 32.3 per cent. The need for systematic instruction on the care of the teeth is certainly indicated.

The figures indicate that some 35 per cent. of children entering school have perfect sets of teeth. This is a low percentage and is the outcome of the relative neglect of the teeth during pre-school age. The importance of this period cannot be too strongly emphasised. The school medical service, in this regard, as in others of a similar character, is a receiver of damaged goods. With a proper system of inspection and treatment of the pre-school child much avoidable ill-health and physical defect in young school children would be abolished.

The proper care of the teeth before school age is reached would lead to much less attention being necessary during school age. The Leaver group gave the best findings, a result brought about by the work of the School Dental Service.

TABLE VII.  
SUMMARY OF THE FINDINGS AT ROUTINE  
EXAMINATIONS.  
(Percentages.)

Condition	Entrants.		Inter-mediate.		Leavers.		Other Ages		All Groups	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Cleanliness— (Percentage clean)										
Head ... ..	99.8	98.1	99.3	98.4	99.5	98.2	97.1	98.9	99.5	98.7
Body ... ..	99.4	99.7	99.3	99.8	99.3	99.7	97.1	99.4	99.3	99.7
Clothing (satisfactory) ..	99.6	99.0	97.8	99.1	99.3	99.2	97.8	98.3	98.9	99.1
Footgear do. ... ..	99.7	99.1	97.8	99.1	99.0	99.3	97.1	98.3	98.8	99.1
Nutrition (normal) ... ..	86.2	90.5	84.5	81.7	87.0	83.6	67.4	68.4	85.4	84.7
Defects—										
Circulatory System ... ..	12.0	6.6	5.5	6.0	5.7	11.1	5.8	6.8	7.6	7.9
Pulmonary System (defects not T. B.) ... ..	5.4	5.7	3.7	3.4	1.9	1.3	2.2	2.3	3.6	3.5
Skin Disease ... ..	3.5	2.1	1.8	2.3	2.9	1.4	1.4	2.8	2.7	2.0
Defects of Nose and Throat	33.9	33.6	22.0	23.1	13.6	17.9	29.0	22.0	23.2	25.0
Enlarged Cervical Glands	22.5	20.1	12.1	13.4	9.1	6.4	14.5	11.3	14.4	13.4
External Eye Disease ... ..	1.8	2.1	2.0	2.7	2.8	1.3	1.4	1.7	2.2	2.0
Defective Vision ... ..	...	...	4.3	5.2	7.6	8.2	7.2	5.1	6.0	6.6
Defective Hearing ... ..	0.3	0.4	0.5	0.4	0.6	0.4	2.2	1.7	0.5	0.5
Speech Defects ... ..	1.0	0.7	0.9	0.3	0.3	0.1	1.4	1.1	0.7	0.4
Dental Disease (more than four decayed) ... ..	27.7	24.7	14.4	16.8	4.5	4.9	8.7	15.8	15.1	15.7
Dull and Backward ... ..	0.6	0.3	1.0	1.1	0.9	0.8	5.1	2.8	1.0	0.8

The above Table gives in a concise form the results of findings at Routine Medical Inspections.

Defects of the nose and throat are once again the commonest defects found, though there is a slight drop on last year's findings. The Entrant group is the worst and the Leaver the best. Under-nutrition is found in about 15 per cent. of all children examined.

Girls showed a slightly higher proportion of under-nutrition than boys, the worst groups being the Intermediate girls and the Leaver girls groups. The findings for Dental Defects are what might be expected in view of the present lack of systematic supervision of children of pre-school age, the Entrant group being by far the worst. Enlarged cervical glands, which have a relation both to dental defects and to under-nutrition, were commonest in the Entrant group, and were more often found in boys than girls. Defective vision increased as age increased and the effect of scholastic routine, together with the strain of bodily growth, must be held to be the main cause of this finding. As children who are wearing spectacles which correct vision are included as having normal vision, the wearing of spectacles masks the actual amount of defective vision. Vision is more defective in the Secondary Schools than in the Public Elementary.

The following Table was compiled from the findings at routine medical inspections, in order to ascertain the amount of visual defect in the particular children examined in the various schools. It relates only to children who were referred from routine medical inspections for treatment or observation and who were consequently thought to be in need of spectacles.

TABLE VIII.

School.	Inter-mediates.		Leavers.		School.	Inter-mediates.		Leavers.	
	Boys	Girls	Boys	Girls		Boys	Girls	Boys	Girls
Ashburton ...	3.8	3.9	11.9	17.4	Whitehorse Manor	4.9	8.0	7.6	...
Beulah ...	2.2	5.9	...	...	Winterbourne ..	2.1	9.8	...	...
British ...	...	...	7.7	9.3	Woodside ..	8.3	2.7	...	...
Davidson ...	5.4	11.4	7.0	4.5	Addington ...	16.6	—	...	...
Ecclesbourne ...	3.6	2.0	...	3.9	All Saints' ...	—	—	5.9	4.2
Elmwood ...	6.2	7.7	4.4	4.5	Arch. Tenison's..	...	...	...	17.4
Gonville ...	2.4	2.5	...	...	Christ Church ..	2.5	2.8	...	...
Howard ...	—	9.5	...	...	Holy Trinity ...	...	5.6	...	...
Ingram ...	3.6	5.0	8.3	9.2	Parish Church ...	—	—	5.4	...
Ken-ington ...	8.6	2.8	...	...	St. Andrew's ...	4.3	...	...	...
Kingsley ...	5.3	4.8	9.6	14.1	St. Joseph's ...	—	11.1	—	14.3
Lanfranc ...	...	...	9.7	8.0	St. Mark's ...	—	7.1	...	...
Norbury Manor .	0.9	4.5	3.7	3.0	St. Mary's ...	—	—	50.0	5.9
Oval ...	10.5	11.4	3.7	3.9	St. Peter's ...	5.0	23.5	...	...
Portland ...	8.5	1.8	13.6	9.1	St. Saviour's ..	2.2	2.9	...	...
Purley Oaks ...	4.3	4.5	11.0	18.8	Shirley ...	...	—	...	...
Rockmount ...	5.9	6.7	5.9	3.8					
South Norwood...	8.1	5.5	...	...					
Sydenham ...	2.6	—	...	...					
Tavistock ..	3.6	3.4	6.9	12.5					
Waddon ...	1.2	—	2.0	6.0					
West Thornton ...	2.5	2.5	...	...					

NOTE.—Where a dash is placed, children were examined, but no visual defects were found. The figures for the St. Mary's School may appear unduly high. This is due to the fact that out of four Leavers examined, two had defective vision.



TABLE IX.

## Return of Defects Found in the Course of Medical Inspection 1933.

Defects	Boys.			Girls.		
	No. requiring Treatment.	No. referred for Observation.	Percentage of total Examined	No. requiring Treatment.	No. referred for Observation.	Percentage of total Examined.
Malnutrition ... ..	14	22	0.78	18	19	0.86
UNCLEANLINESS—						
Head ... ..	1	1	0.04	1	—	0.02
Body ... ..						
SKIN DISEASE ... ..	5	1	0.13	2	—	0.05
EYE DISEASES—						
Defective Vision ... ..	186	8	4.21	178	16	4.49
Squint ... ..	14	2	0.35	25	5	0.69
External Eye Trouble... ..	5	4	0.20	3	1	0.09
EAR DISEASES—						
Deafness ... ..	3	3	0.13	1	2	0.07
Otitis Media ... ..	7	6	0.28	5	6	0.25
Other Diseases ... ..	2	2	0.09	—	—	—
NOSE AND THROAT—						
Enlarged Tonsils only ... ..	53	107	3.47	65	120	4.23
Adenoids only ... ..	36	15	1.11	20	10	0.69
Enlarged Tonsils & Adenoids ... ..	160	32	4.16	173	36	4.83
Other Conditions ... ..	19	7	0.56	8	9	0.39
Enlarged Cervical Glands (not T.B.)... ..	1	14	0.32	—	17	0.39
DENTAL DEFECTS ... ..	71	3	1.60	56	3	1.36
SPEECH DEFECTS ... ..	3	2	0.11	1	4	0.12
HEART AND CIRCULATION—						
Organic... ..	6	46	1.13	3	45	1.11
Functional ... ..	—	48	1.04	—	54	1.25
Anæmia ... ..	6	16	0.48	2	13	0.35
BRONCHITIS ... ..	6	21	0.59	6	10	0.37
OTHER NON-T.B. ... ..	2	2	0.09	1	3	0.09
PULMONARY TUBERCULOSIS ... ..	1	2	0.06	2	7	0.21
OTHER TUBERCULOSIS... ..	—	2	0.04	—	1	0.02
NERVOUS SYSTEM DISORDERS (including Epilepsy, Chorea, etc.) ... ..	—	9	0.20	1	20	0.49
DEFORMITIES—						
Rickets ... ..	—	1	0.02	3	2	0.12
Spinal Curvature ... ..	42	18	1.30	65	49	2.64
Others ... ..	63	18	1.76	50	8	1.34
OTHER DEFECTS AND DISEASES	16	25	0.89	13	16	0.67
<b>Total</b> ... ..	<b>722</b>	<b>437</b>	<b>25.12</b>	<b>702</b>	<b>476</b>	<b>27.25</b>
<b>Total Children Examined</b> ... ..	<b>4613</b>			<b>4323</b>		

TABLE X.  
 CHILDREN EXAMINED AT ROUTINE INSPECTIONS AND  
 FOUND TO REQUIRE TREATMENT (EXCLUDING  
 UNCLEANLINESS AND DENTAL DEFECTS).

Group.	No. of Children Inspected	No. referred for treatment.	Percentage referred for treatment	Corres- ponding percent- age for 1932.
Entrants ... ..	2893	343	11.9	11.9
Intermediates ... ..	2861	339	11.8	15.2
Leavers ... ..	2867	484	16.9	15.7
Other Ages ... ..	315	47	14.9	10.3
	8936	1213	13.6	14.0

The fact that 11.9 per cent. of the children examined shortly after entering school at 5 years of age required treatment of some kind is an adverse commentary upon the lack of any system of medical and dental supervision of the pre-school child. To leave medical and dental supervision in the hands of parents has been proved repeatedly to be insufficient. Besides, the parent cannot be expected to recognise those early departures from health which, if dealt with promptly, are easily put right. When a noticeable breakdown happens, the child is taken to a doctor, who endeavours to remedy a condition which should never have occurred. In other cases the study of cumulative departure from normal is so insidious that irreparable consequences have supervened before the parent takes any steps. Initial slight defects, if unremedied, often lead to further defects as the child grows.

TABLE XI.  
CHIEF CAUSES OF EXCLUSIONS FROM SCHOOL.

Condition.	Exclusions during 1933.	Percentage of total exclusions	Exclusions during 1932.	Percentage of total exclusions.
Ringworm—Head ... ..	11	0.26	11	0.24
"    Body ... ..	23	0.54	35	0.75
Verminous Conditions ... ..	542	12.71	448	9.55
Impetigo ... ..	230	5.39	306	6.52
Scabies ... ..	49	1.15	44	0.94
Scarlet Fever... ..	282	6.61	227	4.84
Measles ... ..	1215	28.49	1679	35.80
Diphtheria ... ..	115	2.70	62	1.32
Whooping Cough ... ..	404	9.47	575	12.26
Chicken Pox ... ..	870	20.40	550	11.73
Mumps ... ..	66	1.55	49	1.05
Tuberculosis (all forms) ... ..	37	0.87	43	0.91
External Eye Disease ... ..	14	0.33	33	0.70
Sore Throat ... ..	203	4.76	209	4.46
Other Causes ... ..	204	4.78	419	8.93
	4265	...	4690	...

There were 425 less children excluded from school on account of various illnesses than in 1932.

The chief causes of exclusion were Infectious Diseases, 69.0 per cent. Exclusions on account of verminous conditions were higher than in 1932 or 1931, and constituted 12.71 per cent. of the total exclusions.

The health visitors examined 66,758 children in the schools in connection with the personal cleanliness of the scholars. Impetigo was less prevalent than in 1932.

#### CAUSES OF DEATH IN CHILDREN OF SCHOOL AGE.

Taking the school population as 28,241, the death-rate per 1,000 in school children was 2.3. There were two deaths from Measles, compared with one death in 1932.

There were 65 deaths in children of school age; those caused by Infectious Diseases, 9; Pneumonia, 6; Tuberculosis, 6; Disease of the Digestive System, 4; other causes, 40. In the Infectious Diseases group the causes were Diphtheria 7 and Measles 2. Among "other causes" of death were violent deaths (accidents), 7; organic heart disease, 10; and appendicitis and peritonitis, 7.

## INFECTIOUS DISEASE

Notifiable infectious diseases in schools, and also cases of other than statutorily notifiable diseases, brought to the notice of the department by Head Teachers and School Attendance Officers.

TABLE XII.

Name of School.	School population.	Notifiable Diseases.			Conditions notified by Teachers and School Attendance Officers.											Percentage incidence of Infectious Diseases in Schools.	
		Scarlet Fever	Diphtheria.	Ac. Primary Pneumonia.	Measles.	Whooping Cough.	Chicken Pox.	Mumps.	Scabies.	Impetigo.	Sore Throats.	Ringworm (body).	Ringworm (scalp).	Indefinite Sickness.	Ill. Not Infectious.		Conjunctivitis
Ashburton ...	859	7	...	1	110	2	2	1	...	2	...	...	3	7	...	14.3	
Beulah ...	1241	25	9	...	20	49	25	2	4	22	7	...	26	15	1	10.5	
Croydon British...	536	1	...	...	3	...	1	...	1	1	6	...	5	5	...	0.9	
Davidson ...	776	35	3	...	5	1	94	1	3	9	17	...	25	21	1	17.9	
Ecclesbourne ...	1017	7	4	...	39	48	11	...	8	14	2	...	11	7	...	10.7	
Elmwood ...	1144	26	4	...	24	7	31	1	4	12	3	4	...	7	15	...	8.1
Gonville ...	373	4	...	...	25	4	16	...	...	...	...	...	5	3	...	13.1	
Howard ...	396	5	...	...	...	...	2	1	...	2	2	...	4	3	...	2.0	
I-gram ...	902	13	4	2	11	6	15	4	2	8	13	...	8	11	...	6.1	
Kensington Av ...	377	4	...	...	39	2	2	...	...	2	...	...	1	7	...	12.5	
Kingsley ...	1674	14	10	...	12	20	24	4	3	25	50	1	1	9	33	...	5.0
Lanfranc ...	663	1	1	...	2	...	1	...	...	1	5	...	3	7	...	0.7	
Norbury Manor	1106	7	2	...	1	6	29	...	...	5	...	1	...	3	...	4.1	
Oval ...	711	9	18	2	62	3	12	2	...	6	36	3	...	2	17	3	15.2
Portland ...	961	7	6	...	54	7	9	2	1	12	8	...	1	5	12	...	8.9
Parley Oaks ...	513	10	1	...	1	7	4	3	1	8	5	...	3	4	...	5.1	
Rockmount ...	576	6	...	...	9	18	78	1	...	...	...	...	3	10	...	19.4	
South Norwood	882	6	9	...	32	2	6	...	1	...	2	...	2	6	...	6.2	
Sydenham ...	738	6	2	...	58	28	10	2	2	6	5	3	...	4	25	1	14.3
Tavistock ...	855	7	2	...	33	3	5	...	3	6	7	1	...	2	20	...	5.8
Waddon ...	1523	7	12	...	45	17	6	3	4	27	4	3	1	3	63	...	5.9
West Thornton ...	957	8	6	...	78	16	26	3	...	8	15	...	27	10	...	14.3	
Whitehorse Manor	933	5	2	...	107	24	10	1	2	8	...	1	1	8	24	2	16.0
Winterbourne ...	1129	10	1	...	115	8	181	1	1	3	...	...	3	20	2	28.0	
Woodside ...	919	9	2	...	157	16	109	7	1	7	...	...	1	10	10	2	32.6
Heath Clark ...	420	3	...	...	3	...	4	2	...	2	...	...	...	1	2	...	2.9
John Ruskin ...	389	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lady Edridge ...	324	...	2	...	...	1	...	...	...	...	...	...	...	...	1	...	0.9
St. Christopher's	108	...	2	1	...	...	1	...	1	8	1	1	...	4	...	3.7	
St. Giles ...	75	1	2	...	...	...	1	...	...	...	...	...	...	3	...	5.3	
Myopic Class ...	20	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	5.0
Addington																	
St. Mary's	42	...	...	...	...	...	8	...	...	...	2	...	2	2	...	19.0	
All Saints' ...	372	2	...	...	43	54	1	1	1	...	...	1	2	3	18	...	27.1
Arch. Tenison's ...	400	3	1	...	2	...	...	...	...	1	...	1	...	...	...	...	1.5
Christ Church ...	461	2	2	...	7	9	29	1	2	3	4	...	2	7	...	10.9	
Holy Trinity ...	268	4	...	...	19	15	5	1	...	1	...	1	...	2	8	...	16.4
Parish Church ...	538	7	2	...	31	2	7	...	1	...	2	1	...	6	12	...	9.1
St. Andrew's ...	400	1	...	...	38	6	8	...	...	10	2	1	1	2	8	1	13.2
St. Joseph's ...	215	3	...	...	1	4	2	...	...	...	...	...	...	...	...	...	4.7
St. Mark's ...	152	...	1	...	2	2	23	1	2	...	...	...	...	2	...	...	19.1
St. Mary's ...	380	3	1	...	2	1	1	...	...	4	...	...	1	...	3	...	2.1
St. Peter's ...	128	1	1	...	...	...	23	21	...	4	3	...	...	2	4	...	35.9
St. Saviour's ...	351	6	2	...	21	2	2	...	1	...	2	...	...	3	3	...	9.4
Shirley ...	264	...	...	...	2	14	46	...	...	2	...	...	...	2	4	...	23.5
St. Michael's	218	1	1	...	1	...	...	...	...	1	...	...	...	...	1	...	1.4
Selhurst Grammar	955	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.6
Totals ...	28241	282	115	6	1215	404	870	66	49	230	203	23	11	204	439	14	

Note.—Percentage incidence of Infectious Diseases taken from Scarlet Fever, Diphtheria, Primary Pneumonia, Measles, Whooping Cough, Chicken-Pox and Mumps.

The percentage incidence is calculated on the average school population over the year at each school. The highest incidence in relation to children in attendance at the school was in St. Peter's (35.9) due chiefly to Chicken Pox and Mumps; next was Woodside (32.6) due chiefly to Measles and Chicken Pox. The lowest incidence was in the Selhurst Grammar (0.6), Lanfranc (0.7), and British and Lady Edridge (0.9). In view of the age distribution of these schools this was to be expected.

#### **Scarlet Fever.**

Two hundred and eighty-two cases were notified from the schools. Davidson (35), Elmwood (26) and Beulah (25) had the most cases. There were no cases in the John Ruskin School.

#### **Diphtheria.**

One hundred and fifteen cases were notified from schools. This is a considerable increase on 1932. The Oval with 18 cases, Waddon with 12 cases, and Kingsley with 10 cases, had the highest individual numbers.

#### **Mumps.**

Only 66 cases were notified from schools. St. Peter's had the highest individual number.

#### **Chicken Pox.**

Eight hundred and seventy cases occurred in schools and were notified therefrom. Winterbourne (181), Woodside (109), Davidson (94), and Rockmount (78) showed the highest incidence.

#### **Whooping Cough.**

Four hundred and four notifications were received from schools. The highest numbers for individual schools were All Saints' (54), Beulah (49), and Ecclesbourne (48).

#### **Measles.**

As was expected, Measles was troublesome during the first quarter of the year, but afterwards its incidence was low throughout the year, showing, however, a tendency to rise in December. The reorganisation of schools as advocated in the Hadow Report, with the consequent grouping of children of the most susceptible ages into Junior, Mixed and Infants Schools, has led to a higher incidence of all the common infectious diseases in these schools

than occurred under the former arrangements. However desirable the re-grouping recommended by the Hadow report may be educationally, it will probably be found not to be advantageous from the medical aspect.

### SCHICK TESTING AND IMMUNISATION AGAINST DIPHTHERIA.

The following Table shows the work done during 1933. The tabular form is used for convenience, and does not represent a statistically complete piece of work. Work on the children in the various groups was not necessarily begun and ended during the year, so that the numbers in the various columns do not balance, but the two columns of percentages are approximately accurate.

All children positive on re-testing were given a second immunising course, and none was positive after that.

One child with a history of Diphtheria had a positive Schick reaction.

The immunising material used was Diphtheria Prophylactic (T.A.M.) B. W. & Co.

GROUP.	No. Schick- tested. (Primary)	No. Positive.	Percen- tage Positive.	No. given full course of T.A.M.	No. re- tested.	No. Negative on re-test.	Percen- tage Negative.	Uncom- pleted at end of year.	Left District before com- pleted, or Defaulted.
Private Cases ... ..	7	7	100	6	—	—	—	5	2
P.A.C. Homes ... ..	56	31	55.4	28	73	62	85	25	7
Do.—Queen's Road ...	18	9	50.0	10	5	5	100	9	5
Russell School ... ..	34	26	76.5	26	29	29	100	3	—
Gordon Boys' Home ...	6	2	33.3	2	2	2	100	2	—
TOTALS ...	121	75	62	72	109	98	90	44	14

## FOLLOWING UP.

There are 19 Health Visitors, 18 of whom devote 5/11ths of their time to school work, and one who is employed whole time in school clinics. In addition there are two masseuses, one of whom devotes all her time to school work and the other half her time, the other half being occupied with Maternity and Child Welfare. There are three whole-time dental assistants.

The nurses also assist at routine and special medical inspections in the schools and pay periodical visits to schools for cleanliness surveys. With the helpful co-operation of the Chief School Attendance Officer and his staff, persistent offenders against cleanliness have been proceeded against in Court, others have been brought before the Committee and warned. There are still, however, certain families who consistently spoil the cleanliness records of some of the schools.

### School Visits.

The following table summarises the visits paid, etc., in connection with these duties :—

Visits to Schools re Cleanliness	43
Visits to School Departments re Cleanliness	473
Number of children inspected for cleanliness (first inspection)*	66,758
Number of children inspected (subsequent inspections)	3,973
Number of children found unclean (first inspection)	2,451*
Number of children found unclean (subsequent inspections)	2,416

\*Representing 1,961 individual children.

### Home Visits.

Concerning uncleanliness	76
Concerning defects found at routine medical inspections	1,709
Subsequent visits re defects found at routine medical inspections	756
Visits re special cases	1,129
Visits to dental cases	333
Visits in connection with infectious cases and other visits	10,840



These figures show an increase of 1,637 in the number of children inspected for cleanliness; a decrease of 1,928 in visits paid in connection with infectious cases and other visits for miscellaneous reasons; an increase of 128 in the following-up visits to dental cases, and in visits to special cases; decreases of 32 in the visits made regarding defects found at routine medical inspections, and of 22 in the home visits regarding uncleanliness.

Sickness among the school nursing staff has unfortunately caused a drop in the amount of visitation paid to the homes of children for the purpose of following up defects.

### TREATMENT.

#### The Work of the School Clinics.

TABLE XIII.

#### SUMMARY OF ATTENDANCES.

	1933.	1932.	Increase or Decrease.
Minor Ailments Clinics ... ..	11740	12800	— 1060
Inspection Clinic ... ..	1207	1181	+ 26
Dental Clinics ... ..	13444	13348	+ 96
Ophthalmic Clinic ... ..	2797	2870	— 73
Orthopædic Clinic ... ..	2637	2413	+ 224
Remedial Exercises Clinic ... ..	8003	7508	+ 495
Ear, Nose and Throat Clinic ... ..	1148	846	+ 302
Ionization Clinic ... ..	386	350	+ 36
Rheumatism Clinic ... ..	193	227	— 34
	41555	41543	+ 12

#### The Minor Ailments Clinic.

This Clinic is held each morning at the Lodge Road premises. One nurse is in attendance for the whole session and a doctor attends when possible to see cases referred to him. He does not spend his whole morning here, however, going on either to a school for a medical inspection or to another Clinic. Medical cases or cases requiring surgical measures are referred to their private doctor or to hospitals. The aim of this Clinic is to render first aid and to treat the minor disabilities peculiar to school children, and to advise what further measures may be necessary.

A subsidiary clinic is held at 206, Selhurst Road on three occasions weekly. 474 children made 2,402 attendances during 1933.

TABLE XIV.

Complaint.	1933.			1932.		
	Cases.	Attendances.	Average No. of Attendances per case	Cases.	Attendances.	Average No. of Attendances per case.
Ringworm of Scalp ...	18	74	4.1	15	57	3.8
„ Body ...	28	151	5.4	30	285	9.5
Scabies ...	88	264	3.0	62	301	4.9
Impetigo ...	257	1568	6.1	288	1748	6.1
Other Skin Diseases ...	124	448	3.6	103	422	4.1
Otorrhœa and other Ear defects	294	4332	14.7	323	4088	12.7
External Eye Disease ...	192	1258	6.5	175	1779	10.2
Miscellaneous ...	642	3645	5.7	521	4120	7.9
	1643	11740	7.1	1517	12800	8.4

From this table it is seen that the average number of attendances per child decreased from 8.4 to 7.1; the total attendances fell by 1,060, and the number of individual cases decreased by 74. Otorrhœa is one of the most difficult of all minor conditions in school children to cure, this being reflected in the large number of attendances made for the remedying of this defect.

Impetigo still remains troublesome, whilst the cases of scabies attending showed a further increase.

#### Adenoids and Enlarged Tonsils.

During 1933, 140 cases of tonsils only, 63 cases of adenoids only, and 367 cases of adenoids and enlarged tonsils, a total of 570 cases, were recommended for treatment. In 422 cases the Local Education Authority was requested to arrange for the operation.

There were 69 operating sessions at the Croydon General Hospital. The work is done by a rota of 4 general medical practitioners working in pairs, as surgeon and anæsthetist, for periods of 3 months, and remunerated by the Education Committee. All other expenses of the Clinic are also borne by the Committee.

The cases were examined at the Throat Clinic the week prior to the operation and a week after.

402 children were operated upon, an increase of 115 on 1932. The cases referred have all come within the terms of the three definitions given below. All cases are kept in hospital for at least one night after the operation unless the parent expressly desires otherwise and is prepared to take all responsibility. All children are conveyed home by ambulance. 381 children were detained for the night after the operation. In all there were 129 non-attendances.

Of the 402 children operated on 216 attended the Remedial Exercises Clinic for post-operative breathing exercises. This is a very important complement to the operation. The percentage of children operated on, who attended for exercises, was 54 per cent., compared with 57 per cent. in 1932.

The percentage is by no means as high as might be wished. The distance some of the children have to come is a deterrent.

58 cases came to the knowledge of the department for whom the parents had obtained treatment from another source; the majority at a London hospital. In these cases the expenses are defrayed by the parent and not by the Local Education Authority.

Only the following conditions are considered to warrant the reference of a child for operation:—

- (a) Tonsils which are enlarged and septic, especially if in conjunction therewith the tonsillar glands are also enlarged.
- (b) Obstruction to breathing through one or both nostrils.
- (c) The presence of mouth breathing.

Strict adherence to these standards obviates the unnecessary removal of tonsils. Provided the tonsils are not interfering with any normal function and are not a focus of septic poisoning, there is no proof that their removal is of any benefit to a child.

### **The Inspection Clinic.**

This is held on Wednesday and Saturday mornings. The object of the Inspection Clinic is (a) to examine children referred by parents or teachers for special examination; (b) children sent by school attendance officers for an opinion as to their fitness or otherwise to attend school; (c) children referred for examination

under the provisions of the Education Act, 1918, Sec. 15; (d) cases in whom a further examination is desired after routine medical inspection; (e) children referred under the Juvenile Employment regulations. 1,207 attendances were made by children during the year.

### Treatment of Visual Defects.

TABLE XV.

	Number of defects dealt with.				Spectacles prescribed.		Spectacles obtained.	
	Under the Authority's Scheme.	Submitted to refraction by private practitioner or Hospital apart from the Authority's scheme	Otherwise.	Total.	Under the Authority's Scheme.	Otherwise.	Under the Authority's Scheme.	Otherwise.
Errors of Refraction—								
Elementary Schools ...	780	19		799	593	19	462	19
Secondary Schools ...	99	8		107	71	8	73	8
	879	27		906	664	27	535	27

### Orthopædic Work.

The orthopædic scheme continues on the same lines as described in my report for 1931. The units comprising the scheme are (a) The outpatient clinic held by Mr. Alan Todd at the Croydon General Hospital; (b) The Remedial Exercises Clinic held in St. Andrew's Hall, Pump Pail; (c) The St. Giles' School, Addington.

TABLE XVI.

### Spinal and Other Remedial Clinics.

	1933.				1932.			
	Attendances.	Sessions.	Av. att.		Attendances.	Sessions.	Av. att.	
Spinal ...	3,009	607	5.0	...	2,454	597	4.1	
Massage ...	59	59	1.0	...	168	168	1.0	
Flat Feet ...	1,625	189	8.6	...	1,433	193	7.5	
Breathing ...	2,182	241	9.0	...	2,221	268	8.3	
	6,875	1,096			6,276	1,226		

**St. Giles' School, Addington.**

Total number of sessions	...	...	...	...	202
Total number of attendances	..	...	...	...	1,128
Average attendance per session	...	...	...	...	6
Total number of females	...	...	...	...	12
Total number of males	..	...	...	...	12
Total number of patients	...	...	...	...	24
Still under treatment	...	...	...	...	21

COMPLAINTS.	MALE.	FEMALE.	TOTAL.
Scoliosis	—	2	2
Kyphosis	2	1	3
Spastic Diplegia	2	—	2
Hemiplegia	—	2	2
Infantile Paralysis	6	4	10
Lordosis	—	1	1
Athetosis	—	1	1
Inco-ordination	1	—	1
Muscular dystrophy	—	1	1
Osteomyelitis	1	—	1
	—	—	—
	12	12	24
	—	—	—

**THE SCHOOL DENTAL SERVICE.**

I am indebted to the Senior School Dental Surgeon, Mr. Pilbeam, for the particulars contained in this section of the report.

The work of the School Dental Service consists chiefly in the inspection and treatment of school children. In addition, the treatment of patients referred under the Maternity and Child Welfare, Tuberculosis and Mental Deficiency Schemes is undertaken by the same dental staff. Figures relating to these sections of the work is dealt with under the appropriate headings.

The number of children attending the Public Elementary Schools is approximately 27,030. Of this number 18,087, *i.e.*, 66 per cent., were actually inspected, and 13,029, *i.e.*, 72 per cent. of the number inspected, were referred for treatment. Parents of 8,121 children consented to treatment, and 7,773 were actually treated, so that 95 per cent. of those children whose parents desired Clinic treatment were actually treated.

The age groups dealt with were 6, 7, 8, 9, 10, 11, 12, 13 and 14 years for re-inspection, 5 and 6-year-old entrants, and the whole of the children attending Central Schools.

The staff of the School Dental Service consists of three full-time dental officers. Therefore, each dental surgeon has over 9,000 children allocated to his care, and, unfortunately, this proportion is more than twice as many as one dental surgeon can inspect and treat efficiently each year.

Sir George Newman states that it is on the whole a wiser plan to provide annual inspection for the continuous care of a limited number of children than to attempt to deal with a larger number by extending the period between one inspection and the next.

The number of children whom each dental surgeon can inspect and treat annually is approximately 3,500, and it is therefore apparent that if every child in the Borough is to have annual inspection, and treatment if required, the staff must be considerably augmented.

It will be observed that the dental surgeons were able to inspect only 66 per cent. of the children in the Elementary Schools, which means that it will take at least 18 months to carry out the complete inspection of all the children with the existing staff.

Dental disease is the most prevalent of all diseases, and one inspection and treatment in 18 months is not enough to reduce the incidence of dental caries, as is shown by a study of the following table. As the aim of the School Dental Service is prevention, it is, unfortunately, unable to fulfil its aim.

This Table indicates the state of the teeth since 1927 :—

Year.	1927	1928	1929	1930	1931	1932	1933
Percentage of Children Referred for Treatment ... ..	61	61	63	63	65	68	72

In 1927, when the scheme was confined to annual inspection and treatment of certain age groups, 61 per cent. were referred for treatment, but as more children were brought into the scheme without a corresponding increase in staff the incidence of caries gradually increased each year, until in 1933 it is seen that 11 per cent. more children required treatment than in 1927. This Table proves that dental disease cannot be controlled unless there is annual inspection and treatment of all the scholars.

The school dental surgeons spend a great part of their time doing reparative work, and unless this is followed up by annual inspection, so that further defects may be noted and corrected, the time and money spent on treatment has to a large extent been wasted. With the present staff this can only be prevented by restricting the number of schools or age groups inspected and treated each year, or by eliminating after the first inspection all children whose parents refuse treatment.

TABLE XVII.

## Summary of all Examinations.

Age.	Sex.	1933.			1932.		
		No. Examined.	No. Referred for Treatment.	% Teeth Sound	No. Examined.	No. Referred for Treatment.	% Teeth Sound.
5 years	B	525	402	21.4	757	514	32.1
	G	461	351	23.9	647	470	30.2
6 "	B	809	572	29.3	1015	749	26.2
	G	704	507	27.9	1043	774	25.8
7 "	B	890	649	27.0	966	713	26.1
	G	838	655	21.8	1042	748	28.2
8 "	B	821	622	24.2	1078	778	27.8
	G	822	631	23.2	962	705	26.7
9 "	B	816	575	29.5	1260	905	28.1
	G	1016	755	25.6	956	691	27.7
10 "	B	934	644	31.0	1281	877	31.5
	G	1001	735	26.6	1035	734	29.0
11 "	B	877	614	30.0	1199	811	32.4
	G	1090	767	29.6	1213	697	42.5
12 "	B	1143	800	30.0	1070	709	33.7
	G	947	705	25.5	1128	709	37.1
13 "	B	1519	1099	27.6	652	447	31.4
	G	1196	864	27.7	702	421	40.0
14 "	B	620	411	33.7	314	210	33.1
	G	634	424	33.1	408	248	39.2
15 "	B	192	101	47.4	127	89	29.9
	G	232	146	37.0	122	74	39.3
Total Boys	...	9146	6489	29.0	9719	6802	30.0
Total Girls	...	8941	6540	26.8	9258	6271	32.2

With few exceptions, the age groups show a reduction in percentage of sound dentitions compared with 1932. This Table cannot be construed as showing a marked deterioration of the teeth, but rather as proving that by infrequent inspections dental disease cannot be reasonably controlled.

It is gratifying to see that, with the exception of the 14-year-old girls' group, the Leavers have a higher percentage of sound dentitions than in the previous year.

If children would only view a good dental report with the same satisfaction as they do a favourable school report, and take pride in having healthy teeth, the percentage of sound dentitions would undoubtedly be greater than it is at present.

### **Inspection.**

The annual inspection of school children is essential, so that all defects may be recorded. Even so, children may be found at one inspection to have a sound dentition and at the next to have one or more teeth so diseased that extraction is sometimes the only treatment.

There appear to be three periods in a child's school career when caries is particularly active, namely, at 6, 9 and 12 years. These ages correspond to the time when the teeth usually erupt in pairs. As a preventive measure dental inspections should be carried out twice yearly. A compromise, however, can be effected by inspecting all the age groups annually, and the 6, 9 and 12-year-old groups twice a year. With such a method it would be possible to diagnose early defects and thus reduce the number of extractions of permanent teeth to a very low figure. Unfortunately, this cannot be done at present.

The number of sessions devoted to inspection totalled 109, which is 13 fewer than in 1932. The number of children examined was 18,087, compared with 18,977 in the previous year. The average number of children inspected each session was 166. Obvious defects only are noted at the routine dental inspections, and when the child is called up for treatment a more thorough examination is carried out at the Clinic. A very careful examination is made of those children at routine inspections who show evidence of sound dentitions.

### **Treatment.**

Full details of sessions and treatment are set out in the Board of Education Table at the end of the Report, while a



summary given below is for comparison with previous years :—

	1930.	1931	1932.	1933.
Number of new cases per session ...	7.9	7.4	7.5	7.1
Attendances per session ...	13.7	12.4	13.6	12.3
Fillings per ordinary session ...	4.3	4.1	4.5	5.4
Extractions ...	13.7	12.4	13.6	13.0
Other operations ...	1.5	1.4	2.0	2.0
Gas cases during the year ...	2,395	2,605	2,322	2,125
Local anæsthetics ...	—	1,638	3,914	3,881
Permanent teeth extracted ...	2,001	2,689	2,702	2,707
Permanent teeth filled ...	2,769	3,228	3,896	4,795
Ratio of fillings to extractions ...	1:0.7	1:0.8	1:0.69	1:0.5
Temporary teeth extracted ...	12,105	10,800	11,707	10,740
Temporary teeth filled ...	1,732	1,254	874	829
Ratio of fillings to extractions ...	1:6.9	1:8.6	1:13.3	1:12.5

### Special Treatments.

Partial Dentures to replace incisors—7.

1 obturator was fitted.

### Review of the Work Done.

During the year 30 more sessions were devoted to treatment than in 1932; the amount of conservative treatment shows progressive improvement, and the number of attendances still increases. The ratio of permanent fillings to permanent extractions has improved considerably from 1:0.8 in 1931 to 1:0.5 in 1933. While the extractions of permanent teeth remain practically the same as last year there is a considerable reduction in the number of temporary teeth extracted. Owing to the large number of children attending the Central Schools, who were brought into the Scheme a few years ago, it has been difficult to reduce the number of extractions of permanent teeth. These children in many instances appear to have rampant caries, and it is unfortunate that not infrequently the second permanent molars are so decayed that they are beyond all means of conservative treatment.

Administrations of general anæsthetics were given to 2,125 children, a reduction in the number as compared with last year. The dental officers devoted 93 half-days to gas administration, and medical officers administered gas at 43 sessions at the Selhurst Road Clinic.

Nitrous oxide is administered by dental surgeons at the Lodge Road Treatment Centre, where a doctor is always in attendance at another Clinic in the same building, in case a parent wishes to have the child medically examined before being given an anæsthetic.

Other operations totalled 2,154, which is slightly more than last year. These operations include root dressings, scalings, gum treatments, prophylactic treatments, silver nitrate applications, temporary fillings of zinc oxide, sedative dressings for pulp preservation and pulp cappings.

The Orthodontic Clinic is still making progress, and 68 cases were completed during the year.

Summary of school children inspected and treated during the year :—

Patients examined	...	19,903	Patients treated	...	7,773
Attendances	...	13,444	Fillings	...	5,624
Extractions	..	13,447	"Gas" cases	...	2,125
Other operations	...	2,154	Locals	...	3,881

#### SESSIONS HELD---

Inspection	...	109	Treatment	...	1,087
Administration	...	20	Orthodontia	...	42
Gas administrations (by dental surgeons)	...	93	Total sessions	...	1,396
Gas administrations (by medical officers)	...	44			

### Conservative Treatment.

All filling work is carried out whenever possible before the extractions are completed. Silver and copper amalgam is used in posterior teeth, and synthetic porcelain in anterior cavities.

The use of copper amalgam in school dentistry has been the subject of a good deal of criticism, but if the correct technique is adopted it will, in certain cases, withstand the action of caries to a greater extent than silver alloy. Copper amalgam should not be used when it is obvious that silver amalgam would prove a more serviceable filling.

In anterior teeth in which the pulps have suffered traumatic injury, and in exposures produced by dental caries, root canal treatments have been undertaken in a number of cases.

Sensitive teeth which require conservative treatment are anaesthetised by local or interosseous injections.

### Deciduous Teeth.

The number of temporary teeth extracted during the year is considerably fewer than in 1932.

While admitting that the conservative treatment of permanent teeth is of paramount importance in school dentistry, especially under present conditions when there is so much work to be done for the permanent dentition, it is nevertheless unfortunate that the time available for restoring temporary teeth to a healthy condition is so restricted. In this effort of mass concentration on the permanent teeth the value and function of deciduous dentition must not be lost sight of. If the premature extraction of the temporary molars produced only the minor disability of the forward movement of the six-year-old molars, it would be justifiable to adopt such a line of treatment, but the other functions of the first teeth, those of speech, deglutition, digestion, and development of the jaws and permanent teeth, must be remembered.

### **Persistent Refusals.**

The work of the Clinic is upset considerably by applications for urgent treatment on account of toothache in children whose parents have previously refused treatment advised. If after the third inspection parents who have had a special warning notice, and having received a personal visit from the school nurse, do not realise the value of dental treatment, the only effective way of dealing with them is to circularise the head teachers of the schools which the children attend with the names of such children, so that the teacher will have authority to refuse to give an emergency form. If parents realise that casual treatment cannot be obtained after refusing routine treatment it will, at least, serve as useful propaganda to encourage others to accept treatment. This procedure is now being adopted.

### **Acceptances.**

The number of acceptances for Clinic treatment was 8,121, or 54.7 per cent. of those referred for treatment. Parents of 3,891 children, *i.e.*, 26.2 per cent., promised to obtain private treatment, but, unfortunately, in many cases this is merely evasion. The number of "no decision" forms was 2,548, *i.e.*, 17.2 per cent., and the definite refusals 285, *i.e.*, 1.9 per cent.

The chief causes of non-acceptance of treatment are: (a) infrequent inspections; (b) inspecting unduly large numbers of children during each session; (c) indifference; and (d) fear of dental treatment.

Early calling-up for treatment after a school inspection is the best way to increase the number of acceptances. The inspection of very large numbers of children at each session should be avoided, as it may result in an omission to note certain defects that should be recorded, and also because too rapid examination does not impress parents with the importance of dental diagnosis, and, for that reason, they may fail to sign consent forms.

There are, unfortunately, a number of people who appear absolutely indifferent to the value of dentistry and its relation to health, and it is difficult to educate them. Sympathy, tact and good dentistry can help considerably to reduce fear of treatment.

### **Following Up.**

The following up of some cases has brought good results, but there are some parents who agree to have treatment for their children as an excuse for getting rid of the visitor, and then fail to send their children to the Clinic when an appointment is made.

In the case of children referred for treatment prior to throat operation and failing to keep appointments, non-attendance forms are issued to the Health Visitors for following up. During the year 141 such forms were issued.

Eight cases of persistent refusals by parents whose children had marked suppuration of the teeth from chronic abscesses, resulting from neglect of dental treatment, and were suffering in health thereby, were referred to the National Society for the Prevention of Cruelty to Children. The intervention of the Society's Inspector was successful in obtaining the subsequent attendance of six children.

In addition, 165 sessions were occupied in other than school work (*vide* sections of the report dealing with Maternity and Child Welfare, Tuberculosis and Mental Deficiency). £361 11s. 6d. was received from patients for treatment and in voluntary box contributions. The charge for treatment under all the dental schemes is 6d. per attendance and 1s. 6d. if "gas" is administered. Cases of real necessity are treated free.

### **Special Cases.**

It is necessary to provide some facilities for special cases and for the relief of pain. These comprise (a) cases requiring treatment

prior to the operation for the removal of tonsils and adenoids; (b) cases referred by the School Medical Officer; (c) children referred from the Tuberculosis Dispensary; (d) "casuals" referred by head teachers as needing treatment for acute conditions; the last-mentioned group and many of group (a) consist of children for whom treatment had been previously refused. During the year 1,816 special emergency forms were issued.

### **Pre-School Children.**

A considerable number of children when they enter school have dentitions so ravaged by disease that conservative treatment is impossible. Some of these children have had opportunities for treatment, but the parents have not realised the necessity; nevertheless, there are numbers who would have had treatment but were ineligible through non-attendance at the Child Welfare Centres.

Inspection and treatment for the pre-school child is restricted to those who attend the Child Welfare Centres, but unfortunately only about 50 per cent. attend. The solution appears to rest entirely in the extension of dental inspection and treatment to all children during the pre-school period. A comprehensive scheme of treatment for the pre-school child would reduce considerably the time now spent on the 5 and 6-year-old entrant groups of school children and permit more time to be devoted to other age groups.

### **Preventive and Educative Measures.**

The prevention of dental disease is a greater achievement than its correction by treatment, and it is only by preventive methods that the incidence of dental disease can be reduced. As the school dental officers are so occupied in treatment, they have, unfortunately, very little time to devote to dental education. The teaching of dental health in schools by the teachers would help immensely. The teacher's influence on the child's mind is in many ways greater than that of the parents. If they could, among their multifarious duties, add another, namely, the imparting of a knowledge of oral hygiene to the children in their care, the results would soon be seen in an improved standard of dental hygiene.

The Dental Surgeons can help by giving talks at Clinics and Centres; and Health Visitors in carrying out home visitations have a unique opportunity for promoting knowledge for prevention of dental disease.

### Dental Board Exhibit.

During the year the Dental Board kindly sent a demonstrator to visit some of the schools and give a talk to the children. These talks were illustrated with exhibits, and the children appeared to enjoy the demonstration very much. Unfortunately, those schools visited, which were inspected soon afterwards, did not produce an increase in acceptances, but it is possible that the effect of the Dental Board exhibit may be felt when the schools are next inspected.

### Selhurst Road Clinic.

The review of the work at Selhurst Road Clinic shows great progress during the year. The numbers of fillings and attendances have increased considerably, and extractions show a great reduction.

The number of patients treated was slightly less than last year, but this is because an increased volume of work has been done for those treated.

#### SUMMARY OF WORK DONE.

	1931	1932.	1933.
Attendances ... ..	3,486	3,604	3,831
Extractions ... ..	2,726	3,728	3,102
Fillings ... ..	1,457	1,667	2,002
Patients treated ... ..	2,326	2,006	1,811
Other operations ... ..	283	96	261
"Gas" cases ... ..	545	779	553
Local anæsthesia ... ..	171	490	999
New cases ... ..	—	2,280	2,520

Sessions held : Inspection—49. Treatment—337.

	1931	1932.	1933.
Number of New Cases per Session ... ..	7.5	7.3	7.5
Attendances ... ..	11.2	11.6	11.4
Fillings ... ..	4.7	5.4	5.9
Extractions ... ..	8.8	12.02	9.2
Other operations ... ..	0.9	0.31	0.77
Ratio of Fillings to Extractions ... ..	1:1.8	1:2.2	1:1.4

Mr. Bryce also held 49 sessions at Lodge Road Clinic, and these figures do not include the work done at the Selhurst Clinic.

## THE ORTHODONTIC SCHEME.

During the year this branch of the work continued to progress, and since the Scheme started 368 cases have been treated or are undergoing treatment. Of this number 263 have been treated by fixed and removable appliances, and 105 cases by extraction only.

New cases dealt with during the year have been fewer than in previous years because so many new cases were taken in 1932. The 68 cases that were completed during the year will enable more new cases to be dealt with in 1934. In some of the completed cases which showed gross deformity before treatment the children are wearing retention plates to prevent relapse.

### Percentage of Malocclusion.

At dental inspections 188 children were found to be suffering from irregularity of the teeth, this being approximately 1 per cent. of the total number of children inspected.

The percentage of deformity associated with the jaws and teeth is higher than that in any other part of the body, and chiefly as a result of that maldevelopment, disease is more prevalent in the mouth.

### The Cost of the Scheme.

The charge for treatment is on a flat rate basis of 12s. 6d. per case. This charge includes the fitting and making of all the necessary appliances, and the dental mechanic is paid four-fifths of this charge for making appliances. Small deposits are asked for the use of Friels lip discs and Badcock screw spanners; these deposits are refunded when the treatment is completed. The Scheme has been self-supporting, and there has been no charge on the rates.

### Age for Treatment.

Most of the children are treated between the ages of 8 and 11 years. A few have been fitted with suitable appliances at an earlier age, chiefly when the deformity has been caused by bad habits. In the case of treatment under 8 years muscle exercises are tried at first, and if improvement is not progressing as quickly as is required appliances are fitted, but exercises are still continued to aid treatment.

### Muscle Exercises.

The types of cases which benefit considerably by muscle training are in posterior occlusion Division 1, and in irregularities produced by thumb sucking. Malocclusion in these cases is associated with mouth breathing. With the aid of appliances we are able to correct the deformities, but muscle exercises are needed to re-tone the muscles and restore their suppleness, so that nasal breathing may result.

### Review of Work Done.

During the year 42 sessions were devoted to orthodontic treatment, and 410 routine attendances were made. Extra verbal appointments seen after routine sessions totalled 889.

The number of cases treated by extraction was 39, which shows that 20 per cent. of the cases referred for malocclusion were treated without the aid of appliances. The number of permanent teeth extracted to relieve overcrowding was 60, which is an average of 1.5 permanent teeth extracted per child.

Fixed appliances were fitted in 15 cases and 169 removable appliances were inserted. Several cases were referred for X-ray, which included three cases of torsoversion and four cases for diagnosis of the presence or absence of supernumerary teeth.

Sir George Newman states in the Report of the Health of the School Child, 1932, that the treatment of irregularities is of value provided that a proper perspective is maintained. Two dental surgeons devote part of a session on Monday mornings, from 10.30 to 12 noon, to the work, which may be reasonably said to be a proper proportion, having regard to the amount and urgency of the routine dental work.

### EAR CLINIC.

In previous reports this Clinic has been called the Ionization Clinic, but in the process of time, the scope of the Clinic has extended, and actual ionization is now only a part of its function. Any children complaining of ear symptoms are now referred to this Clinic.

	1933.		1932.
Number of Sessions held ...	39	...	35
Number of first attendances ...	100	...	79
Number of re-attendances ...	286	...	273



There were 14 names on the waiting list at the end of the year. The classification of cases shows a remarkable similarity to that of previous years in the numbers in the respective groups, viz. :—

(1) No evidence of otorrhœa past or present, or deafness of more than a trivial or temporary nature ... ..	15
(2) Deafness only. Some of these were due to <u>old</u> otitis media ... ..	13
(3) Otorrhœa, active, quiescent or cured ... ..	72

*Group 2.*—13 cases. Eleven were catarrhal in type and two were cases of nerve deafness. Of the catarrhal cases, three did not require any special treatment at the time; three required the removal of tonsils and adenoids; three required breathing exercises, and two required treatment by the Eustachian catheter. One of the nerve cases was “stone” deaf after cerebro-spinal meningitis and was recommended for a school for the deaf; the other was referred to the Croydon General Hospital for further investigation.

<i>Group 3.</i> —(a) Found dry and requiring no treatment ...	29
(b) Found dry but recommended for accessory treatment such as tonsillectomy ... ..	8
(c) Active cases ... ..	35

Of the active cases only 9 were considered to be uncomplicated cases of tympanic sepsis (the type most amenable to local applications such as ionisation). The 35 cases were dealt with as follows:—Four were referred to the General Hospital; 7 were recommended accessory treatment with or without treatment of the ears; 2 were lost sight of; 5 are still under treatment; and 24 were discharged with ears dry. Only 7 of these were ionised, 5 were treated with iodine and boric powder, 2 had operations for tonsils and adenoids, and 11 cleared up without any special treatment.

All 7 cases ionised were discharged dry within short periods. One or two cases continuing treatment from the previous year failed to clear up and were eventually referred for the mastoid

operation. Where one hesitates to advise operation, prolonged conservative treatment without benefit makes operation easier to recommend and more acceptable to the parents.

There are several children attending the Clinic at present with otorrhœa continuing after the conservative mastoid operation. Perseverance in an effort to obtain a dry ear is made, but if the ear does not heal soon after operation the chances of success without recourse to the radical operation seem slight. In two cases this further operation has been recommended.

As regards the type of case now attending for the first time, many give a short history of otorrhœa, but on careful inquiry it is usually found that there was otorrhœa in infancy and sometimes at intervals afterwards. Ionisation is applied in all cases where benefit is though likely to accrue and where it is safe to apply it, but in assessing the value of any treatment regard must be had to the figure shown above of 11 drying up without any special treatment.

Most of the cases, of course, were subjected to much more frequent cleansing after starting to attend the ear clinic. The use of iodine and boric powder has been extended, and a very favourable opinion formed of its antiseptic, astringent and healing properties. Especially in old-standing cases or ears failing to heal after the conservative mastoid operation, it effects a remarkable improvement in reducing the granulations and lessening the amount of discharge. In less complicated cases it seems to be instrumental in completely drying up the ear. It is easily applied and its application is especially suitable where the dry method is desired. Greater success would be attained by the co-operation of the mother in obtaining and using the insufflator at home, but this is seldom possible.

Four children with a relapse after previous ionisation applied for further treatment during the year. One of these had mastoiditis and was referred for immediate operation.

The value of this Clinic becomes more manifest each year.

## RHEUMATISM CLINIC

During 1933 it has been impossible to hold this Clinic more often than once a fortnight—24 times in all. This is not often enough, and it is a pity, for although all new cases had been seen and the waiting list reduced to nil at the end of the year, re-examinations were much too infrequent, and many cases have been waiting over a year for re-examination which ought to have taken place a few weeks after the previous examination. The Clinic is not held for treatment, but is a supervisory centre. It cannot function as such if re-examinations are at such infrequent intervals. The supervision of rheumatic children is good preventive work which is not likely to be undertaken by the general practitioner amongst elementary school children. It is not true economy for the Clinic to be held at such infrequent intervals that its proper functions cannot be carried out.

The number of new cases is almost the same as in 1932. It is much smaller than the numbers in the first four years of the Clinic, and it will be interesting to see if the figure is now stabilised.

Dr. Preston, at the Croydon General Hospital, has again been very helpful in seeing doubtful and difficult cases and giving his advice on cases sent to him at his Out-Patients Clinic. The Convalescent Home at Coombe Cliff is a great boon for children requiring prolonged rest which they are not likely to get at home.

Parents are certainly being educated about the rheumatism of childhood and are coming to recognise the symptoms and appreciate their significance. Growing pains are much less often ignored than formerly. When juvenile rheumatism and the rheumatism of grown-ups are given different names, a great stride forward will have been taken in the prevention and supervision of the former. At present it is inevitable that parents who have never been instructed to the contrary will associate rheumatic pains in their children with their own chronic aches and attach little importance to what, in their case, is little more than an annoyance, but in children may lead to lifelong invalidity.

**Cases Examined at Rheumatism Clinic.**

					1933.		1932.
Primary ... ..	...	...	...	...	71	...	76
Re-examinations	...	...	...	...	109	...	151
					—		—
				Total ... ..	180	...	227
					—		—
Rheumatic ... ..	...	...	...	...	65 (91.5%)		65
Non-Rheumatic	...	...	...	...	6 (8.5%)		11
					—		—
				Total ... ..	71	...	76
					—		—

**Classification of Rheumatic cases—**

Sex—Males ... ..	...	...	...	...	25 (38.5%)
Females ... ..	...	...	...	...	40 (61.5%)
					—
				Total ... ..	65
					—

**Age when examined recorded in 63 cases :—**

Ages ...	4	5	6	7	8	9	10	11	12	13
Numbers ...	1	6	3	7	11	3	9	11	4	8

There has been evidence in the last two reports of a definite increase in the number of young children referred. This is an indication that parents are noticing the signs of rheumatism more than formerly. An encouraging sign.

**Grouping and Classification.**

This followed the scheme laid down in the report for 1931.

Under Group I. were placed 9 children.

Under Group II. were placed 56 children.

Under Group III. were placed 23 children.

The last two groups include the majority of cases. The groups of symptoms are nearly always in combination, varying in degree with the activity or type of case.

## Grouping of 65 cases.

Mild and Potential ... ..	32 (49.2%)
Definite Active ... ..	17 (26.2%)
Definite Quiescent ... ..	16 (24.6%)
Total Definite Cases ... ..	33 (50.8%)

This classification follows that of Dr. R. Miller. It appears the most useful, as in it a place is found for all cases irrespective of situation, or character of symptoms.

Perhaps the earliest signs and those which in particular led to the diagnosis of a case as mild and potential were "growing pains" in highly strung children, in association with slight irregularities of cardiac sounds or rhythm.

The percentage of Mild and Potential cases has arisen. Probably due to the greater watchfulness and understanding of the parents.

The definite and active group comprised cases of frank rheumatic carditis, as shewn by well marked physical signs with a history, or the presence of rheumatic fever or chorea.

Some cases of organic heart disease, whose origin could not be otherwise accounted for, were placed in this group.

## Group IV.—Rheumatic manifestations. Total: 65 cases.

Rheumatic Pains ... ..	52 (80%)
Rheumatic Fever ... ..	9 (13.8%)
Chorea ... ..	12 (18.5%)
Carditis Definite ... ..	25 (38.5%)
Carditis Suspected ... ..	9 (13.8%)
Tonsillitis ... ..	16 (24.6%)

**Rheumatic Fever Cases.**

There were 9 children who gave a definite history of rheumatic fever. Of these 2 had sound hearts, 7 had definite carditis.

**Chorea Cases.**

There were 12 cases of chorea. Of these 4 had definite carditis, 4 suspected, and 4 sound hearts.

### Family Histories.

In the case of 9 families (13.8%) either the father or the mother had had rheumatic fever or chorea. In 4 other cases (6%) a history of rheumatic fever was obtained in near relatives of the parents. In the case of 13 children (20%) their brothers or sisters gave a history of rheumatism or chorea.

### Skin Conditions.

Recorded in 46 cases.

Fair	...	...	...	...	...	38 (82.6%)
Dark	...	...	...	...	...	8 (17.4%)

Moist skin, history of liability to sweating, etc., was recorded in 4 cases.

A history of flushings and rashes in 7 cases.

### Nervous Conditions.

Recorded in 65 cases.

Children recorded as highly strung	...	...	...	...	47 (72%)
History of headaches	...	...	...	...	20 (31%)
Night terrors, etc.	...	...	...	...	8 (12%)
Enuresis	...	...	...	...	5 (8%)
Twitchings	...	...	...	...	14 (21%)

Some children exhibited more than one of the above symptoms.

### Catarrhs.

A history of various catarrhs, as distinct from tonsillitis, and mainly referred to the period of infancy and early childhood, viz., 0-5 years, was reported in 9 cases out of a total of 65 (14%).

### Tonsillectomy.

Operation reported in 13 cases (20%).

One hundred and nine re-inspections were carried out. In 6 of these, the condition had become worse; 9 were thought to be non-rheumatic; 72 were definitely improved and had become quiescent; and 22 stationary.

### Environment and Other Conditions in Rheumatism Clinic Cases.

*Wards.*—Cases were drawn from all wards in the town to the numbers shown :—Woodside, 8; Whitehorse Manor, 6; West Thornton, 6; Upper Norwood, 4; Broad Green, 2; Waddon, 8; Addiscombe, 4; Thornton Heath, 7; East, 1; South Norwood, 4; Bensham Manor, 5; Central, 2; Norbury, 3; South, 2; and Addington, nil.

*Housing Conditions: Subsoil.*—No relationship was found to exist between the type of subsoil and the incidence of rheumatic infection. This finding was similar to the findings of the three previous years.

*Drainage of Subsoil.*—41 of the houses were sufficiently drained and 8 were well drained; and in 13 drainage was problematical. 25 of the houses shewed no signs of dampness; 27 shewed traces; 5 were damp; and 1 was very damp.

*Aspect.*—The commonest aspects of the houses were : S.E., 6; S.W., 6; E., 7; N.E., 12; N.W., 11; S., 6; N., 7; W., 14.

The bulk of houses in which cases occurred were ordinary terrace houses (34) or semi-detached (14), and definite overcrowding was found in one family.

The *economic status* of the families from whom patients came was : poor in 7; average working class, 24; better working class, 17; clerical work, 6; and superior, 5. The interior home conditions could be classified as : clean, 37; moderately clean, 15; superior, 8; and in no instance definitely unsatisfactory.

### OPEN-AIR EDUCATION.

There is as yet no open-air school in Croydon. Playground classes were held during the summer months at Woodside School. There was no extension of these classes during 1933.

### BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

Full statistical details are given in Table III. of the Tables required by the Board of Education, Appendix III.

#### Blind Children.

Six boys and 3 girls are resident at special schools for the blind. The institutions which these children attend are as

follows :—Royal Normal College for the Blind, 3 boys; Chorley Wood Blind College, 1 girl; Barclay Blind School, Brighton, 2 girls; Abbotskerswell, Devon, 1 boy; Sunshine Home, East Grinstead, 2 boys; (these are residential); 20 children attend the Special Class for Myopic Children.

#### **Deaf Children.**

Eight boys and 9 girls are resident at special schools for the deaf; 1 boy attends a special day school. The institutions which these children attend are: Royal School for the Deaf, Margate, 8 boys and 9 girls (this is residential); L.C.C. Day (Deaf) School, 1 boy, at Hearnville Road, Balham.

#### **Epileptic Children.**

Two boys and 4 girls are resident at special schools, namely, at Lingfield Epileptic Colony, 2 boys and 4 girls.

#### **Mentally Defective Children.**

A full account of the activities at St. Christopher's School is given in the section of my Annual Report dealing with Mental Deficiency

In addition to the day accommodation provided at St. Christopher's School, 3 girls are resident in the Monyhull M.D. School, Birmingham; 2 girls are at Knotty Ash M.D. School, Liverpool; and 3 boys and 1 girl at Sandlebridge, Cheshire; 1 boy at Besford Court, Worcestershire.

#### **Physically Defective Children.**

The Education Authority have, in addition to those accommodated at St. Giles' School, crippled children in the under-mentioned special schools:—The Heritage Craft School, Chailey, 4 boys and 1 girl; Treloar Cripples' Home, Alton, 1 boy; Suntrap, Hayling Island, 1 boy and 1 girl; St. Patrick's, Hayling Island, 1 boy; Lancing Convalescent School, 1 boy.

The Committee maintained 2 girls at West Wickham Heart Home, a special school for cardiac cripples.

### **SCHOOL CAMPS.**

A school camp was again held during the summer months at Pilgrim Fort, near Caterham. The camp, which is provided with a piped water supply from the East Surrey Water Company, is provided with permanent buildings. Blankets, tents, stretchers,



etc., for sleeping purposes, and a fully equipped cookhouse are provided. The sanitary arrangements are satisfactory.

495 boys and girls from the elementary schools went to the Camp during 1933 in parties of 20 or 40, each party going for one week. All the children are medically inspected before proceeding to camp. The following are the departments which sent parties:—Ashburton, 20 boys; Davidson, 20 girls and 40 boys; Whitehorse Manor, 40 boys; Portland, 40 boys; Ecclesbourne, 20 boys; Howard, 35 boys; Kingsley, 40 boys and 40 girls; Lanfranc, 20 boys; Norbury Manor, 40 girls; Elmwood, 20 boys; West Thornton, 20 girls; Sydenham, 40 boys; Croydon British, 20 girls; Tavistock, 40 boys.

### JUVENILE EMPLOYMENT RETURN.

The following numbers of children were examined by the medical officers during 1933 as to their fitness to follow the part-time employment indicated. There has been a decrease of 42, chiefly noticeable in the delivery of newspapers. For the past five years there has been a steady decline in the number of children examined for this purpose:—

	1933.	1932.	1931.	1930.	1929.
Delivery of Goods for Shopkeepers	105	119	102	140	158
Delivery of Newspapers ... ..	163	178	227	328	329
Delivery of Milk ... ..	24	37	33	28	40
	292	334	362	496	527

Seven girls and 1 boy were medically examined, and subsequently licensed by the Education Authority to take part in public entertainments.

### THE PROVISION OF MEALS AND MILK AND COD LIVER OIL AND MALT.

The arrangements for the provision of meals were reorganised in October last. Children are now provided with free dinners at the Domestic Subjects Centres, as follows:—Davidson, Ecclesbourne, Elmwood, Howard, Ingram, Kingsley, Sydenham, Tavistock, Waddon, West Thornton and Woodside. Milk and cod

liver oil and malt have also been provided for children suffering from malnutrition. This is given in school. Recommendations for extra nourishment are made by the School Medical Officer, Teachers, Attendance Officers and Care Committees and are considered by the School Canteen Sub-Committee. Re-examinations are made every three months, if practicable, by the medical officers in cases referred on medical grounds, when renewal or discontinuance is decided on. This recurrent examination acts also as a useful check on the general physical health of the child, enabling obvious defects to be pointed out to the parents for remedy.

The scheme originally suggested by the National Milk Publicity Council has been working smoothly and continuously throughout the year and has undoubtedly had beneficial results. At the end of 1933 some 5,000 penny bottles per day were being delivered at the schools. This supply is available for all elementary school children irrespective of any medical recommendation.

	1932.	1933.
No. of Children who received Free Dinners ...	748	967
"    "    Free Dinners provided ...	57,856	104,190
	pints	pints
No. of Children who received Free Milk ...	118—9,126	120—9,249
"    "    Milk (part payment) ...	23—1,231	15—1,318
"    "    Milk (whole payment) ...	11—600	8—151
	issues	issues
"    "    Free Malt ... ..	30—1,753	34—2,187
"    "    Malt (whole payment) ...	22—1,250	14—1,623

### PHYSICAL TRAINING IN SCHOOLS.

Detailed reports have been presented by the Inspector of Schools and the Organiser of Physical Training to the Education Committee, and the following is only a precis of these reports.

#### Boys.

In the Senior Schools the work has been mainly directed towards the consolidation of schemes introduced during the past two or three years. It has resulted in an improved carriage and bearing on the part of the boys. The teaching of Sword and Morris dancing is becoming more general in these Schools. Gymnastic shoes are now almost universally worn; superfluous clothing is discarded, and, in many cases, the boys change into gymnastic costume.

The new syllabus of Physical Training has just been introduced into the Junior Schools, and has aroused the interest of all teachers concerned.

The past year has been an excellent one for swimming in both Senior and Junior Schools. The number of proficiency certificates awarded constitutes a record. There has been more interest taken in Life-saving. Organised games on the playing fields and athletic training and sports take place in school time.

Teachers have had opportunities to attend courses in Sword and Morris dancing, the use of the portable Swedish apparatus, and Life-saving. The monthly meetings of the specialist teachers are still held.

The Croydon Schools Athletic Association has continued its excellent work of organising inter-schools competitions in cricket, football, boxing, swimming, and general athletics. This voluntary work on the part of the teachers is extremely valuable.

### **Girls.**

(Central, Senior and Junior Mixed, Senior and Junior Girls and Infants).

The outstanding event of the year 1933 was the issue by the Board of Education of the new Syllabus of Physical Training for Schools. This syllabus had been expected for some months, and when, by the courtesy of the Board, an advance copy was received in September, courses for both Junior and Infants' teachers were immediately arranged, and the Syllabus is already being introduced into most of the Schools, with an enthusiastic response from both teachers and pupils. A demonstration of typical exercises in the new syllabus was arranged for Head Teachers—classes of boys and girls of the 6-7, 8-9, 9-10 and 11-12 age groups demonstrating. This demonstration, which was well attended, was followed by a Conference on the scope of the syllabus and its application to the Schools, the Chairman of the Education Committee presiding.

Swimming again proved one of the most popular and valuable means of Physical Training from May till October. Well over 1,000 girls learned to swim for the first time, while the number of certificates gained exceeded all records as, with the boys' figures included, 100 per cent. increase on last year's figures was reached. All Central, Senior and Junior Departments, with the exception of three, sent girls' classes to the Baths regularly throughout the season. Twenty Schools organised their own Swimming Galas.

Organised Games, particularly Netball and Rounders, were carried on throughout the year. The decision of the Netball Section of the Croydon Schools' Athletic Association to abandon all League matches and Tournaments for the year, in order to give all Schools greater opportunities of inter-house and class games, is worthy of mention, as each Department was thus enabled to provide play for all girls wishing to take part, instead of much time being spent in special coaching of selected teams for inter-school play. In place of the annual League Tournaments a special half-day was devoted to inter-house tournaments in each School.

Twenty-eight Schools held sports afternoons.

Folk Dancing is now an established branch of Physical Training in all but four Senior and Junior Departments, and the Schools were well represented both at the Folk Dance Party kindly given by Captain and Mrs. Lethbridge-Abell in February in connection with the competition for the Lethbridge-Abell Folk Dance Trophy and Cup, and also at the Children's Festival of Folk Dance and Song, arranged by the East Surrey Branch of the English Folk Dance and Song Society at Ashburton Park in July.

Corrective Classes, for the special treatment of cases of faulty posture were held in nine schools. During the year, three of these classes (Winterbourne, Ingram and Ashburton Junior) had to be discontinued on account of staffing and other difficulties, but two new classes were started, viz., at Kingsley and Norbury Manor. There were six classes working at the end of the year.

Eleven Schools sent parties of girls either to camp or for a School Journey during the year. Of this number, five Schools went to Pilgrim Fort, the remaining six going farther afield, *e.g.*, Seaford, Broadstairs, etc.

From February to July, the Organiser of Physical Training conducted physical training classes at the Juvenile Instruction Centre for Unemployed Girls, at the Centre at Princess Road. These classes were held twice weekly.

Refresher Courses and Demonstrations for Teachers held during the year included Folk Dances, Organised Games for Junior Schools, Physical Training for Senior Schools, Courses on new Syllabus for Junior and Infants' Schools, Swimming for

A.S.A. Teachers' Certificate, Lecture on Swimming, and Head Teachers' Conference and Demonstration of the new Syllabus.

### INSTRUCTION IN SPECIAL SUBJECTS.

In the time-table for the year ending 31st March, 1934, the following provision is made for the instruction of older girls in Special Subjects, *e.g.*, Cookery, Homecraft, Housewifery, Domestic Science :—

*Intensive Housewifery Centres—*  
Tavistock.

*Cookery and Homecraft Centres—*  
Howard (Domestic Science).  
Ingram (Domestic Science and Homecraft).  
Sydenham (Cookery, Homecraft and Domestic Science)

*Special Rooms or Centres reserved for School named—*  
Ashburton (Domestic Science).  
Davidson (Domestic Science).  
Ecclesbourne (Domestic Science).  
Elmwood (Domestic Science).  
Kingsley (Domestic Science).  
Lanfranc (West Thornton Centre—Domestic Science).  
Oval (Domestic Science).  
Portland (Woodside Centre—Domestic Science).  
Tavistock (Domestic Science and Homecraft).  
Norbury Manor (Domestic Science).  
Rockmount (Domestic Science).  
Waddon (Domestic Science).  
Archbishop Tenison's (Domestic Science).  
Lady Edridge (Domestic Science).  
Heath Clark (Domestic Science).

Centres for Domestic Subjects have now practically ceased to exist as such. Instead, special rooms or Centres are available for each Senior Girls' School, whereby the older girls in such schools are able to receive the necessary instruction in Domestic Subjects as part of the normal school curriculum and, generally speaking, on the school premises.

### SECONDARY SCHOOLS.

The usual arrangements for the medical examination of secondary school children were continued in 1933; 1,455 children were examined, 628 of whom were boys and 827 girls. Table II of Appendix gives the detailed findings. 56 boys (8.9 per cent.) and 172 girls (20.8 per cent.) were found to require treatment, the most usual defects being dental and defective vision.

Although the figures are small, a table similar to that given for elementary school children and relating to nutrition has been included below.

Year of Birth.	BOYS.							GIRLS.						
	Number Examined.	Average Height in inches.	Average Weight in lbs.	Average maximum Height in inches.	Average maximum Weight in lbs.	Average minimum Height in inches.	Average minimum Weight in lbs.	Number Examined.	Average Height in inches.	Average Weight in lbs.	Average maximum Height in inches.	Average maximum Weight in lbs.	Average minimum Height in inches.	Average minimum Weight in lbs.
1927 ... ..	...	...	...	...	...	...	...	2	44.0	43.0	45.0	45.0	43.0	41.0
1926 ... ..	...	...	...	...	...	...	...	3	49.7	59.0	52.0	66.0	46.0	45.0
1925 ... ..	...	...	...	...	...	...	...	5	51.2	63.2	53.0	70.0	47.5	57.0
1924 ... ..	...	...	...	...	...	...	...	11	52.0	62.5	56.0	87.0	47.5	48.0
1923 ... ..	8	55.4	78.4	61.0	98.0	51.0	56.7	27	54.4	69.3	60.3	112.5	50.3	52.0
1922 ... ..	52	56.7	78.1	63.0	94.5	52.0	60.7	110	57.1	77.7	63.8	111.6	53.3	60.0
1921 ... ..	64	58.1	82.1	64.3	117.4	53.3	64.5	211	58.7	83.9	66.5	133.3	53.0	60.2
1920 ... ..	105	58.9	86.3	63.7	117.9	53.8	66.4	173	60.7	93.7	65.1	138.7	55.3	65.5
1919 ... ..	178	61.2	99.1	68.9	153.5	54.9	70.9	91	62.0	101.7	65.6	121.6	58.5	79.2
1918 ... ..	133	63.8	111.4	69.9	160.8	57.2	81.5	88	62.7	108.3	66.6	134.6	57.6	78.9
1917 ... ..	83	66.3	124.1	70.7	154.5	59.6	90.8	13	63.5	118.1	66.0	128.8	61.8	105.5
1916 ... ..	27	67.1	127.9	71.5	159.3	63.9	98.3	37	63.4	115.5	67.0	141.0	58.5	82.7
1915 ... ..	1	70.0	141.5	—	—	—	—	10	63.4	125.5	65.0	142.2	62.0	106.7
1914 ... ..	...	...	...	...	...	...	...	5	64.2	123.4	66.5	132.5	62.0	108.0

TABLE XXIV.

In conclusion, the report shows that much avoidable illness in school children is due to ignorance or neglect of simple physiological functions, and it is certain that if a child was fully instructed, before leaving school, in the fundamental principles of communal, personal, and domestic hygiene the health of the school children of the next generation would show a notable improvement.

I beg to tender my thanks to you, ladies and gentlemen, for the consideration you have at all times extended to me. I wish to acknowledge my indebtedness to the Education Officer and members of his staff for their helpful co-operation.

I desire also to bring to your notice the continued valuable services of Dr. Watson, the deputy medical officer, and others of my colleagues in the School Medical Service.

I am,

Yours faithfully,

OSCAR M. HOLDEN,

*School Medical Officer.*

## Mental Deficiency (Notification of Children) Regulations, 1928.

Statement of the number of Children notified during the year ended 31st December, 1933, by the Local Education Authority to the Local Mental Deficiency Authority.

Total number of children notified: 24.

*Analysis of the above Total.*

<i>Diagnosis.</i>					<i>Boys.</i>	<i>Girls.</i>
1.	(i)	Children incapable of receiving benefit or further benefit from instruction in a Special School:				
		(a) Idiots	...	...	...	1
		(b) Imbeciles	...	...	2	3
		(c) Others	...	...	1	7
	(ii)	Children unable to be instructed in a Special School without detriment to the interests 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		...	...	3	6
3.	Feeble-minded children notified under Article 3, <i>i.e.</i> , "special circumstances" cases		...		1	—
4.	Children who in addition to being mentally defective were blind or deaf		...	...	—	—
<b>Totals</b>					<b>7</b>	<b>17</b>



## ELEMENTARY SCHOOLS.

Year ended 31st December, 1933.

TABLE I.

### RETURN OF MEDICAL INSPECTIONS.

#### A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections—

	Year 1933.	Year 1932.
Entrants ... ..	2893	3119
Intermediates ... ..	2861	2876
Leavers ... ..	2867	2352
Total ...	8621	8347
Number of other Routine Inspections...	315	185
	8936	8532

#### B.—OTHER INSPECTIONS.

	Year 1933.	Year 1932.
Number of Special Inspections ... ..	4182	4847
Number of Re-inspections ... ..	6980	4810
Total ...	11162	9657
Total Visits to Elementary Schools ...	426	416

TABLE II

A. — RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31ST DECEMBER, 1933.

DEFECT OR DISEASE.	ROUTINE INSPECTIONS Number of defects.		SPECIAL INSPECTIONS. 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)
Malnutrition ... ..	32	41	...	2
Uncleanliness ... .. (See Table IV.—Group V.)	2	1	...	...
SKIN—				
Ringworm :				
Scalp ... ..	...	...	...	...
Body ... ..	...	...	...	...
Scabies ... ..	6	...	2	...
Impetigo ... ..	...	...	...	...
Other diseases (non-tuberculous) ...	1	1	...	...
EYE—				
Blepharitis ... ..	4	4	1	...
Conjunctivitis ... ..	1	1	...	...
Keratitis ... ..	...	...	...	...
Corneal Opacities ... ..	1	...	...	...
Defective vision (excluding squint) ...	364	24	94	2
Squint ... ..	39	7	5	2
Other conditions ... ..	2	...	...	...
EAR—				
Defective hearing ... ..	4	5	4	..
Otitis media ... ..	12	12	2	2
Other ear diseases ... ..	2	2	5	...
NOSE & THROAT—				
Enlarged tonsils only ... ..	118	227	12	5
Adenoids only ... ..	56	25	5	1
Enlarged tonsils & adenoids ... ..	333	68	34	4
Other conditions ... ..	27	16	4	1
ENLARGED CERVICAL GLANDS—				
(Non-tuberculous) ... ..	1	31	3	3
DEFECTIVE SPEECH... ..	4	6	...	...
TEETH DENTAL DISEASES				
(See Table IV.—Group IV.)	127	6	5	...
HEART & CIRCULATION—				
Heart disease :				
Organic... ..	9	91	...	4
Functional ... ..	...	102	...	2
Anæmia ... ..	8	29	...	2
LUNGS—				
Bronchitis ... ..	12	31	..	...
Other non-tuberculous diseases ..	3	5	...	2
TUBERCULOSIS—				
Pulmonary—Definite .. ..	...	...	...	...
„ Suspected ... ..	3	9	...	1
Non-pulmonary—Glands .. ..	...	2	...	...
„ Spine ... ..	...	...	...	...
„ Hip ... ..	...	...	...	...
„ Other Bones & Joints ..	...	...	...	—
„ Skin ... ..	...	...	...	..
„ Other Forms ... ..	...	1	...	...
NERVOUS SYSTEM—				
Epilepsy ... ..	...	4	1	2
Chorea ... ..	..	12	3	1
Other conditions ... ..	1	13	...	...
DEFORMITIES—				
Rickets ... ..	3	3	...	...
Spinal curvature ... ..	107	67	6	2
Other forms ... ..	113	26	16	2
OTHER DEFECTS & DISEASES ... ..	29	41	4	8

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

GROUP.	Number of Children.		Percentage of Children found to require treatment.	Year 1932.
	Inspected.	Found to require treatment.		
(1)	(2)	(3)	(4)	(5)
Code Groups—				
Entrants... ..	2893	343	11·9	11·9
Intermediates ... ..	2861	339	11·8	15·2
Leavers ... ..	2867	484	16·9	15·7
Total (Code Groups)...	8621	1166	13·5	14·1
Other Routine Inspections ... ..	315	47	14·9	10·3

TABLE III.

## Return of all Exceptional Children in the Area.

## CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Number of children suffering from combination of defects ... ..

## BLIND CHILDREN.

A blind child is a child who is too blind to be able to read the ordinary school books used by children.

In this Section only children who are so blind that they can only be appropriately taught in a school for blind children are included.

<i>At Certified Schools for the Blind.</i>	<i>At Public Elementary Schools.</i>	<i>At Other Institutions.</i>	<i>At no School or Institution.</i>	<i>Total.</i>
11	...	...	...	11

## PARTIALLY BLIND CHILDREN.

Only children who, though they cannot read ordinary school books or cannot read them without injury to their eyesight, have such power of vision that they can appropriately be taught in a school for the partially blind are included.

Children who are able by means of suitable glasses to read the ordinary school books used by children without fatigue or injury to their vision are not included in this Table.

<i>At Certified Schools for the Blind.</i>	<i>At Certified Schools for the Partially Blind.</i>	<i>At Public Elementary Schools.</i>	<i>At other Institutions.</i>	<i>At no School or Institution.</i>	<i>Total.</i>
...	22	4	...	...	26

## DEAF CHILDREN.

Only children who are so deaf that they can only be appropriately taught in a school for the deaf are included.

<i>At Certified Schools for the Deaf.</i>	<i>At Public Elementary Schools.</i>	<i>At other Institutions.</i>	<i>At no School or Institution.</i>	<i>Total.</i>
12	...	...	...	12

## PARTIALLY DEAF CHILDREN.

Only children who can appropriately be taught in a school for the partially deaf are included.

<i>At Certified Schools for the Deaf.</i>	<i>At Certified Schools for the Partially Deaf.</i>	<i>At Public Elementary Schools.</i>	<i>At other Institutions.</i>	<i>At no School or Institution.</i>	<i>Total.</i>
...	3	2	...	...	5

## MENTALLY DEFECTIVE CHILDREN.

## FEEBLE-MINDED CHILDREN.

Mentally Defective children are children who, not being imbecile and not being merely dull or backward, are incapable by reason of mental defect of receiving proper benefit from the instruction in the ordinary Public Elementary Schools but are not incapable by reason of that defect of receiving benefit from instruction in Special Schools for mentally defective children.

This category includes only those children for whose education and maintenance the Local Education Authority are responsible, and excludes all children who have been notified to the Local Authority under the Mental Deficiency Act.

<i>At Certified Schools for Mentally Defective Children.</i>	<i>At Public Elementary Schools.</i>	<i>At Private Schools.</i>	<i>At no School or Institution.</i>	<i>Total.</i>
120	14	5	13	152

## EPILEPTIC CHILDREN.

## CHILDREN SUFFERING FROM SEVERE EPILEPSY.

Only children are included who are epileptic within the meaning of the Act, i.e., children who, not being idiots or imbeciles, are unfit by reason of severe epilepsy to attend the ordinary Public Elementary Schools.

<i>At Certified Special Schools.</i>	<i>At Public Elementary Schools.</i>	<i>At other Institutions.</i>	<i>At no School or Institution.</i>	<i>Total.</i>
6	7	...	...	13

## PHYSICALLY DEFECTIVE CHILDREN.

Physically Defective children are children who, by reason of physical defect, are incapable of receiving proper benefit from the instruction in the ordinary Public Elementary Schools, but are not incapable by reason of that defect of receiving benefit from instruction in Special Schools for physically defective children.

## A. TUBERCULOUS CHILDREN.

In this category are placed only cases diagnosed as tuberculous and requiring treatment for tuberculosis at a sanatorium, a dispensary, or elsewhere. Children suffering from crippling due to tuberculosis which is regarded as being no longer in need of treatment are recorded as crippled children, provided that the degree of crippling is such as to interfere materially with a child's normal mode of life. All other cases of tuberculosis regarded as being no longer in need of treatment are recorded as delicate children.

## I—Children Suffering from Pulmonary Tuberculosis.

(Including pleura and intra-thoracic glands.)

<i>At Certified Special Schools.</i>	<i>At Public Elementary Schools.</i>	<i>At other Institutions.</i>	<i>At no School or Institution.</i>	<i>Total.</i>
nil	nil	nil	nil	nil

## II.—Children Suffering from Non-Pulmonary Tuberculosis.

(This category includes tuberculosis of all sites other than those shown in (I) above.)

<i>At Certified Special Schools.</i>	<i>At Public Elementary Schools.</i>	<i>At other Institutions.</i>	<i>At no School or Institution.</i>	<i>Total.</i>
6	11	5	4	26

### B. DELICATE CHILDREN.

This Section is confined to children (except those included in other groups) whose general health renders it desirable that they should be specially selected for admission to an Open Air School.

<i>At Certified Special Schools.</i>	<i>At Public Elementary Schools.</i>	<i>At other Institutions.</i>	<i>At no School or Institution.</i>	<i>Total.</i>
5	10	...	1	16

### C. CRIPPLED CHILDREN.

This Section is confined to children (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, i.e., children who generally speaking are unable to take part, in any complete sense, in physical exercises or games or such activities of the School curriculum as gardening or forms of handwork usually engaged in by other children.

<i>At Certified Special Schools.</i>	<i>At Public Elementary Schools.</i>	<i>At other Institutions.</i>	<i>At no School or Institution.</i>	<i>Total.</i>
59	12	...	5	76

### D. CHILDREN WITH HEART DISEASE.

This Section is confined to children whose defect is so severe as to necessitate the provision of educational facilities other than those of the Public Elementary School.

<i>At Certified Special Schools.</i>	<i>At Public Elementary Schools.</i>	<i>At other Institutions.</i>	<i>At no School or Institution.</i>	<i>Total.</i>
31	6	...	12	49

TABLE IV.—RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31ST DECEMBER, 1933.

Group I.—Minor Ailments (excluding uncleanliness, for which see Group VI)

Disease or Defect.	NUMBER OF DEFECTS TREATED OR UNDER TREATMENT DURING THE YEAR.			Year 1932.
	Under the Authority's Scheme.	Otherwise.	TOTAL.	
(1)	(2)	(3)	(4)	(5)
<b>SKIN—</b>				
Ringworm, Scalp ... ..	18 (3)	...	18	15
"  Body ... ..	28	...	28	30
Scabies ... ..	88	...	88	62
Impetigo ... ..	257	...	257	286
Other skin diseases ... ..	124	...	124	95
<b>MINOR EYE DEFECTS—</b> (External and other, but excluding cases falling in Group II)				
	192	..	192	174
<b>MINOR EAR DEFECTS ... ..</b>				
	294	...	294	321
<b>MISCELLANEOUS —</b> (e.g. Minor injuries, bruises, sores, chilblains, etc.) ...				
	634	...	634	501
<b>TOTAL ... ..</b>	<b>1635</b>	<b>...</b>	<b>1635</b>	<b>1484</b>

Group II.—Defective Vision and Squint (excluding minor eye defects treated as minor ailments.—Group I.)

Disease or Defect	NUMBER OF DEFECTS DEALT WITH.			Year 1932.	
	Under the Authority's Scheme.	Submitted to refraction by private practitioner or at hospitals apart from the Authority's scheme.	Otherwise.		TOTAL.
(1)	(2)	(3)	(4)	(5)	(6)
<b>Errors of refraction (including squint)</b>	<b>780</b>	<b>19</b>		<b>799</b>	<b>865</b>
<b>Other defect or disease of the eyes (excluding those recorded in Group I)</b>	<b>2</b>	...	...	<b>2</b>	...
<b>TOTAL ... ..</b>	<b>782</b>	<b>19</b>		<b>801</b>	<b>865</b>

Total number of children for whom spectacles were prescribed—

	Year 1932
(a) Under the Authority's scheme ... ..	593 610
(b) Otherwise ... ..	19 29

Total number of children who obtained or received spectacles—

	Year 1932
(a) Under the Authority's scheme ... ..	462 560
(b) Otherwise ... ..	19 29

## 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)
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
3	46	350	-	14	-	40	1	17	46	390	1	...	454
Year 1932 } 281				75				356			...	356	

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and adenoids. (iv) Other defects of the nose and throat.

## GROUP IV.—ORTHOPAEDIC AND POSTURAL DEFECTS.

	Under the Authority's Scheme.			Total number treated.
	(1)			
	Residential treatment with education.	Residential treatment without education.	Non-residential treatment at an orthopaedic clinic.	
	(i)	(ii)	(iii)	
Number of children treated	27	20	508	520

TABLE IV.

## GROUP V.—DENTAL DEFECTS.

(1) Number of Children who were—										Year 1932	
(a) Inspected by the dentist :—											
Routine Age groups.	Aged	...	...	...	5-6	986	Total—18087	...	...	1431	
		"	...	...	...	6-7		1513		...	2031
		"	...	...	...	7-8		1728		...	2008
		"	...	...	...	8-9		1643		...	2040
		"	...	...	...	9-10		1832		...	2216
		"	...	...	...	10-11		1935		...	2316
		"	...	...	...	11-12		1967		...	2412
		"	...	...	...	12-13		2090		...	2198
		"	...	...	...	13-14		2715		...	1354
		"	...	...	...	14-15		1254		...	722
		"	...	...	...	15 up		424		...	249
		Specials	...	...	...	...		...		1816	1864
					Grand Total	...		19903	20841		
										Year 1932	
	(b) Found to require treatment	...	...	...	...	14845		...	14837		
	(c) Actually treated	...	...	...	...	7773		...	7928		
(2)	Half-days devoted to Inspection	...	...	...	...	109		...	122		
	" " Treatment	...	...	...	...	1087		...	1055		
								1196	1177		
(3)	Attendances made by children for treatment	...	...	...	...	13444		...	13348		
(4)	Fillings—Permanent teeth	...	...	...	...	4795		...	3896		
	Temporary teeth	...	...	...	...	829		...	874		
								5624	4770		
(5)	Extractions—Permanent teeth	...	...	...	...	2707		...	2702		
	Temporary teeth	...	...	...	...	10740		...	11707		
								13447	14409		
(6)	Administrations of general anaesthetics for extractions	...	...	...	...	2125		...	2322		
(7)	Other operations—Permanent teeth	...	...	...	...	2077		...	2093		
	Temporary teeth	...	...	...	...	77		...	28		
								2154	2121		



GROUP VI.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

	Year 1932	
(i) Average number of visits per school made during the year by the School Nurses (including subsequent visits)...	11.0	11.9
(ii) Total number of examinations of children in the Schools by School Nurses ...	66758	65121
(iii) Number of individual children found unclean on first examination	1961	2633
(iv) Number of children cleansed under arrangements made by the Local Education Authority ...	Nil	1
(v) Number of cases in which legal proceedings were taken :—		
(a) Under the Education Act, 1921 ...	—	—
(b) Under School Attendance Bye-laws ...	5	

## SECONDARY SCHOOLS.

Year ended 31st December, 1933.

TABLE I.

## RETURN OF MEDICAL INSPECTIONS.

## A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections—

						Year 1933.	Year 1932.
Age 11 or under	...	...	...	...	...	221	319
12	...	...	...	...	...	290	445
13	...	...	...	...	...	286	295
14	...	...	...	..	...	265	273
15	...	...	...	...	...	219	296
16	...	...	..	..	...	96	181
17	...	...	...	...	...	62	29
18 or over	...	...	...	...	...	16	—
						—	—
					<b>Total ...</b>	<b>1455</b>	<b>1838</b>
						—	—

## B.—OTHER INSPECTIONS.

						Year 1933.	Year 1932.
Number of Special Inspections	...	...	...	...	...	129	19
Number of Re-inspections	...	...	...	...	...	327	274
						—	—
					<b>Total ...</b>	<b>456</b>	<b>293</b>
						—	—
Visits to Secondary Schools	...					69	87

TABLE II.—A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31ST DECEMBER, 1933.

DEFECT OR DISEASE	ROUTINE INSPECTIONS. Number of defects.		SPECIAL INSPECTIONS. Number 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)
Malnutrition ...	1	8	...	...
Uncleanliness ...	...	...	...	...
(See Table IV.—Group V.)				
SKIN—				
Ringworm	...	...	...	...
Scalp ...	...	...	...	...
Body ...	...	...	...	...
Scabies ...	...	...	...	...
Impetigo ...	...	...	...	...
Other diseases (non tuberculous)	...	...	...	...
EYE—				
Blepharitis ...	...	...	...	...
Conjunctivitis ...	1	...	...	...
Keratitis ...	...	...	...	...
Corneal opacities ...	...	...	...	...
Defective vision (excluding squint).	83	12	9	...
Squint ...	1	...	...	...
Other conditions ...	1	...	...	...
EAR—				
Defective hearing ...	...	1	...	...
Otitis media ...	...	1	...	...
Other ear diseases ...	...	...	...	...
NOSE AND THROAT—				
Enlarged tonsils only ...	10	18	...	...
Adenoids only ...	2	1	...	...
Enlarged tonsils and adenoids ...	...	3	...	1
Other conditions ...	2	3	...	1
ENLARGED CERVICAL GLANDS (Non Tuberculous)	...	...	...	...
DEFECTIVE SPEECH ...	...	1	...	...
TEETH—DENTAL DISEASE... (See Table IV.—Group IV).	83	3	...	...
HEART AND CIRCULATION—				
Heart Disease—				
Organic ...	...	7	...	...
Functional ...	...	11	...	...
Anæmia ...	1	21	...	...
LUNGS—				
Bronchitis ...	...	...	...	...
Other non-tuberculous diseases	...	...	...	...
TUBERCULOSIS—				
Pulmonary—				
Definite ...	...	...	...	...
Suspected ...	1	...	...	...
Non-pulmonary—				
Glands... ..	...	...	...	...
Spine ... ..	...	...	...	...
Hip ... ..	...	...	...	...
Other bones & joints...	...	...	...	...
Skin ... ..	...	...	...	...
Other forms ...	...	...	...	...
NERVOUS SYSTEM—				
Epilepsy ... ..	...	...	...	...
Chorea ... ..	...	6	...	1
Other conditions ...	...	9	...	...
DEFORMITIES—				
Rickets ... ..	...	...	...	...
Spinal curvature ...	31	47	...	...
Other forms ... ..	6	7	1	2
OTHER DEFECTS AND DISEASES ...	3	8	...	...

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

GROUP.  (1)	Number of Children.		Percentage of children found to require treatment.  (4)
	Inspected.  (2)	Found to require treatment.  (3)	
11 or under ... ..	221	24	10.9
12 ... ..	290	41	14.2
13 ... ..	286	33	11.5
14 ... ..	265	19	7.2
15 ... ..	219	23	10.5
16 ... ..	96	3	3.1
17 ... ..	62	2	3.2
18 and over ... ..	16	...	...
	1455	145	10.0

TABLE IV.—RETURN OF DEFECTS TREATED DURING THE YEAR ENDED, 31ST DECEMBER, 1933

Group I.—Minor Ailments (excluding uncleanliness, for which see Group V).

Disease or Defect.  (1)	NUMBER OF DEFECTS TREATED, OR UNDER TREATMENT DURING THE YEAR.		
	Under the Authority's scheme.  (2)	Otherwise.  (3)	TOTAL  (4)
SKIN—			
Ringworm (scalp) ... ..	...	...	...
" (body) ... ..	...	...	...
Scabies ... ..	...	...	...
Impetigo ... ..	...	...	...
Other skin disease ... ..	...	...	...
MINOR EYE DEFECTS—			
(External and other, but excluding cases falling in Group II) .. ..	...	...	...
MINOR EAR DEFECTS—	...	...	...
MISCELLANEOUS—			
(e.g. minor injuries, bruises, sores, chilblains, etc.) ... ..	8	...	8
TOTAL.	8	...	8

## SECONDARY

Group II.—Defective Vision and Squint (excluding minor eye defects treated as minor ailments.—Group I.)

Defect or Diseases	NUMBER OF DEFECTS DEALT WITH.				Year 1932
	Under Authority's Scheme.	Submitted to refraction by private practitioner or at Hospital apart from the Authority's scheme.	Other-wise.	TOTAL	
(1)	(2)	(3)	(4)	(5)	( )
Errors of refraction (including squint) ... ..	99	8		107	52
Other defects or disease of the eyes (excluding those recorded in Group I.) ...	...			...	...
TOTAL ... ..	99	8		107	52

Total number of children for whom spectacles were prescribed:—

(a) Under the Authority's scheme ... ..	71
(b) Otherwise ... ..	8

Total number of children who obtained or received spectacles:—

(a) Under the Authority's scheme ... ..	73
(b) Otherwise ... ..	8

Group III.—Treatment of Defects of Nose and Throat.

## NUMBER OF DEFECTS.

Received operative treatment.								TOTAL..	Received other forms of treatment.	Total number treated.	Year 1932
Under the Authority's scheme in clinic or hospital.				By private practitioner or hospital apart from the Authority's scheme.							
(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)(2)(3)(4)	(4)	(5)	(6)
-	-	3	-	1	-	3	1	1 - 6 1	...	8	10

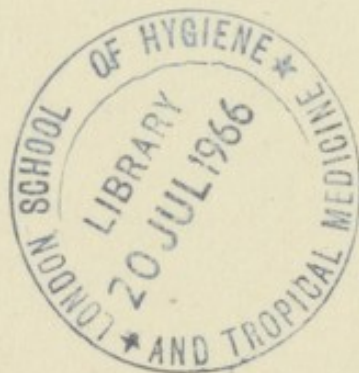
(1) Tonsils only; (2) Adenoids only; (3) Tonsils and Adenoids,  
(4) Other Defects of Nose and Throat.











R 5/66

