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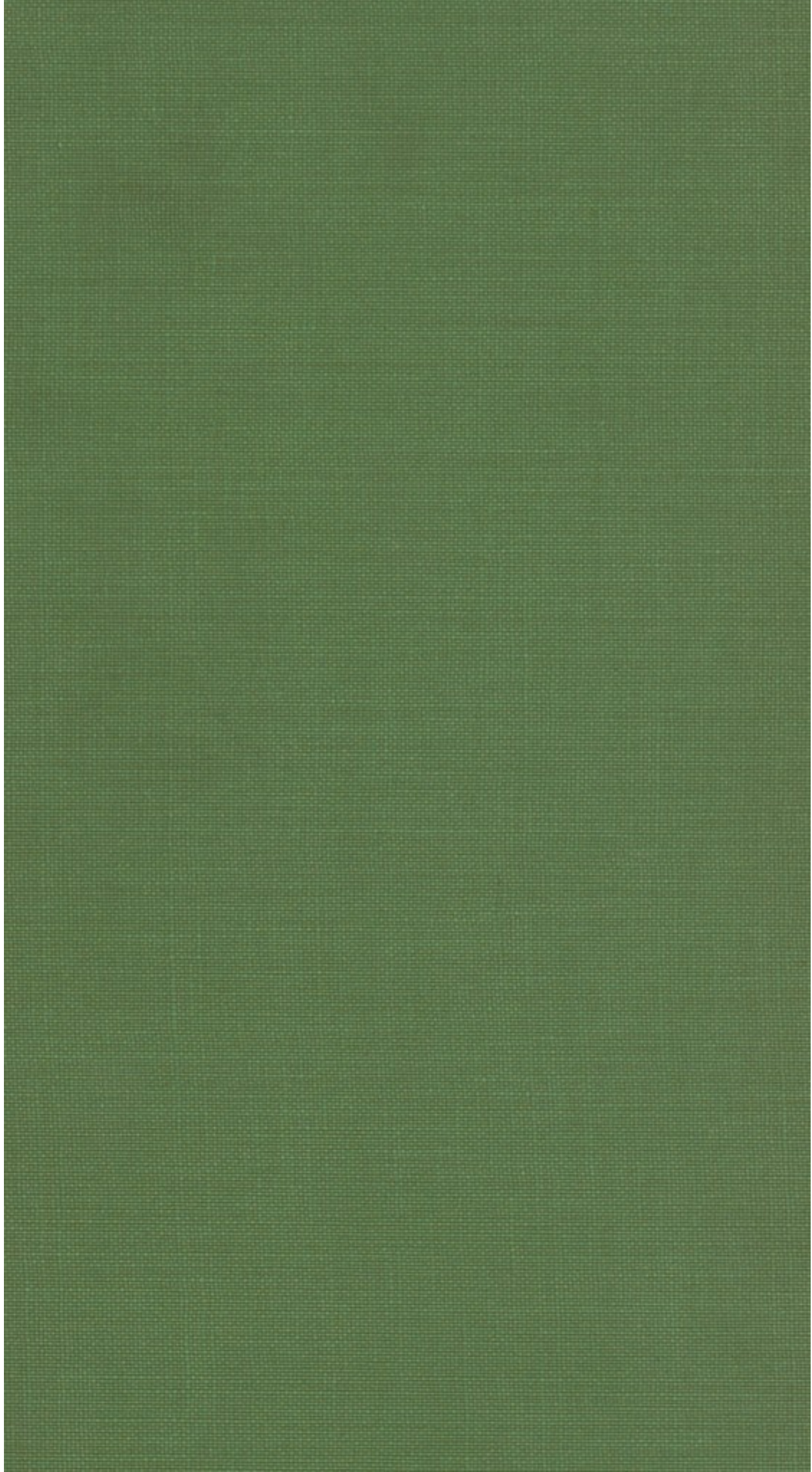
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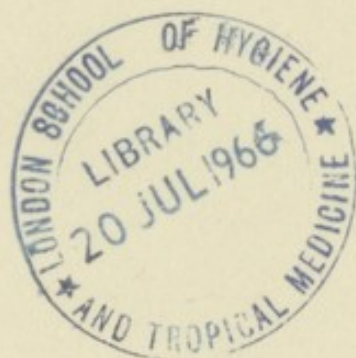
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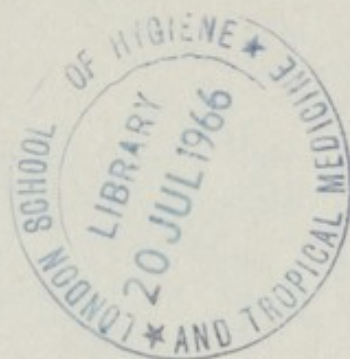


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County Borough of Croydon.



ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
AND
SCHOOL MEDICAL OFFICER
For the Year 1930

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

CROYDON:

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

PUBLIC HEALTH COMMITTEE.

NOVEMBER, 1929—1930.

THE WORSHIPFUL THE MAYOR (Mr. Alderman T.
Arthur Lewis, J.P.)

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

Councillor Mrs. ROBERTS (Vice-Chairman).

Mr. Alderman W. B. SOUTHWELL, J.P.

Mr. Councillor E. E. L. ARKELL.

Mr. Councillor E. C. S. BAKER, J.P.

Mr. Councillor A. L. BODDINGTON.

Mr. Councillor W. J. GIBBINS.

Councillor Mrs. HEIGHTON.

Mr. Councillor C. H. HODGE.

Mr. Councillor B. HOLDEN.

Mr. Councillor S. RODEN.

Councillor Mrs. SQUIRE.

Mr. Councillor A. J. STUBBS, M.I.C.E.

For purposes of Maternity and Child Welfare :—
Mesdames HORN, LEWIS, RICHARDS, SOUTHWELL,
and WEST.

COUNTY BOROUGH OF CROYDON.

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
AND
SCHOOL MEDICAL OFFICER
For the Year 1930.

To the Chairman and Members of the Public Health Committee.

LADIES AND GENTLEMEN,

I have the honour to present herewith my third Annual Report as Medical Officer of Health for Croydon. The arrangement follows that of last year's report, with the difference that a new section dealing with the Local Government Act, 1929, has been incorporated. The contents have been compiled to accord with the requirements of Circular 1119 of the Ministry of Health.

The year has been a busy one, and the work of the Department shows an increase throughout. The coming into force of the Local Government Act on April 1st added to the responsibilities of the work whilst at the same time extending its scope. The Housing Act, 1930, has also laid additional duties on the Department. In connection with this Act a survey has been carried out of the Old Town Area and a Representation made concerning 107 houses comprising four Clearance Areas, and 110 houses which could be included in an Improvement Area.

Vital Statistics.—Although the Registrar-General's population estimate is the same as for 1929, it is felt that this is an underestimate when the steady growth in the number of inhabitants over the past decennium is borne in mind. The Census, to be taken in 1931, will probably show that past growth has been maintained. Underestimation of population naturally affects vital statistics.

The year under review has been a healthy one. The general death-rate is the lowest but one recorded. Apart from a somewhat heavy incidence of Measles there has been no undue prevalence of epidemic diseases, and the Infantile Mortality has reached the gratifying low level of 48 per 1,000. For a large town like Croydon this is a satisfactory figure and will compare favourably with any similar town in the British Isles. The birth-rate showed

a slight rise over 1929, but the bulk of the increase of population is due to immigration.

Sanitary Circumstances.—The Housing Act, 1930, marks an advance on the administrative side, facilitating as it does the rather cumbersome methods of its predecessors. The demarcation of areas into Clearance Areas and Improvement Areas is a valuable provision and should help towards the abolition of slum property and, what is even more important, the prevention of slums. Especially with regard to individual unfit houses, the Act should prove useful. The most difficult housing problem in Croydon is not the existence of extensive slum areas, but the sub-letting of houses originally intended for only one family. This is the great cause of overcrowding. The Act will help a little towards dealing with this evil, though the powers given to Local Authorities are not sufficiently wide. It is not, by any means, the landlord who is always to blame, the tenant is as frequently the offender.

Four thousand seven hundred and six houses were inspected under the Public Health or Housing Acts, and 1,832 houses were inspected under house-to-house inspection (Inspection of District Regulations, 1910). 1,266 houses were built in the Borough during the year, of which 58 were erected by the Local Authority. For 3,100 houses notices were served on the owners to remedy defects found, and 2,540 had been remedied by the end of the year. Two representations were made for Closing Orders, and one Order was obtained.

In a total of 4,706 houses inspected, 3.5 per cent. were found to be overcrowded. This is a reduction on last year's figures, which points to a gradual amelioration of the position. As there is no statutory definition of what is meant by "overcrowding," the basis of calculation employed was that in use under the local bye-laws for Common Lodging Houses and Houses Let in Lodgings.

Food Supply.—There is undoubtedly a steady improvement in the average standard of cleanliness of food premises. The buying public show welcome signs of taking a closer interest in this aspect of hygiene. More especially in connection with milk supply has a strict supervision been exercised. The chemical standard of milk was, on the whole, satisfactory; 13 samples out of a total of 386 or 3.3% were found not to come up to the statutory requirements. On the bacteriological side the results are not so good. 132 samples fell below the standard of Grade A milk, a

standard which is not unreasonable. 32 samples were found to contain tubercle bacilli, though the numbers are rather inflated owing to repeated samples being taken from suspected sources of supply in order to ascertain if action taken had proved effective. The present designations of milk are confusing to the ordinary consumer, who, naturally, concludes Grade A is the highest standard, whereas, in point of fact it is the least "safe" of the designated milks. Nearly 90% of the volume of milk sold for human consumption in Croydon is bottled. This is all to the good, but bottling does not make a dirty milk clean, whilst if due care in the washing of the bottles is not exercised it may make clean milk dirty. The consumer also has his part to play, and he cannot complain of the souring of the milk if he keeps it in the home under unsatisfactory conditions.

The practice of leaving empty milk bottles on the door step or on the pavement is not hygienic, and should not be done. Many of the empty bottles are also returned in a dirty state. It should be remembered that sour milk is exceedingly difficult to get off the sides of a bottle, and although modern bottle washing machines cleanse very thoroughly, all bottlers of milk do not have available a machine which is very expensive and requires steam power to operate.

In an area like Croydon, that takes practically all its supply from outside the town, the Local Authority are rather at a disadvantage, inasmuch as they are not cognisant of the farms from which the supplies are derived. The wholesale bulking of milk also greatly complicates matters and renders the tracing of tuberculous milk to its source a matter of much difficulty and, in some cases, an impossible task. A well-equipped dairy for the collection, pasteurisation and distribution of milk was established by a wholesale milk company in Croydon during the year. Although pasteurised milk is not fresh milk and cannot take the place of clean fresh milk, it is, if efficiently pasteurised, a safe source of supply. Until the time comes when all milk attains the standard of Certified, or Grade A (Tuberculin Tested), it is necessary to advocate pasteurisation. Firms engaged in the pasteurisation of milk should, nevertheless, exact as high standard of cleanliness as possible from their consignees. The pasteurising of dirty milk is a bad policy from every point of view.

Constant supervision has been maintained over bakehouses, ice-cream factories, and other premises, on which food is prepared for human consumption, and also over restaurants, eating houses

and similar establishments. There has also been an increase in work under the Shop Hours Act, the number of infringements being considerably in excess of those recorded in 1929.

Cancer.—There is no noticeable increase in the mortality from this disease. It can be repeated with profit that some of the deaths which occur could have been prevented if the victims had realised the importance of a thorough medical examination at occasional intervals. In persons over 40 years of age, any unusual symptoms should be investigated without delay. In all probability they are not due to cancerous growth, but they may be. In the early stages, Cancer is curable either by radium or by surgical procedure.

Infectious Diseases.—Fewer cases of both Scarlet Fever and Diphtheria are recorded, and in both the mortality rate also was lower than in 1929. Measles, mumps, and chicken-pox were prevalent during the first half of the year, but whooping cough caused little trouble until December, when it shewed signs of increasing.

In order to group the medical services of the Council as much as possible, arrangements were made to cease admitting infectious cases, such as Measles, Whooping Cough, Erysipelas, etc., into the Mayday Road Hospital, and to receive them instead into the Borough Fever Hospital. This has worked satisfactorily, and the accommodation at the Fever Hospital has not as yet been unduly taxed. Two wards which had been out of commission for some time were renovated, and the sanitary and heating apparatus overhauled and where necessary replaced. By this means 28 beds have been added to the existing accommodation.

Tuberculosis.—The slow decline in both the incidence of, and the deaths from, Tuberculosis of all forms, is maintained. This decline is most noticeable in the non-pulmonary form: the gradual improvement in the milk supply, with the wider use of pasteurised milk, has played an undoubted part in this welcome feature. The decline in the pulmonary form is less conspicuous. Pulmonary Tuberculosis relies for its spread largely on human weaknesses and insanitary environment. It is a preventable disease, and could be reduced to insignificant proportions within two generations if everyone realised that it was spread from person to person, usually by coughing, sneezing, and above all, spitting; and that the great ally of the Tubercle Bacillus was a diminished state of bodily health and resistance brought about by insanitary environment and wrong modes of living. Once again the advisability of

all "Contacts" of a case of Tuberculosis to submit to a medical examination is stressed. The number of such examinations is increasing, but is still far too small.

Work at Cheam Sanatorium has continued on the same lines as in former years. Owing to the erection of glass verandahs and bed platforms, the number of cases admitted had to be curtailed for a period of two months. This addition has proved very beneficial to the patients who can now lie in bed in the open air in any but the severest weather.

The erection of glass partitions between every two beds in the wards has also conduced to greater privacy and has been appreciated. Towards the end of the year a portion of the premises were altered and adapted for the installation of an X-Ray plant, which will be obtained early in 1931. This facility will enable the operation of artificial pneumothorax to be performed. In suitable subjects this little operation holds out the best prospects of permanent arrest of the disease yet known to medical science, but in order to select the proper types of cases and to control the action of the method, the X-Ray is absolutely necessary.

The Occupation Centre was transferred during the year to a new building erected in the sanatorium grounds especially for this purpose. The new accommodation has been fully utilized and has enabled a greater variety of work to be done under excellent conditions. This occupational work is now firmly established and is increasing steadily in volume.

It undoubtedly exerts a good psychological effect, and so indirectly assists treatment. In fact, it may be said without exaggeration, to be an important therapeutic agent. The expansion of the home side of the work has continued; there are always a number of patients discharged from the Sanatorium who continue at home the art or craft they have learnt whilst in the Sanatorium. All the home workers are kept under supervision and visited from time to time by the instructress, who assists with designs, helps with difficulties and sells the finished articles if the worker so desires. Many of the workers have, however, found their own market.

Venereal Diseases.—An increase in the number of new cases, and especially in the number of attendances for treatment, is recorded. The marked augmentation in the latter figure has been brought about by the holding of an additional session. There are

now three sessions a week, one for women and two for men. The great difficulty in all Venereal Diseases Schemes is the cessation of attendance by patients before they are properly cured, and although additional facilities for attendances will not overcome the difficulty it will do something towards lessening it.

Maternity and Child Welfare.—The chief event during the year was the opening of the new extension of St. Mary's Hospital. This institution, which is conducted by the Croydon Mothers' and Infants' Welfare Association, now provides 32 beds for maternity, of which 30 are reserved for cases sent by the Council. The Hospital is modern and well equipped and should play a prominent part in the maternity work of the town.

Although no new centres have been opened by the Croydon Mothers' and Infants' Welfare Association, the attendances at the Centres, and also at the Council's Centre, shew an increase, reaching the peak figure of 63,951. Some of the Centres have been overcrowded, and the establishment of further Centres must be considered in the immediate future. Overcrowding has been most pronounced at the Council's Centre at Lodge Road, where the premises have, unfortunately, proved inadequate to cope with the numbers.

A useful step towards co-ordination was taken by the appointment of a whole-time Obstetrician and Gynæcologist. This specialist, who is an officer of the Public Health Staff, resides at Mayday Road Hospital, and is responsible for all the maternity and gynæcological work at that institution. In addition, he is in clinical charge of the ante-natal centres, and attends daily at St. Mary's Hospital, where, however, he does not conduct any confinements, these being attended by the midwives on the staff, or, when necessity arises, by one of a rota of six general medical practitioners. Late in 1930 a Post-Natal Clinic was established and, although only in operation a short time, is already proving a conspicuous success. In any efficient maternity scheme, continuity of medical supervision is essential. Under this experimental scheme a decided step forward has been made towards this aim, inasmuch as all cases, other than emergencies, for admission to St. Mary's Hospital, or Mayday Road Hospital, are required to attend the ante-natal clinic and after their confinement, on returning home, are visited by the health visitors, and invited to attend the post-natal clinic. The small number of refusals shews that the mothers appreciate the value of the continuity of medical service.

Coombe Cliff Convalescent Home.—In November the Council opened a Convalescent Home for infants and children up to the age of 14 years in Coombe Cliff. The premises and grounds were admirably suited for this purpose, whilst the furnishings have been carried out on bright and cheerful home nursery lines. The results obtained in the rapid improvement of the little patients admitted have fully justified the pioneer step taken.

Additional duties have been placed on the health visitors as they now carry out home visits to foster-mothers and foster-children under the Children Act, 1908, Part I., and to blind persons under the Blind Persons Act, 1920. An unprecedentedly high rate of absenteeism due to sickness among the health visiting staff created a difficult year, and caused a diminution in the number of home visits. Two additional health visitors were appointed during the year. This enabled a re-arrangement of districts to be made, and each health visitor is now responsible for all home visits in connection with school medical work; first visits to tuberculosis cases, maternity and child welfare, blind persons and foster-children in her district. The amalgamation of duties ensures fewer calls at houses, a better concentration of visitation, and a variety of interest.

The Observation Nursery had a busy year with a higher proportion of serious cases than in former years. Though only a small institution, it is a useful unit in the Maternity and Child Welfare Scheme. Whether the work done could not be as efficiently and more economically carried on if it was an integral part of a larger institution and not a separate entity, is open to argument. If the Council decide to transfer the work at a later date to appropriate pavilions at the Mayday Road Hospital, the accommodation vacated at Lodge Road would afford much needed space for the Maternity and School Clinics held on the ground floor, and for which the present facilities are inadequate.

The year was notable in so far as the Infantile Mortality reached the lowest figure yet recorded for Croydon. The rate of 48 deaths per 1,000 births is a low one when the size of the town, and its increasing industrialisation is remembered. It is one of the lowest of those recorded for the 107 large towns.

Mental Deficiency.—The greatest need during the year in this branch of work has been that of suitable accommodation. Negotiations were entered into with the Surrey County Council for Croydon to participate in any provisions they contemplated. The County Council are engaged in altering two institutions previously used as Workhouses and they have bought a large estate

at Chertsey with the intention of establishing a Colony for mentally defective persons. When this project matures the present difficulties will be met; but for the next two or three years the position will not shew much easement. A gradually increasing number of defectives have, in consequence, to be placed under guardianship. As this does not afford any means for proper training, it is not always the best method, but, in the face of circumstances, it is, for many cases, the only method.

Orthopædics.—This department has continued to expand. The gross deformities so often seen in years past are far less frequently encountered now. There are, however, a considerable number of minor deformities needing correction, and it is especially with these cases the orthopædic work exerts its most useful preventive and curative functions. The Remedial Exercises Clinic held in St. Andrew's Hall, Pump Pail, by a whole-time remedial gymnast on the Council's staff, works in conjunction with the Orthopædic Surgeon.

Propaganda.—This side of public health activity, the importance of which is increasingly stressed, has not been neglected. The localised edition of "Better Health" has continued its monthly issues, and no difficulty has been experienced in disposing of 4,000 copies a month. Addresses have been given, on request, to various Ratepayers' Associations in the town, and though the attendances have not always been large, the audiences have made up in the interest displayed. It is all to the advantage of the Public Health Department that the extent and variety of its ramifications should become more widely known. Ignorance and lack of interest are the two great obstructions to appreciation and progress.

In conclusion, I wish to tender my thanks to the Chairman and members of the Public Health Committee, the Mental Deficiency Committee, and the various Sub-Committees for the sympathetic consideration they have given to any proposals I have submitted to them, and for the interest they have taken in the work of the Department as a whole and in its various parts.

The staff have carried out their duties in a satisfactory manner. In particular, I wish to thank Dr. W. B. Watson, the Deputy Medical Officer of Health, for his unfailing and unstinted help at all times.

I am,
Yours faithfully,
OSCAR M. HOLDEN,
Medical Officer of Health.

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STAFF OF THE HEALTH DEPARTMENT.

The staff of the Public Health Department on the 31st December, 1930, 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.
 Douglas M. Lindsay, M.D., F.R.F.P. & S., Assistant Medical Officer of Health for Obstetrics.
 F. W. Gavin, M.D., Ch.B., D.P.H., Assistant Medical Officer of Health and Assistant School Medical Officer.
 P. J. O'Connell, M.D., B.S., D.P.H., 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 Service.
 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 Service.
 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.

(b) *Part-time*:—

- Mary McDougall, M.B., C.M., Assistant Medical Officer, Maternity and Child Welfare.
 L. Ruth Duffy, 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).
 J. D. McLaggan, M.A., M.B., Ch.B., F.R.C.S.—Ionization Clinic Specialist.
 Rota of 8 local medical practitioners for surgical treatment of tonsils and adenoids.

Dental Staff.—

- Senior Dental Surgeon: W. G. Senior, L.D.S.
 Assistant Dental Surgeons: K. C. B. Webster, L.D.S. (appointed March),
 J. K. R. Bryce, 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 5 disinfectors, 1 rat-catcher, and 4 assistants to the Sanitary Inspectors.

Health Visiting Staff—

18 District Health Visitors; 2 Special Visitors; 2 Tuberculosis Nurses; 2 Clinic Nurses; 1 Almoner and 2 Dental Assistants.

Also 2 whole-time Masseuses and Remedial Gymnasts.

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

Nursing and Domestic Staffs.

Clerical Staff—

Twenty-three full-time clerks.

Summary of Vital Statistics for 1930.

Area (in acres) 12,617 acres.

Population (Census 1921), 190,873. Population (estimated middle of 1929), 222,300.

Number of Inhabited Houses (1921 Census), 41,923. Estimated 1930, 55,600.

Rateable Value (1st April, 1930), £1,893,722.

Product of a Penny Rate (1929-30), £7,501.

Rate in the £ (1929-30), 9s. 8d. (Addington Ward only, 8s. 11d).

Gross expenditure on Health Services (administered by Medical Officer of Health), £82,281 19s. 7d.

Income on Health Services, £29,560 10s. 7d.

Net expenditure on Health Services, £52,721 9s. 0d.

Live Births: Legitimate, 3,335; Male 1,689, Female 1,646. Illegitimate 179, Male 85, Female 94. Birth-rate 15.8.

Number of women dying in, or in consequence of child-birth from Sepsis R.G. 4, other causes R.G. 3; 2.0 per 1,000 births.

Deaths of Infants under one year of age per 1,000 live births: Legitimate 45, Illegitimate 106.

*Deaths from Measles (all ages), R.G. 22; Whooping Cough (all ages), R.G. 3; Diphtheria (all ages), R.G. 15; Diarrhoea (under two years of age), R.G. 20.

*Deaths from Diseases of the Respiratory System (including Tuberculosis) 1.69; Cardiac and Circulatory System (including Cerebral Hæmorrhage) 3.28; Renal System, 0.43; Digestive System, 0.34; Deaths from Suicide or Accidents, 0.42; Old Age, 0.54, per 1,000 of the population.

*The figures above are based on the Registrar-General's return which differ slightly from the figures given in Table VII.

SECTION I.

SOCIAL CONDITIONS AND VITAL STATISTICS.

Croydon is largely a dormitory town, but there is an increasing number of industries coming into the area with a consequent increase in the day population. The chief industries are iron foundries (bell casting) and engineering. The London Terminal Aerodrome is within the County Borough Boundary.

The population is growing rapidly, a feature which gives rise to difficulties in estimating vital statistics, as well as those peculiar to the administrative side of the department.

Croydon is an aggregate of townships, each of which shows its own characteristics. Norwood is rapidly becoming a tenement suburb, and with Norbury and Thornton Heath is practically entirely residential. Bad structural housing conditions are met with in the central part of the town, particularly in Whitehorse and Central Wards, though there are individual streets in nearly every ward in the town in which the standard of house property is low, especially when compared with the bulk of the residential areas. 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 1921 Census with a total enumerated population of 190,684, showed that of this number 40,534 lived and worked in Croydon, and 33,564 lived in the town, but worked elsewhere.

This Census also showed that 5.75 was the average number of rooms per dwelling and 1.14 the average number of families in each dwelling, which gives 1.25 rooms per person. In 1921, 4.7% of the population was living more than two persons per room, a slight increase in density over 1911 (4.3%). The next census will, probably, show a higher percentage, as the indications brought to the knowledge of the department show a distinct tendency towards the conversion of large and medium sized houses into tenements, containing up to six or more families.

Croydon, from being originally a purely residential town, is assuming more and more an industrial character.

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 10.7 deg.
 „ Permanent, 3.2 deg.
 No B. Coli in 100 c.c.
 No Streptococci.
 No acid in 100 c.c.
 Trace of peaty debris and fine sandy mineral matter.

The supply during the year was from the

Corporation's Wells	2,184,144,228
Metropolitan Water Board in bulk	503,156,000

2,687,300,228 gallons.

This works out, on a population basis of 225,000, at a consumption of 32.722 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 Sewerage.

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 £25,000 has been expended in main sewers and surface

water drains. At the sewage disposal works at Beddington, two Activated Sludge plants are in operation dealing with about 2½ 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 small houses and bungalows situate in remote positions, in which the sewage goes to cesspits.

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. Five beds are reserved by the Kent County Council for cases sent by them.

(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 £3,600 from the Local Authority as 30 of the beds are reserved for cases referred through the Local Authority.

(3) Children.

(a) Sick 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 Home.*

This Home was opened in November 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 Road Hospital and at the request of private medical practitioners.

(4) **Fever.**

The Borough Hospital, Purley Way.

The nominal accommodation is for 190 patients. Cases of all the notifiable infectious diseases are admitted other than tuberculosis.

(5) **Small Pox.**

The Croydon and Districts 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.

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:—

Male Beds ... 36 surgical
19 medical

Female Beds ... 34 surgical
19 medical

Children's Beds 22

A total of 130 beds.

The number of in-patients treated during 1930 was 2,162; the average stay of each in hospital being 18.87 days. The number of out-patient attendances was 125,319. The bed accommodation remained unchanged, but plans are in hand for the addition of 61 beds.

Mayday Road Hospital.

This 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>	61
------------------------	-----	-----	----

Maternity Beds ... 20 with 14 cots additionally.

Total ... 465 beds.

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) 11 beds; *Children* 8 beds; *Maternity* 6 beds; together with 7 private wards; a total of 42 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 Road Hospital and at various Children's Homes. Unmarried mothers are admitted to Mayday Road Hospital, to St. Mary's Hostel for the first confinement only, as well as to a large maternity home at Norwood, established by the Free Church Council. Another Voluntary Institu-

tion in Croydon (The Mission of Hope) receives large numbers of illegitimate children from various districts, as a preliminary to establishing them with foster parents 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 29 cases were referred. The reasons for reference were: Neglect to obtain necessary ophthalmic treatment, 7; Neglect to obtain treatment for adenoids and enlarged tonsils, 6; Neglect to obtain other medical or dental attention, 5; for miscellaneous reasons, 11. In connection with these references, the Society's Inspector paid 134 supervisory visits additional to the preliminary investigation.

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 and 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, 1930	1,452 persons; 599 cases (including able-
1st July, 1930 ...	1,344 ,, 552 ,, ,, bodied).
1st January, 1931	1,546 ,, 669 ,, ,,

Number of Croydon persons relieved in the Mayday Road Hospital on 1st January, 1931, and in the Queen's Road Homes on the same date—

Mayday Road Hospital ...	413
Queen's Road Homes ...	456

Expenditure on Out-relief to Croydon cases during the 12 months ended 30th September, 1930—

Half-year ended 31st March, 1930 ...	£11,204	13	0
Half-year ended 30th Sept., 1930 ...	£11,039	3	6

Mayday Road Hospital.

The total number of sick children on 1st January, 1930 : 75.

Admitted during the year 1930	...	...	975
Discharged or died	...	...	952
No. remaining on 1st January, 1931	...	...	98

On 1st January, 1931, the total number of beds at the Mayday Road Hospital was 465 and the total number of inmates 543.*

*It will be noticed this number is in excess of the certified accommodation. Extra beds are introduced as and when required, to take the excess cases.

THE LOCAL GOVERNMENT ACT, 1929.

This Act came into force on April 1st, 1930, and constitutes the most important enactment affecting local government passed for many years. Among other provisions not immediately related to public health, this Act abolished the Boards of Guardians, whose duties passed to the Councils of Counties and County Boroughs. In order to meet the new obligations the Councils formed Public Assistance Committees, who undertook all those duties of the Guardians which were not delegated to Special Committees of the Councils.

In Croydon the delegated duties comprised the carrying out of the Children Act, 1908, Part I., which is now done by the Public Health Committee, as is also the carrying out of the Vaccination Acts. In addition modified arrangements were made in connection with Maternity, Tuberculosis, and Mentally Deficient patients. The Council is now responsible directly through its Public Health and Mental Deficiency Committees for the care of these classes.

The Mayday Road Hospital has not as yet been appropriated by the Public Health Committee under Section 137 of the Public Health Act, 1875, on account of the present lack of accommodation. It was felt that if appropriation was made, the overcrowding would only be accentuated. Also, there are various important adjustments in connection with the grouping of patients

and the modernising of the buildings to be made before the institution can carry out satisfactorily its function as a Public General Hospital, which it would become on transference to the Public Health Committee. As soon as the necessary adjustments are concluded it is the intention of the Council to transfer the institution to the Public Health Committee.

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 is indicated in the various relevant portions of this report, the voluntary agencies carrying out work of public health interest receive their assistance direct from the Council in the form of annual grants. These grants have been fixed for a three-year period, at the end of which term they will be open to revision. Although at first there was nervousness on the part of some of the Societies, inasmuch as they thought that the Council might not be so sympathetic as the Ministry of Health had been, the actual operation of the new arrangement has convinced them that there was no cause for apprehension. There is the added advantage that the valuable work which the Voluntary Societies are doing is now more closely linked up with the official public health work, to the mutual benefit of both parties, and especially of the persons to aid whom the Societies have been founded.

Various special reports have been made during the year dealing with different aspects of the problems raised. Reports have been presented by the Medical Officer of Health on the Hospital accommodation, of all kinds, in the Borough, and the main recommendations for increasing that accommodation have been approved. The following is a summary of the Hospital accommodation at the present time.

I. *General Hospital Beds* (all sources other than private Nursing Homes)—

Male—Surgical and Medical	...	180 beds
Female	ditto	... 244 „
Children	ditto	... 81 „
		—
Total	...	505 beds
		—

Of these 198, including 30 for children, are provided in institutions largely maintained by Voluntary Contributions.

On the estimated population of 222,300, the General Hospital bed provision is one bed to 440 of the population. For a district

such as Croydon the General Hospital bed provision should be about four beds per 1,000 population.

All the institutions, with the exception of two small Cottage Hospitals, dealing with general hospital cases, are overtaxed.

II. *Tuberculosis* (excluding beds retained by the Council in outside institutions)) —

Total : 154 beds, none of which are in Voluntary Institutions. This is one bed to 1,443 of the population.

III. *Infectious Diseases*—

Total : 246 beds, none of which are Voluntary. 20 of these beds are retained by the Small Pox Joint Hospital Board, in the Small Pox Hospital of the Surrey County Council. This is (excluding Small Pox) one bed to 1,000 population.

IV.—*Maternity Bed Provision*—

I. In Voluntary Institutions	38 beds
II. In Rate or State-Aided Institutions	...	...	20 beds

Additionally there are 25 Private Maternity Homes affording an aggregate of 118 beds.

V.—*Hospital Accommodation for Mental Patients*—

(a) In the Croydon Mental Hospital : Males	...	201 beds
Females	...	448 „
		—
Total	...	649 „
		—

(b) At Mayday Road Hospital, 64 beds.

(c) At 6, Morland Road, 20 beds (low grade male defectives under 16 years of age).

There are, then, 765 beds provided for patients subject to be dealt with under the Lunacy Acts and 20 beds for a limited class of Mental Deficiency Act cases,

It was estimated that the accommodation at the Mayday Road Hospital should ultimately be increased to include the following—

Male Surgical	120 beds	Male Medical	200 beds—	320 beds
Female „	100 „	Female „	240 „	340 „
	—		—	—
	220		440	660 „
	—		—	—

Orthopædic, Surgical, Tuberculosis and other						
Special Cases ...	...	...	...	...	...	50 beds
Maternity ...	...	...	...	...	...	30 „
Children ...	...	...	...	...	...	60 „
						<hr/>
						800 „
						<hr/>

As over 100 beds at the Mayday Road Hospital are occupied by patients sent by the Surrey County Council, for whom the County Council must ultimately make their own provision; and 128 beds are at present allocated for Tuberculosis and Mental patients, who are not ordinarily nursed in a General Hospital, it was felt that if these cases were dealt with elsewhere it would not be necessary, with the present population, and in view of some extensions contemplated at the Croydon General Hospital, to proceed with the full estimated number of beds. As an immediate scheme the following was suggested and approved:—

2 Adult Male Surgical Wards ...	15 beds each
2 Adult Female „ „ ...	15 „
2 Adult Male Medical Wards ...	20 „
2 Adult Female „ „ ...	20 „
1 Children's Ward Block of 20 beds.	

A total provision of 160 extra beds.

This will necessitate considerable enlargement to the institution. The present wards, with their stated complement of 32 beds, are overcrowded at this figure. Their floor space does not admit of a greater number than 26, if the recognised requirements are adhered to. This will, in the 12 wards concerned, lead to a loss of 72 beds.

I am indebted to the Medical Superintendent, Dr. A. Gilray, for the following statistics in relation to the patients dealt with at the Mayday Road Hospital and in the Queen's Road Institution (Sick Wards) during the year:—

MAYDAY ROAD HOSPITAL.

Area and Population served by the Institution—

- (a) Croydon County Borough: Acreage, 12,617 acres.
Population (estimated 1929), 222,300.

(b) Surrey Parish of late Croydon Union (Beddington, Coulsdon, Merton, Morden, Mitcham, Sanderstead, Wallington and Woodmansterne). Acreage, 19,176. Population (1921 Census) 91,117.

(c) Penge Parish (Portion of former Croydon Union). Acreage, 770. Population (1921 Census) 26,284.

Beds available for Sick, Maternity and Mental Cases—

(a) For Men	...	...	...	160
(b) For Women	...	...	...	246
(c) For Children under 16	...	...	...	70
				476

Table shewing the classification of the accommodation for the sick and the number of beds occupied on the 31st December, 1930 :

ALL CASES.

Classification of Wards.	Num. of Wards,	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)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Medical	2	32	36	32	35	...	...	64	71
2. Surgical	2½	32	36	48	50	...	...	80	86
3. Children	4	...	...	...	...	70	33	70	33
4. Ohronic sick	3½	32	38	80	99	...	...	112	137
5. Venereal ... ..	...	...	...	...	...	...	...	...	...
6. Tuberculosis	2	32	37	32	36	...	...	64	73
7. Isolation	nil	...	...	...	...	...	...	...	...
8. Maternity	1	...	...	22	20	...	...	22	20
9. Mental	} 2	32	39	32	35	...	...	64	74
10. Mental defectives...									
11. Other ... ..	...	...	...	...	...	Babies in Maternity Ward 17		...	...
TOTAL	17	160	186	246	275	70	50	476	511

*Statistics relating to the Period from 1st April to 31st
December, 1930.*

IN-PATIENTS.

	CROYDON.	SURREY.	KENT.
1.—Total number of admissions ...	2012	370	8
2.—No. of Maternity cases admitted.	257	41	2
3.—No. of live births	242	25	1
4.—No. of still births	16	1	0
5.—No. of deaths among the newly-born (<i>i.e.</i> , under 4 weeks of age)	13	4	0
6.—Total number of deaths of children under one year	23	6	0
7.—Total number of maternal deaths.	2	—	—
8.—Total number of deaths	391	88	5
9.—No. of patients discharged ...	1337	253	13
10.—Average duration of stay of patients included in 8 and 9 above (total patient-days divided by deaths and discharges):			
(a) Acute	36½	36½	36½
(b) Chronic	6 mths.	6 mths.	6 mths.
11.—No. of beds occupied:			
(a) Average during the period	386	102	25
(b) Highest (on 12-4-30) ..	430	119	40
(c) Lowest (on 2-11-30) ...	343	84	10
12.—No. of surgical operations under general anæsthetic (excluding dental operations)	258	30	2
13.—No. of abdominal sections ...	110	13	1

OUT-PATIENTS : Nil.

*Classification of In-Patients who were Discharged from or who
Died in the Institution during the Period 1st April to 31st
December, 1930.*

DISEASE GROUPS.	CROYDON.		SURREY.		KENT.	
	Chldn	Men	Chldn	Men	Chldn	Men
	under	and	under	and	under	and
	16.	W'm'n	16.	W'm'n	16.	W'm'n
A.—Acute Infectious Disease	59	15	8	1	—	—
B.—Influenza	4	10	—	3	—	—
C.—Tuberculosis—						
Pulmonary	1	59	—	15	—	1
Non-Pulmonary	8	13	1	6	—	—
D.—Malignant Disease	1	61	—	14	—	—
E.—Rheumatism—						
(1) Acute rheumatism (rheumatic fever, together with sub-acute rheumatism and chorea) ...	2	13	—	5	—	—
(2) Non-articular manifestations of so-called "rheumatism" (muscular rheumatism, fibrositis, lumbago and sciatica)	3	22	—	3	—	—
(3) Chronic arthritis	—	22	—	3	—	1
F.—Venereal Disease	—	2	—	1	—	—
G.—Puerperal Pyrexia	—	9	—	—	—	—
H.—Puerperal Fever	—	1	—	2	—	—
I.—Other diseases and accidents connected with child bearing ...	—	76	—	24	—	—
J.—Mental Diseases	5	240	2	41	—	3
K.—Senile Decay	—	60	—	14	—	3
L.—Violence	19	132	—	29	—	—
In respect of cases not included above :						
M.—Disease of the Nervous System and Sense Organs	24	82	4	17	—	2
N.—Disease of the Respiratory System	29	114	5	23	—	—
O. " Circulatory " ...	7	90	1	21	—	2
P. " Digestive " ...	76	201	8	24	—	1
Q. " Genito-urinary " ...	16	97	4	21	—	3
R. " Skin " ...	61	98	11	27	1	1
S.—Other Diseases	8	6	—	3	—	—

QUEEN'S ROAD HOMES.

Area and Population served by the Institution—

The same as for Mayday Road Hospital.

Beds available for Sick, Maternity and Mental Cases—

(a) For Men 50

(b) For Women 25

—
75
—

Table shewing the Classification of the Accommodation for the Sick and the number of beds occupied on the 31st December, 1930—

CLASSIFICATION.	BEDS.					
	Men.		Women.		Total.	
	Pro-	Occu-	Pro-	Occu-	Pro-	Occu-
	vided.	pied.	vided.	pied.	vided.	pied.
Chronic Sick	50	50	25	25	75	75

Statistics relating to the Period from 1st April to 31st December, 1930.

IN-PATIENTS.

	CROYDON,	SURREY.	KENT.
Total number of admissions	28	9	Nil
Total number of deaths	27	1	—
No. of patients discharged	10	1	—
Average duration of stay of patients ...	32 wks.	32 wks.	—
Average number of beds occupied ...	All	All	—

Classification of In-Patients who were Discharged from or who Died in the Institution during the Period 1st April to 31st December, 1930.

	CROYDON.	SURREY.	KENT.
Venereal Disease	1	—	—
Senile Decay	12	—	—
Diseases of the Nervous System and Sense Organs	1	—	—
Disease of the Respiratory System ...	7	1	—
" Circulatory " ...	14	—	—
" Digestive " ...	1	—	—
" Genito-urinary " ...	1	—	—
" Skin	—	1	—

Number of Beds available for Pulmonary and Non-Pulmonary cases : Male 32, Female 32; a total of 64.

Table shewing the Extent of Residential Treatment provided during the year in Poor Law Institutions for persons chargeable to the Council (or to the Constituent Authorities of the Joint Committee)—

		Admitted.			Discharged.			Died.		
		Croydon	Surrey	Kent	Croydon	Surrey	Kent	Croydon	Surrey	Kent
No. of patients suffering from pulmonary tuberculs, admitted for treatment.	Adult Males	67	11	...	27	6	...	29	2	...
	Adult Females	49	12	...	22	6	...	18	5	1
	Children	4	...	...	...	...	...	...	...	...
	Total ...	120	23	...	49	12	...	47	7	1
No. of patients suffering from non-pulmonary T. B. admitted for treatment.	Adult Males	3	1	..	1	1	...	...	...	...
	Adult Females	4	...	...	1	...	...	...	...	...
	Children	...	3	...	...	...	...	4	1	...
	Total ...	7	4	...	2	1	...	4	1	...
	Grand Total	127	27	...	51	13	...	51	8	1

METEOROLOGY.

I am indebted to Mr. H. W. Corden for the information contained in the tables below.

TABLE I.
METEOROLOGICAL RECORD—YEAR 1930.

Rain Gauge 5-in. in diameter, 1-ft. above ground, 146-ft. above sea level Temperature taken in the shade of a Stevenson's Screen, 4-ft. from the ground. The Ground Thermometer is suspended in an iron tube, the bulb being 4-ft. below the level of the ground.

Months. 1930.	Temperature of Air during Month				Mean Temperature of Air.	Difference from average 50 years at Greenwich.	Mean Temperature of Ground at 4-ft.	Mean Temperature of the Dew Point.	Mean Tensional Difference between Ground and Dew Point at 9 a.m. and 3 p.m.	Rainfall.		
	Highest.	Lowest.	Mean of							No. of Days on which Rain fell.	Amount collected in Inches.	Difference from average 50 years at Greenwich
			All Highest.	All Lowest.								
January ..	57°	30°	48°·2	39°·7	43°·9	+ 5°·4	44°·2	40°·6	in. — ·035	21	in. 3·08	in. + 1·29
February..	53°	29°	42°·8	34°·9	38°·8	— 0°·7	43°·5	34°·7	— ·079	7	0·84	— 0·69
March ..	60°	26°	50°·9	36°·8	43°·8	+ 2°·1	43°·2	38°·8	— ·040	9	1·48	— 0·03
April ..	70°	30°	55°·6	41°·7	48°·6	+ 1°·4	45°·5	43°·2	— ·021	16	1·74	+ 0·14
May ..	71°	39°	61°·2	47°·1	54°·1	+ 1°·0	49°·1	47°·9	— ·013	19	3·00	+ 1·12
June ..	80°	46°	70°·9	53°·7	62°·3	+ 2°·9	54°·4	54°·1	— ·011	5	0·33	— 1·70
July ..	81°	49°	69°·4	55°·3	62°·3	— 0°·2	57°·1	54°·2	— ·045	12	1·16	— 1·25
August ..	94°	49°	71°·9	56°·1	64°·0	+ 2°·4	58°·0	56°·3	— ·025	16	1·55	— 0·83
September	80°	46°	66°·2	53°·5	59°·8	+ 2°·6	58°·8	54°·5	— ·069	18	3·29	+ 1·09
October ..	69°	30°	59°·3	45°·7	52°·5	+ 2°·5	55°·1	49°·3	— ·079	16	1·25	— 1·48
November	58°	22°	50°·6	38°·7	44°·6	+ 1°·4	50°·7	42°·0	— ·095	18	5·15	+ 2·86
December	52°	28°	44°·5	36°·4	40°·4	+ 0°·7	46°·9	38°·4	— ·087	14	2·13	+ 0·19
Means and Totals for Year.	94°	22°	57°·6	44°·9	51°·2	+ 1°·8	50°·5	46°·1	— ·049	171	25·00	+ 0·71

TABLE II.

Prevailing direction of the Wind at Croydon in 1930.

Number of Days each Month.

1930.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	N.
January ... ..	...	1	4	4	19	2	...	1
February	16	3	4	1	1	...	2	1
March	3	3	3	1	12	4	4	1
April	5	3	4	7	1	2	2	6
May	6	2	...	2	5	9	4	3
June	4	3	4	1	12	3	...	3
July ... ..	...	...	...	1	14	6	9	1
August	1	...	1	5	15	5	3	1
September	4	3	3	...	9	6	3	2
October	1	1	2	5	15	6	1	...
November	4	...	3	...	13	3	5	2
December ... ..	...	4	1	1	12	7	6	...
TOTALS	44	23	29	28	128	53	39	21
	67		57		181		60	

Summary of the Meteorological Conditions During 1930.

(Compiled from the Registrar-General's quarterly returns).

This precis is included as weather exerts an influence on death rates and the incidence of sickness; this influence may be detected by a comparison with the monthly vital statistics.

January was characterised by persistent mild and unsettled conditions, with strong winds or gales during the first fortnight. The mean temperature for the month exceeded the normal, but there were occasional severe ground frosts. The amount of sunshine was below the normal.

February.—The weather was mainly cold, dry and quiet with an unusual preponderance of N.E. or E. winds. The mean temperature for the month was below the normal. The amount of sunshine was below normal.

March.—The weather was on the whole unsettled. From the 9th to the 24th cold northerly winds prevailed with some snowfall between the 13th and 20th. Sunshine aggregates exceeded the normal.

April was dull and wet with a preponderance of northerly winds. The mean temperature, however, exceeded the normal in consequence of mild nights and a spell of warm weather at the end of the month. There was a deficiency of sunshine and the rainfall exceeded the normal.

May was dull and rather wet and there was a deficiency of sunshine. The mean temperature for the month was about normal.

June was sunny, warm and dry. Occasional thunderstorms occurred and some flooding was caused by a severe storm on the 17th. The rainfall total was, however, below the average.

July was on the whole dull, with an excess of rainfall. Monthly sunshine aggregates were below the normal.

August.—With the exception of a week of very fine weather at the end of the month, the weather was mostly wet, cool and unsettled. There was a small excess of rainfall and the total sunshine recorded was below normal.

September was a wet month with a pronounced deficiency of sunshine. The first few days were bright and sunny but were fol-

lowed by unsettled conditions. The mean temperature for the month exceeded the normal and the rainfall was also greater than the average.

October.—The first few days were fine but then unsettled conditions persisted throughout the month. The mean temperature exceeded the normal, winds being mostly southerly or westerly. A deficiency of rainfall was experienced and sunshine aggregates were about normal.

November was a wet month but in spite of this sunshine aggregates were above the normal. Ground frosts occurred frequently and occasional fogs towards the end of the month.

December was mild, dull and foggy. Rainfall was deficient and sunshine aggregates below normal. Fog was unusually prevalent and on 21st and 22nd reached a great density locally.

VITAL STATISTICS.

Marriages.—The number of marriages solemnised was 2,112, compared with 1,982 in 1929; 1,874 in 1928; 1,847 in 1927; and 1,764 in 1926. The marriage rate was 9.5 per 1,000 of the population; 972 were solemnised in Established Churches, 212 in other places of worship, 928 in the Register Offices. No ceremonies were performed under Jewish ritual.

Births.—The births registered were 3,335 legitimate and 179 illegitimate. The birth-rate consequently was 15.8. For England and Wales the rate was 16.3, and in the 107 Great Towns it was 16.6.

The illegitimate births in Croydon were 5.1% of the total, compared with 4.80% in 1929, 4.36% in 1928, 4.79% in 1927, and 4.26% in 1926.

The total male births numbered 1,774, the female 1,740, being a proportion of 1,020 males to 1,000 females.

The subjoined table (IV.) gives the vital statistics for the Wards in the Town. It is seen that the Wards with the highest birth-rates were West Thornton (23.9), Waddon (20.4), and Whitehorse Manor (20.1).

Those with the lowest were: South (10.4), Central (11.3), Woodside (11.7), and Upper Norwood (12.4).

Deaths.—The deaths numbered 2,337, compared with 2,792 last year. For 1930 the death-rate was 10.51. The death-rate for England and Wales was 11.4, and for the 107 Great Towns 11.5. For London the death rate was 11.4. The male death-rate was 11.2, the female 9.9.

There were 193 inquests held by Coroners in respect of Croydon residents during 1930, and 116 findings by Coroners after post-mortem examination without inquest.

Wards with the highest death-rates were: Waddon (13.0), and Thornton Heath (12.5). Those with the lowest were Woodside (7.6), Bensham Manor (9.0), Addiscombe (9.1), and South (9.2).

Natural Increase.—The excess of births over deaths was 1,177 or 5.7 per 1,000 of the population. A comparison with previous years is given below.

Immigration is apparently playing a larger part than emigration and is leading to a rapid population increase. 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 a town like Croydon standardisation of rates upon group ages of population is a valuable method of arriving at more accurate results, but this cannot be done without a census. The longer the period from the last Census the more problematical do statistics become. The population given by the Registrar General for 1930 is the same as for 1929; but if the estimated rate of increase was maintained in 1930, at the same figure as for the previous 8 years, the population should be about 226,000.

TABLE III.

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
1904	3769	26.1*	1998	13.8	144,419	12.2	1771
1914	4007	22.0	1984	10.9	181,956	11.1	2023
1921	3631	18.9	2054	10.7	191,500	8.2	1577
1922	3505	18.2	2387	12.4	192,300	5.8	1118
1923	3370	17.4	2007	10.4	193,400	7.0	1363
1924	3456	17.6	2280	11.6	196,000	6.0	1176
1925	3406	17.1	2169	10.9	199,300	6.2	1237
1926	3477	16.9	2269	11.0	205,900	5.4	1208
1927	3174	15.0	2452	11.6	211,700	3.4	722
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

* Uncorrected or gross figure.

TABLE IV.

WARDS.	Estimated Population (1930).	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 (1930).
Upper Norwood	15628	194	161	12.4	10.3	108	0.38	0.51	0.90	0.57	0.19	1.86	1.41	1.34	14.0
Norbury	12109	168	129	13.8	10.6	48	0.08	0.08	1.57	0.66	0.16	2.23	1.24	1.40	22.1
West Thornton	15834	378	183	23.9	11.6	29	0.25	...	1.96	1.07	0.13	2.34	1.45	1.14	33.3
Bensham Manor	15420	202	138	13.1	9.0	39	0.06	0.06	0.78	0.78	...	1.56	0.97	1.75	47.7
Thornton Heath	15109	271	189	17.9	12.5	66	0.26	0.20	1.98	0.99	0.13	2.38	1.32	1.92	49.0
South Norwood	18525	313	199	16.9	10.8	51	0.05	0.16	1.46	0.43	0.16	2.37	1.13	1.62	30.1
Woodside	16869	197	128	11.7	7.6	40	0.06	0.06	0.89	1.07	0.06	1.84	0.83	0.83	39.5
East	13247	177	143	13.3	10.8	40	0.15	...	1.28	0.15	0.07	1.96	1.43	2.64	7.0
Addiscombe	16559	214	151	12.9	9.1	33	...	0.18	1.51	0.24	...	1.69	1.39	1.21	56.0
Whitehorse Manor	18525	373	184	20.1	9.9	62	0.27	0.11	1.78	0.65	0.11	1.89	0.54	1.13	69.6
Broad Green	17076	320	185	18.7	10.8	38	0.35	0.12	1.58	0.82	0.06	2.05	1.06	1.68	76.6
Central	13764	156	157	11.3	11.4	51	0.07	0.36	1.53	0.44	0.07	2.83	1.38	1.23	37.6
Waddon	16766	341	218	20.4	13.0	56	0.24	0.06	1.55	0.89	0.12	2.92	0.95	1.80	17.1
South	15834	159	146	10.4	9.2	25	0.13	0.13	1.07	0.76	0.06	1.83	1.26	1.90	13.3
Addington	1035	16	12	15.4	11.6	62	0.96	...	3.86	0.96	...	1.93	0.96	0.96	0.3
Borough	222300	3514*	2337*	15.8	10.5	48	0.18	0.15	1.46	0.69	0.09	2.15	1.16	1.52	...

* These are the corrected figures.

TABLE V.

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.
1918	188,755	2632	2626	13.9	2687	15.9	388	245	202	76	2544	15.1
1919	191,922	3008	2965	15.4	2287	12.4	312	197	219	73	2172	11.7
1920	191,820	4434	4351	22.6	2225	11.6	299	209	275	63	2134	11.1
1921	191,500	3713	3631	18.9	2115	11.0	283	222	269	74	2054	10.7
1922	192,300	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	11.4
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	11.4
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	11.4
1929	222,300	3553	3399	15.3	2954	13.3	463	301	221	65	2792	12.4
1930	222,300	3703	3514	15.8	2407	10.8	364	294	171	48	2337	10.5

Comments on Table V.

The birth-rate showed a slight rise over 1929 and the death-rate a substantial decrease. The year was a healthy one.

The infantile mortality was the lowest yet recorded and compares very favourably with other large towns.

TABLE VI.

WARD.	Estimated population 1930.	Persons per acre.	Births.	Birth Rate.	Infant Mortality.	Deaths.	Death Rate	Natural in- crease of popu- lation.
Upper Norwood	15,628	14.0	194	12.4	108	161	10.3	+33
Norbury	12,109	22.1	168	13.8	48	129	10.6	+39
West Thornton	15,834	33.3	378	23.9	29	183	11.6	+195
Bensham Manor	15,420	47.7	202	13.1	39	138	9.0	+64
Thornton Heath	15,109	49.0	271	17.9	66	189	12.5	+82
South Norwood	18,525	30.1	313	16.9	51	199	10.8	+114
Woodside	16,869	39.5	197	11.7	40	129	7.6	+69
East	13,247	7.0	177	13.3	40	143	10.8	+34
Addiscombe	16,559	56.0	214	12.9	33	151	9.1	+63
Whitehorse Manor	18,525	69.6	373	20.1	62	184	9.9	+189
Broad Green	17,076	76.6	320	18.7	38	185	10.8	+135
Central	13,764	37.6	156	11.3	51	157	11.4	-1
Waddon	16,766	17.1	341	20.4	56	218	13.0	+123
South	15,834	13.3	159	10.4	25	146	9.2	+13
Addington	1,035	0.3	16	15.4	62	12	11.6	+4
Unallocated ... ..	...	...	...	...	...	14	...	...
	222,300	17.6	3514*	15.8	48	2337*	10.5	+1177

*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 Upper Norwood (108), Thornton Heath (66), and Whitehorse Manor (62); lowest in South (25), West Thornton (29), and Addiscombe (33).

Birth-rates were highest in West Thornton, Thornton Heath, Waddon, Broad Green, and Whitehorse Manor; lowest in South, Central and Woodside.

The general death-rate was highest in Waddon, West Thornton, and Thornton Heath; lowest in Woodside, Bensham Manor, Addiscombe and South Wards.

Most persons to acre in Broad Green, Whitehorse Manor, and Addiscombe; least in East, South, and Upper Norwood.

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

TABLE VII.
DEATHS REGISTERED DURING THE CALENDAR YEAR 1930.
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 "Resi- dents" 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.	
1		2	3	4	5	6	7	8	9	10	11	12	13
All Causes	Certified ...	2334	171	22	26	66	105	101	128	263	360	1092	1391
	Uncertified ...	3	...	...	...	...	...	...	...	...	1	2	...
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles...	...	22	3	5	6	8	...	...	...	...	...	...	9
Scarlet Fever...	...	2	1	...	...	1	...	...	...	...	...	...	2
Whooping Cough	...	3	2	...	1	...	...	...	...	...	...	...	2
Diphtheria and Croup	...	14	...	...	3	11	...	...	...	...	...	...	14
Influenza	...	21	2	...	...	...	1	...	2	7	9	...	3
Erysipelas	...	7	1	...	...	1	...	...	1	2	2	...	7
Tetanus	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis	...	154	...	...	1	3	40	35	22	26	19	8	95
Tuberculous Meningitis	...	7	1	...	3	3	...	...	...	...	...	...	10
Other Tuberculous Disease	...	14	...	1	1	2	2	1	1	1	3	2	8
Cancer, Malignant Disease	...	339	...	...	...	...	1	3	20	59	90	166	172
Acute Rheumatism and Rheumatic Fever	...	4	...	...	...	2	1	...	...	1	...	...	2
Cerebro-Spinal Meningitis	...	2	...	...	...	...	1	...	...	1	...	...	1
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Forms of Meningitis (not T. B.)	...	14	2	1	...	3	...	1	1	1	1	4	14
Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...
Locomotor Ataxy	...	2	...	...	...	...	...	...	...	...	2	...	1
General Paralysis of the Insane	...	10	...	...	...	...	...	4	4	2	...	...	11
Cerebral Hæmorrhage	...	151	...	...	1	...	2	2	2	10	37	97	69
Other Diseases of the Nervous Sys'm	...	94	...	1	...	1	5	7	4	6	16	54	47
Senile Decay	...	120	...	...	...	...	...	...	...	...	1	119	85
Diabetes	...	32	...	...	...	...	4	...	2	2	3	21	20
Organic Heart Disease	...	375	...	1	...	7	12	9	7	44	56	239	179
Arterio-Sclerosis	...	85	...	...	...	...	...	...	2	4	19	60	25
Aneurism	...	3	...	...	...	...	...	...	...	...	1	2	4
Other Diseases of the Circulatory System	...	15	...	...	...	...	...	1	4	3	2	5	12
Bronchitis, Acute	...	38	1	1	...	1	...	1	2	5	4	23	10
Bronchitis, Chronic	...	87	...	...	...	...	...	...	...	8	10	74	39
Influenzal Pneumonia	...	11	...	...	...	...	...	...	2	3	3	3	2
Pneumonia (other forms)	...	199	19	8	3	4	4	10	15	24	30	82	112
Other Diseases of the Respiratory System	...	16	...	...	...	1	1	...	3	2	5	4	5
Diarrhoea and Enteritis	...	32	24	...	...	...	2	...	2	1	2	1	32
Appendicitis, Typhlitis, and Peri- tonitis	...	23	...	...	1	3	2	3	2	5	4	3	28
Cirrhosis of the Liver	...	5	1	...	...	...	...	...	...	1	2	1	2
Alcoholism	...	3	...	...	...	...	...	...	1	...	1	1	3
Other Diseases of the Digestive Sys'm	...	44	...	1	1	2	...	3	6	8	6	17	45
Nephritis and Bright's Disease	...	45	...	...	...	2	1	1	5	8	5	23	33
Other Diseases of the Urinary Sys'm	...	51	...	...	...	...	...	3	3	7	9	29	46
Puerperal Fever	...	1	...	...	...	...	1	...	...	...	...	...	1
Puerperal Pyrexia	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases and Accidents of Pregnancy and Parturition	...	6	...	...	...	...	...	4	2	...	...	...	2
Congenital Debility and Malforma'n	...	42	36	3	2	...	...	...	...	1	...	...	28
Premature Birth	...	40	40	...	...	...	...	...	...	...	...	...	33
Venereal Diseases	...	4	2	...	...	...	...	...	1	...	...	1	5
Other Diseases of the Reproductive System (Non-Malignant)	...	7	...	...	...	...	1	...	1	2	...	3	9
Violent Deaths (excluding Suicide)	...	74	1	...	1	9	15	4	6	13	7	18	80
Suicide	...	19	...	...	...	...	2	3	4	8	1	1	13
All other Defined Diseases	...	96	35	...	2	4	6	7	4	7	11	20	69
Diseases Ill-defined or unknown	...	4	...	...	...	...	...	2	...	...	...	2	2
All Causes	...	2337	171	22	26	66	105	101	128	263	361	1094	1391

Comparisons with 1929.

(i) A small increase in the measles fatalities. (ii) Whooping Cough showed a decreased fatality in the first five years of life. (iii) Some decrease in the number of deaths from diphtheria. (iv) Considerable decrease in deaths from influenza, chiefly affecting those over 65. (v) A decrease in deaths from pulmonary tuberculosis which are largely concentrated between 15 and 45 years of age. (vi) Cancer deaths remained practically the same with a preponderance of deaths over 45 years of age, as in 1929. (vii) An increase in cases attributed to senile decay. (viii) An increase in deaths from organic heart disease and arterio-sclerosis. (ix) A decrease in deaths from acute and chronic bronchitis. (x) Very great decrease in deaths from influenzal pneumonia and from all other forms of pneumonia. (xi) A decrease in infantile deaths from diarrhoea. (xii) A decrease in deaths from nephritis. (xiii) A slight increase in number of violent deaths.

Comments on Table VII.

(i) Cancer remains the chief cause of death between the ages of 55 and 65 years. (ii) Heart disease is the main cause of death over 65, closely followed by cancer. (iii) Cancer remained, as in 1929 and 1928, 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 (239), Cancer (166), Cerebral Haemorrhage (97), Pneumonia (82), and Chronic Bronchitis (74). (v) Pneumonia still showed its maxima at both extremes of life as in 1928 and 1929. (vi) The dangers run by an infant during the first year of life. This is the most dangerous time until the 45—55 age group is reached. (vii) Violent death overtakes the older groups of the population more often than the younger groups. Suicide was commonest between 35 and 45.

There are a few points of difference between Table VII. 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 519 deaths from Heart Disease, whilst Table VII. gives only 376. There are, however, given in the latter table 120 deaths from Senile Decay, and 56 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 7.3. Deaths under 15 years, 12.2%; deaths under 65 years, 53.2%; deaths over 65 years, 46.8%.

TABLE VIII.

CLASSIFICATION OF DEATHS ACCORDING TO DISEASE OVER
A PERIOD OF 11 YEARS.

Cause of Death.	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	
	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 ...	4	1	1	...	2	...	1	2	...	1	...	...
Malaria...	...	...	1	...	...	1	1	...	...	...	...	...
Small Pox ...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	22	6	19	9	4	7	13	6	30	1	22	0.099
Scarlet Fever ...	7	4	6	2	2	1	...	3	5	4	2	0.009
Whooping Cough ...	2	22	11	11	11	9	9	21	14	24	3	0.013
Diphtheria and Croup ...	26	23	27	21	8	8	32	10	32	23	14	0.063
Influenza (including Influenzal pneumonia) ...	43	39	101	20	89	63	44	118	38	199	32	0.144
Dysentery ...	2	1	...	...	...	...	...	...	...	...	1	0.004
Erysipelas ...	3	4	2	2	4	5	5	5	3	8	7	0.031
Cerebro-Spinal Fever ...	...	...	2	...	2	...	...	...	2	...	2	0.009
Pulmonary Tuberculosis ...	156	156	183	153	157	151	171	165	167	170	154	0.693
Tuberculous Meningitis ...	16	12	14	22	12	17	17	10	13	10	7	0.031
Other Tuberculous Disease ...	23	16	12	15	19	13	20	28	26	19	14	0.063
Cancer, Malignant Disease ...	218	218	252	259	293	319	330	344	327	330	339	1.52
Rheumatic Fever ...	5	12	7	5	9	8	11	6	6	5	4	0.018
Meningitis ...	13	11	12	8	6	6	2	9	11	17	14	0.063
Organic Heart Disease ...	258	229	324	254	305	273	281	346	405	308	375	1.69
Bronchitis ...	163	143	194	139	142	130	100	92	92	226	125	0.562
Pneumonia* ...	160	138	183	144	182	140	138	200	158	272	199	0.895
Other Diseases of the Re- spiratory Organs ...	40	34	40	36	33	32	34	33	33	21	16	0.072
Diarrhoea and Enteritis ...	40	62	37	36	32	36	34	24	28	45	32	0.144
Appendicitis and Typhlitis ...	14	9	15	21	28	20	14	17	16	27	23	0.103
Cirrhosis of Liver ...	10	10	14	11	7	12	3	9	11	10	5	0.022
Alcoholism ...	2	2	1	3	3	1	2	3	3	4	3	0.013
Nephritis and Bright's Disease	55	59	47	59	70	65	81	77	79	117	45	0.202
Puerperal Fever ...	6	4	6	4	2	5	11	4	2	6	1	0.004
Other Diseases and Accidents of Pregnancy & Parturition	12	10	10	6	8	8	13	5	11	5	6	0.027
Congenital Debility and Mal- formation ...	62	48	52	32	37	36	52	30	26	42	42	0.189
Premature Birth ...	61	47	38	39	54	42	40	48	32	47	40	0.180
Violent deaths (excluding Suicide) ...	33	26	48	49	66	65	71	83	75	64	74	0.333
Suicide ...	17	30	19	23	23	23	33	30	35	29	19	0.085
Other Defined Diseases ...	642	665	687	624	670	672	703	720	664	748	713	3.20
Diseases Ill-defined or unknown	19	13	22	...	...	1	3	4	10	10	4	0.018
Total ...	2134	2054	2387	2007	2280	2169	2269	2452	2354	2792	2397	10.5

*Except Influenzal Pneumonia.

Comments on Table VIII.

The main features for 1930, as compared with last year, are:
(1) The decline in the death rate from Influenza. (2) The in-
crease in the Measles death rate, this disease exhibiting its usual
two yearly exacerbation. (3) The increase in the deaths attributed

to Heart Disease, although contributory illnesses, such as Influenza and Bronchitis, showed a decline. There is a distinct tendency for this cause of death to become more prominent in late years. It is difficult to ascertain the relative importance of some change in certification of deaths, with the possibility of an actual increase in the number of damaged hearts. Probably both factors enter into the calculations. (4) The marked decline in the death rate from Bronchitis and Pneumonia. This is probably a result of a mild winter and the absence of any epidemic of influenza. (5) The decline in the number of deaths from Nephritis.

1930 was, on the whole, a very healthy year. The total death rate is the lowest but one—that of 1923—yet recorded.

Causes of Death.

The chief causes of death during 1930 were:—Organic heart disease, 375 deaths, death-rate 1.69; Cancer, 339 deaths, death-rate 1.52; All forms of Tuberculosis, 175 deaths, death-rate 0.78; Pneumonia (including influenzal pneumonia), 210 deaths, death-rate 0.94; Arterio-sclerosis and Cerebral Hæmorrhage, 236 deaths, death-rate 1.06.

Taking diseases of bodily systems and group diseases to which death was definitely assigned we find:—

	Deaths.	Death-rate per 1,000 of population.
Circulatory System (including Atheroma and Cerebral Hæmorrhage)	629	2.83
Cancer	339	1.52
Respiratory System (not Tubercular) ...	340	1.53
Tuberculosis (all forms)	175	0.79
Infectious Diseases (excluding Tuber- culosis but including Enteritis and Influenza	112	0.50
Diseases of the Nervous System (not Tubercular)	120	0.54
Diseases of the Digestive System (exclud- ing Cancer and Tuberculosis) ...	75	0.34
Diseases of Renal System	96	0.43
Suicides and Violent Deaths	93	0.41
Conditions at Birth	82	0.37
Old Age	119	0.54

The greatest single group of causes of death as in 1929 was diseases of the Circulatory system, and of this group Organic Heart

Disease was the most prominent member (375 deaths); the majority of deaths in this group occurred over 65 years of age. Rheumatism in childhood is indubitably a cause of cardiac breakdown later on in life, more particularly if the original attack of rheumatism has been missed or disregarded.

The strenuous nature of modern life, with its hurry and unrest bears hardly upon hearts which are not structurally sound, leading to breakdowns which, if the pace had been slower, would have functioned for years longer.

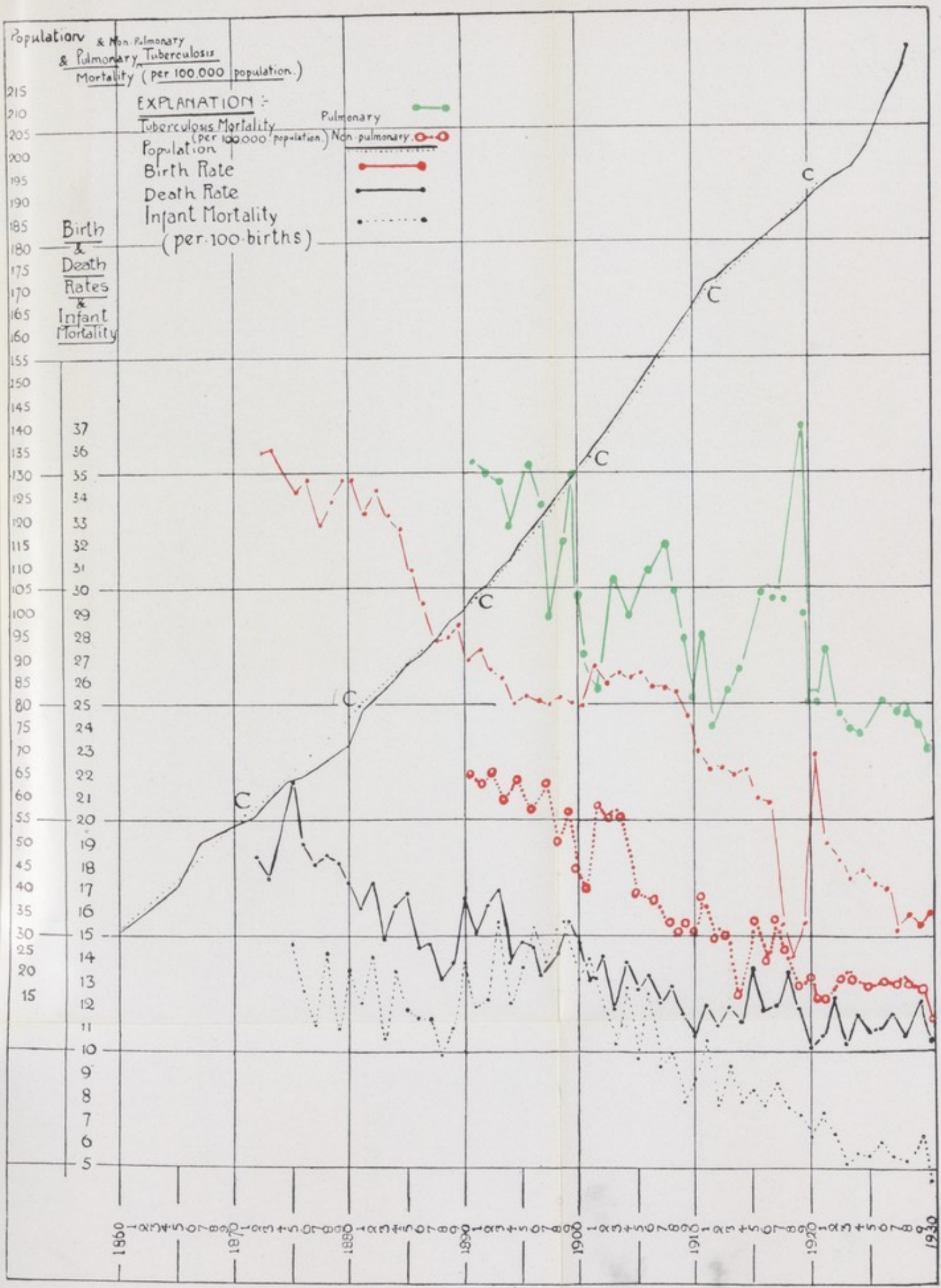
Arterio-sclerosis (85 deaths) is the second big cause of death in this group. This is a thickening, and diminution in the elasticity, of the walls of the arteries and is an expression either of prolonged stress or unwise living which, if continued, leads to a final rupture of the walls of the vessel—most often in the brain—leading to Cerebral Hæmorrhage, which caused, incidentally, 151 deaths. Arterio-sclerosis and Cerebral Hæmorrhage between them caused 236 deaths.

Measles was the most fatal infectious disease; all the deaths occurred under 15 years. Diphtheria came second and all the deaths were under 15 years of age. There is still an inadequate appreciation on the part of parents of the urgent necessity for immediate medical advice and treatment in the common infectious ailments of childhood.

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 1930 it is estimated by the Registrar General to be 222,300. If, however, the average yearly rate of increase is applied to the 1930 population, the figure would have been 222,800. The statistics have been calculated, however, on the Registrar General's figure. 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 even more rapid. Such an increase of population gives rise to problems of its own from Public Health aspects; additionally 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 centres 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 is also exerting a prominent influence.



Birth-Rate per 1,000 Living.—This is shown by a continuous red graph. There is seen to be a continuous, though fluctuating fall, since 1872, from which date statistics are only available. A minimum was reached in 1918, followed by a big jump in 1920, since then the fall has been continued until the present year when a slight rise occurred.

Death-Rate per 1,000 Population.—There was a steady but rather widely fluctuating decline since 1885 to a minimum in 1920; since then there has been no general fall, though the present year shows a further small decline.

The growth of a population depends on (a) The excess of births over deaths; (b) Immigration. Although the surplus of births over deaths is diminishing this is not having any effect on the increase of population; therefore there must be a very considerable immigration. The average age of the population is rather on the high side, a feature which may be due to persons retiring to the town after active life.

The main factors affecting birth rates are (a) Late marriages; (b) Decreasing fertility due to various causes among which higher economic status and greater facilities for amusements may be mentioned; (c) The practice of abortion; (d) The practice of birth control. Under civilized conditions it is often found that the rate of fertility is decreased in ratio to the extent of the departure from natural conditions. Among the more civilized peoples there is evidence of a general and marked decrease in the fertility of women; and in other forms of life, as the organism becomes more complicated and longer lived the rate of fertility declines.

SECTION II.

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, 1930, 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.	„ „

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.

Byelaws.

With respect to Common Lodging Houses, 1885.

- „ Nuisances, 1885.
- „ Tents, Vans, Sheds and similar structures used for human habitation, 1903.
- „ Slaughterhouses, 1914.
- „ New Streets and Buildings, 1920.
- „ Houses intended or used for occupation of the Working Classes, and let in lodgings or occupied by members of more than one family, 1921.
- „ Offensive Trades, 1925.
- „ Conduct of Persons using Public Conveniences, 1926.
- „ Water on Footpaths, 1927.
- „ Street Trading, 1927.
- „ Slaughterhouses. Amending 1914 Byelaws.
- „ Cleanliness of Food, 1929.
- „ Smoke. Public Health (Smoke Abatement) Act, 1926.

**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)	4706
No. of houses inspected under the Housing (Inspection of District Regulations, 1910)	1832
No. of Houses inspected under the Rent Restrictions Act, 1920 ...	61
No. of Houses inspected where zymotic diseases have occurred ...	805
House drains tested with smoke (primary)	1287
House drains tested with smoke (on application)	85
No. of smoke tests during repair	573
Inspection of drainage work during construction	2718
No. of water tests during repair	565
Final tests of drains after repair	74
Final tests of drains when completely relaid	74
Length of new drains tested with water yards	3540
Inspections of yards, stables and manure pits	452
„ Passages	32
„ Public Conveniences	585
„ Pigstyes	35
„ Tents, Vans, and similar structures	22
„ Theatres, Cinemas, Halls, etc.	113
„ Ponds and Ditches	23
„ School Lavatories	51
„ Common Lodging Houses (including night visits) ...	111
„ Houses let in lodgings	85
„ Premises where offensive trades are conducted	248
Smoke Observations	28
No. of Visits re Infectious Diseases	5949
Inspections of Shops (under Shops Acts)	1358

Special Early Closing Patrols	...	...	...	...	...	...	85
Special Evening Inspections under Shop Hours' Act	...	...	...	...	...	...	63
Inspections under Poisons and Pharmacy Act	...	...	...	...	...	...	8
" Dairies	...	...	...	...	...	...	298
" Cowsheds	...	...	...	...	...	...	47
" Milkshops	...	...	...	...	...	...	345
" Premises where food is prepared or sold	...	...	...	...	...	...	5785
" Slaughterhouses	...	...	...	...	...	...	1451
" Factories	...	...	...	...	...	...	377
" Factory Laundries	...	...	...	...	...	...	15
" Workshops	...	...	...	...	...	...	388
" Workshop Laundries	...	...	...	...	...	...	15
" Workplaces	...	...	...	...	...	...	75
" Factory Bakehouses	...	...	...	...	...	...	181
" Workshop Bakehouses	...	...	...	...	...	...	101
" Outworkers Premises	...	...	...	...	...	...	44
Visits to Employers of Outworkers	...	...	...	...	...	...	12
Reinspections of Work in Progress	...	...	...	...	...	...	25104
Sundry Inspections and Visits	...	...	...	...	...	...	14599
Appointments kept with Owners, Builders, etc.	...	...	...	...	...	...	1445
Complaints from public investigated (for purposes other than inspection of House)	...	...	...	...	...	...	2899
Examination of Building Plans	...	...	...	...	...	...	1157
Informal Notices outstanding 31/12/29	...	...	...	...	...	...	3269
" " served	...	...	...	...	...	...	11068
" " complied	...	...	...	...	...	...	10590
No. of Informal Notices referred for Statutory Orders	...	...	...	...	...	...	1174
Informal Notices outstanding (including 628 overcrowding)	...	...	...	...	...	...	2573
Statutory Notices outstanding 31/12/29	...	...	...	...	...	...	299
" " served	...	...	...	...	...	...	1067
" " complied	...	...	...	...	...	...	1110
Total number of complaints received	...	...	...	...	...	...	3497
Interviews with callers	...	...	...	...	...	...	4967
Letters received	...	...	...	...	...	...	5640
Letters and other intimations, etc. sent (not including notices)	...	...	...	...	...	...	9421

Nuisances and other matters dealt with by the Sanitary Inspectors during 1930.

Premises, Shops, Schools, Theatres, etc.

Plasterwork defective	...	...	...	...	...	...	1771
Dirty W.C. pans	...	...	...	...	...	...	76
Domestic nuisances (dirty floors, etc.)	...	...	...	...	...	...	61
Bad smells (dry rot, dead vermin, etc.)	...	...	...	...	...	...	4
Requiring cleansing and limewashing	...	...	...	...	...	...	2183
Defective drains and outside fittings	...	...	...	...	...	...	717
Damp	...	...	...	...	...	...	1916
Insufficient ventilation under floors	...	...	...	...	...	...	22
Dirty floors	...	...	...	...	...	...	4
Defective floors	...	...	...	...	...	...	598
" roofs	...	...	...	...	...	...	1601
" gutters	...	...	...	...	...	...	781
" downspouts	...	...	...	...	...	...	358
Overcrowding (notices served)	...	...	...	...	...	...	187
Defective sinks	...	...	...	...	...	...	262
" sink waste pipes	...	...	...	...	...	...	310
Other defective sanitary fittings	...	...	...	...	...	...	1081

Repair or renewal of sashcords	...	...	...	...	...	...	1328
Insufficiently ventilated	...	...	...	...	...	...	40
" lighted	...	...	...	...	...	...	11
Without proper water supply	...	...	...	...	...	...	8
Defective drinking water cisterns	...	...	...	...	...	...	80
" windows and doors	...	...	...	...	...	...	1029
" stoves, fireplaces, etc.	...	...	...	...	...	...	553
Dustbins required	...	...	...	...	...	...	1443
Sundry other nuisances, etc.	...	...	...	...	...	...	1030
Damp or flooded cellars	...	...	...	...	...	...	6
Animals improperly kept	...	...	...	...	...	...	34
Drains found stopped	...	...	...	...	...	...	258
Defective manure receptacles	...	...	...	...	...	...	12
Want of manure receptacles	...	...	...	...	...	...	7
Defective conveniences	...	...	...	...	...	...	46
Dirty conveniences	...	...	...	...	...	...	31
Smoke nuisances	...	...	...	...	...	...	12
Offensive accumulations	...	...	...	...	...	...	234
Deposits of materials causing dampness	...	...	...	...	...	...	5
Infringements of Shops Acts	...	...	...	...	...	...	440
Infringements of Bye-laws and Regulations	...	...	...	...	...	...	67
Infringements of Milk and Dairies Acts and Orders	...	...	...	...	...	...	53
Infringements of Food Byelaws	...	...	...	...	...	...	54

Factories, Workshops and Workplaces only.

Requiring cleansing and whitewashing	...	...	...	...	...	...	178
Insufficient ventilation	...	...	...	...	...	...	3
Dustbins required	...	...	...	...	...	...	67
Drainage of floors	...	...	...	...	...	...	4
Repair of floors	...	...	...	...	...	...	7
Repairs to paving	...	...	...	...	...	...	9
Ventilation of stoves	...	...	...	...	...	...	6
Infringements of drinking water regulations	...	...	...	...	...	...	12
Sanitary conveniences insufficiently screened	...	...	...	...	...	...	4
Insufficient sanitary accommodation	...	...	...	...	...	...	7
Defective sanitary conveniences	...	...	...	...	...	...	111
Sanitary accommodation not in cleanly condition	...	...	...	...	...	...	67
Sanitary accommodation not separate for sexes	...	...	...	...	...	...	5
Want of intervening space to W.C.'s	...	...	...	...	...	...	10
Sundry other nuisances or defects	...	...	...	...	...	...	60

Infringements of Croydon Corporation Act, 1924.

Food cupboards necessary	...	...	...	...	...	...	339
Verminous conditions	...	...	...	...	...	...	69

Infringements of Public Health Act, 1925.

Utensils, etc. not kept clean	...	...	...	...	...	...	292
Cleansing and whitewashing required	...	...	...	...	...	...	107
Rooms not fit for storage of food	...	...	...	...	...	...	30
Filth, etc. accumulating in food store	...	...	...	...	...	...	35
Sundry nuisances or defects	...	...	...	...	...	...	7

Infringements of Public Health Acts (Amend.) Act, 1907.

Yard paving defective	...	...	...	...	...	...	639
Infringements of Merchandise Marks Act	...	...	...	...	...	...	194
Rainwater pipes used as Ventilation Pipes	...	...	...	...	...	...	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 1930 requests were made in connection with

80 houses,
5 schools, Total 85.

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

Defective sinks and waste pipes	...	...	11
Defective drains and outside fittings	...	...	37
Other defective sanitary fittings	...	...	7
Defective plasterwork	...	...	1
Dampness	...	...	5
Defective gutters	...	...	1
Defective downspouts	...	...	2
Dustbins required	...	...	1
Yard surfaces defective	...	...	2
Sundry other nuisances	...	...	4

RENT RESTRICTION ACTS.

A number of applications were received for certificates as to the sanitary condition of the houses concerned. In 59 instances where the Acts applied certificates were granted. In two instances the applications were withdrawn and in four 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.
Failing to abate a nuisance ...	—	2 10 6	2 10 6
Do. Do. ...	—	4 4 0	4 4 0

HOUSING.

The following table gives particulars as to Housing during 1930 under the headings prescribed by the Ministry of Health.

TABLE IX.
Housing 1930.

Number of houses erected during the year :—

(a) Total	1266
(b) With State assistance under the Housing Acts, 1919 or 1923 :	
(i) By the Local Authority	58
(ii) By other bodies or persons	Nil
1.—Unfit Dwelling Houses :—	
Inspection (1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	4706
(2) Number of dwelling houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910, or the Housing Consolidated Regulations, 1925	1832
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	3
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	3100
2.—Remedy of Defects without service of Formal Notices :—	
Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers	1981
3.—Action under Statutory Powers :—	
A. Proceedings under Section 3 of the Housing Act, 1925, and Section 17, Housing Act, 1930 :	
(1) Number of dwelling houses in respect of which notices were served requiring repairs	5
(2) Number of dwelling houses which were rendered fit :	
(a) By owners	Nil
(b) By Local Authority in default of owners	2
(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	Nil
B. Proceedings under Public Health Acts :—	
(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied	738
(2) Number of dwelling houses in which defects were remedied :	
(a) By owners	*557
(b) By Local Authority in default of owners	Nil
C. Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925 :—	
(1) Number of representations made with a view to the making of Closing Orders	2
(2) Number of dwelling houses in respect of which Closing Orders were made	1
(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit	Nil
(4) Number of dwelling houses in respect of which Demolition Orders were made	Nil
(5) Number of dwelling houses demolished in pursuance of Demolition Orders	Nil
(6) Number of dwelling houses demolished voluntarily	Nil

*This number does not include 205 houses where notices were served in the latter part of 1929 and complied with in 1930.

OVERCROWDING.

During the course of a systematic inspection of 4,706 houses between 1st January and 31st December, 1930, 169 or 3.5 per cent. were found to contain one or more overcrowded rooms. The standard of overcrowding was on the basis of a minimum of 360 cubic feet air space in sleeping rooms for persons over 10 years or 400 cubic feet where the room is both a living and sleeping room; and 250 cubic feet per person under 10—this being the standard fixed in the local bye-laws for houses let in lodgings. 273 families occupied these 169 houses and 187 or 68.5 per cent. of these families were found to be overcrowded. In 96 houses of the 169 houses it was found possible to abate overcrowding without producing corresponding overcrowding elsewhere.

187 notices were served to abate overcrowding.

TABLE X.

FACTORIES, WORKSHOPS, AND WORKPLACES.

1. Inspection.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions
FACTORIES.			
(including Factory Laundries)	392	209	...
WORKSHOPS.			
(including Workshop Laundries)	403	163	...
WORK PLACES.			
(other than Outworkers premises	75	97	...
Total	870	469	...

TABLE XI.

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	178	162	...	...
Want of Ventilation	3	3	...	...
Overcrowding ... ..	...	...	...	...
Want of Drainage of Floors	4	4	...	...
Other Nuisances	161	150	...	...
Sanitary Accommodation—				
Insufficient	7	6	...	...
Unsuitable or Defective	192	164	...	...
Not separate for sexes	5	4	...	...
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 ... ..	...	...	21	...
Total	550	493	21	...

3. List of Registered Workshops.

Trades.	Totals.
Bakers and Confectioners	71
Tailors	93
Dressmakers	64
Building Trades	73
Milliners	28
Upholsterers	38
Laundries	17
Cycle Works	24
Blacksmiths	19
Bootmakers	65
Watchmakers	21
Motor Engineers	70
Coachbuilders	13
Photographers	8
Picture Framers	8
Umbrella Makers and Repairers	4
Saddlers	6
Ladder and Barrow Makers	4
Wig Makers	2

Scale Makers	...	...	...	...	...	2
Blind Makers	...	...	...	...	...	4
Furriers	...	...	...	...	...	1
Marine Stores	...	...	...	...	...	8
Cabinet Makers	...	...	...	...	...	14
French Polishers	...	...	...	...	...	5
Embroidery	...	...	...	...	...	4
Sign Writers	...	...	...	...	...	8
Miscellaneous Trades	...	...	...	...	...	144

4. Bakehouses.

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

Number of bakehouses on Register, 31st December, 1930	...	...	...	...	...	105
Number of underground bakehouses (included in above)	...	...	...	...	...	7
Visits made to bakehouses during the year	...	...	...	...	...	282
Defects found	...	...	...	...	...	131
Notices issued	...	...	...	...	...	112
Notices complied	...	...	...	...	...	89

5. Home Work.

Lists of homeworkers are sent in twice yearly. 264 of these lists containing the names of 195 outworkers residing within the Borough were received from Employers during the year. 44 visits were paid to outworkers and 12 visits were paid to premises of employers of outworkers to examine lists and for other purposes.

TABLE XII.

NATURE OF EMPLOYMENT OF WORKERS ON THE REGISTER,
31st DECEMBER, 1930.

Nature of Work.	Number employed.	Outwork in infected premises.	Outwork in unsatisfactory premises.	Remarks.
Making, cleaning, altering and repairing wearing apparel	182	...	...	...
Upholstery work	4	...	...	...
Cardboard box making	1	...	...	...
Brushes	1	...	...	...
Blind Repairs	1	...	...	...
Table Linen	2	...	...	...
Carding Buttons	...	...	...	...
Lace goods...	2	...	...	...
Other classes of work	7	...	...	...
	200	...	...	...

REGISTERED AND LICENSED PREMISES IN THE BOROUGH, 31st DECEMBER, 1930.

Slaughterhouses (not including Public)	...	...	4
Bakehouses	...	...	105
Common Lodging Houses	...	...	13
Houses Let in Lodgings	...	...	77
Dairies and Milkshops	...	...	254
Cowsheds	...	...	26
Offensive Trades	...	...	124
Wholesale Dealers in Margarine, etc.	...	...	36

SHOP HOURS ACTS.

1,506 visits and patrols were made during the year, including week-day and evening patrols and Sunday evening patrols, for the purpose of detecting any infringement of the Acts.

440 infringements found.

439 cautions given or notices served.

In one instance proceedings were taken under the Shops Acts and fines and costs amounting to £3 1s. were incurred.

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 9d. the cost of a weekly ticket is 5s. for seven nights.

The number of men accommodated during the year was 36,160. The number of men lodgers exceeded 99 per night throughout the year. The receipts and expenditure for the last eight years are as follows:—

				<i>Receipts.</i>			<i>Expenditure.</i>		
				£	s.	d.	£	s.	d.
1922	...	...	...	1027	17	10	1279	13	4
1923	...	...	...	1081	4	2	1288	1	3
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

2. Private Common Lodging Houses.

There are 13 common lodging houses on the register.

During 1930, 86 day and 25 night inspections were made.

Notices were served for the following conditions:—

Defective windows.
Broken sashcords.
Defective plasterwork.
Dirty walls and ceilings.
Verminous conditions.
Dirty w.c. pans and seats.
New dustbins required.
Dirty and defective yard surfaces.
Dirty floors and staircases.

TABLE XIII.

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
1a and 2, Tamworth Road	11	44 men
13	71	216 men and women

HOUSES LET IN LODGINGS.

There are 77 houses registered under the Bye-laws.

85 visits were made for inspection purposes.

42 notices were served for various amendments.

39 notices were complied with.

TABLE XIV.

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	...	...	...	...	...	1
London Road	...	...	...	...	...	1
Whitehorse Lane	...	...	...	...	...	1
Nursery Road	...	...	...	...	...	1
Mayday Road	...	...	...	...	...	1
Tamworth Road	...	...	...	...	...	1
Bert Road	...	...	...	...	...	1
Croydon Grove	...	...	...	...	...	1
Derby Road	...	...	...	...	...	2
Belgrave Road	...	...	...	...	...	2
Cecil Road	...	...	...	...	...	1
Windmill Road	...	...	...	...	...	2
Auckland Road	...	...	...	...	...	1
Harrington Road	...	...	...	...	...	1
Portland Road	...	...	...	...	...	1

Notices were served for the following conditions :—

Defective yard surfaces.
 Insufficient ventilation.
 Defective roofs, gutters, windows and doors.
 Verminous conditions.
 Dampness.
 Food storage accommodation required.
 New dustbins required.
 Defective cooking ranges.
 Washing accommodation required.
 Dirty w.c. pans.
 Defective stair treads.
 Defective and stopped drains.
 Broken sashcords.
 Plasterwork defective.

OFFENSIVE TRADES.

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

248 inspections were made of premises where such trades were carried on and notices issued requiring amendments in accordance with the bye-laws.

The following are on the register:—

Rag and Bone Dealers	50
Gut Scrapers	2
Fish Friers	70
Rabbit Skin Drier	1
Fellmonger	1
	<hr/>
	124
	<hr/>

RAG FLOCK ACTS, 1911 AND 1928.

Five samples were obtained from two firms and subjected to analysis, the results being as follows:—

No. 1 contained 15 parts of Chlorine per 100,000

„ 2	„ 6	„	„
„ 3	„ 4	„	„
„ 4	„ 4	„	„
„ 5	„ 4	„	„

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

SMOKE OBSERVATIONS.

During the year 28 observations were made of factory chimneys for the purpose of detecting offences under the Act. 12 notices were sent and amendments carried out to stop the nuisance.

AMUSEMENT HOUSES.

113 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 requiring the carrying out of the following amendments:—

- Repair and cleanse walls and ceilings.
- Amend flushing arrangements.
- Repair flushpipe joints.
- Replace defective gutters.
- Cleanse wash basins.
- Cleanse w.c. pans.
- Affix notices to lavatories.
- Provide artificial light.
- Provide additional ventilation.
- Unstop drains.
- Provide dustbins.
- Cleanse yard area.

KEEPING OF ANIMALS.

61 inspections were made in connection with the keeping of animals. There were 19 premises where pigs were known to be kept in the Borough.

8 notices were served to abate nuisances arising from various causes in connection with the keeping of pigs and 26 notices were served to abate nuisances arising from the keeping of other animals.

INSPECTION OF WATERCOURSES, ETC.

During the year 23 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., and for other defects.

POISONS AND PHARMACY ACT, 1908.

The Poisons and Pharmacy Act, 1908, came into operation on April 1st, 1909. The object is to regulate the sale of certain poisonous substances and to amend the Pharmacy Act.

The number of licences renewed under the Act during 1930 was seven, and in addition six licences were renewed and two additional licences were granted under the Order-in-Council dated November 10th, 1911, to assistants in the employ of persons already holding licences.

Inspections of the premises were carried out periodically, when no infringements of the Act were found.

FERTILISERS AND FEEDING STUFFS ACT, 1906 and 1926.

During the year 6 samples were submitted for analysis under this Act and found to be satisfactory.

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	35,787
By Formalin gas	3,100
By Formalin spray	293
	<hr/>
	39,180
	<hr/>

In addition 1,301 articles were destroyed on request.

Disinfection after infectious or contagious disease was carried out in

2,575 rooms at 1,744 houses.

3 school departments and 64 class rooms.

15 hospital wards.

3 vehicles.

1 hut.

2 cars.

1 pram.

CLEANSING OF VERMINOUS PERSONS, ETC.

During the year 7 adults were cleansed for verminous conditions, 8 children for scabies, and 2 adults 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 1930 under the Rats and Mice (Destruction) Act, 1919.

TABLE XV.

Premises.	No. of Visits made.	No. of Poison and other baits laid.	No. of Rats Killed.
Private Houses	1427	2901	2015
Butchers	46		
Other premises where food is pre- pared or sold	160		
Other premises	214		
Total	1847	2901	2015

SECTION III.—FOOD SUPPLY.

At the beginning of 1930 the method of supervision was considerably altered. Hitherto this form of inspection was carried out by four of the inspectorial staff, who covered the whole Borough. To avoid duplication, which was inevitable where two sets of inspectors were employed, and in order to have smaller districts, the work of food inspection was transferred as part of the district sanitary inspectors' duties. Twelve of the fourteen district inspectors are qualified in food inspection, the work of food inspection in the remaining two districts being carried out by inspectors in adjacent districts. 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 the premises. This method of inspection, along with the frequent sampling of all articles of food, is intended to procure for the public a wholesome supply of pure, unadulterated food.

Refrigeration is adopted in some form by large numbers of traders in foodstuffs; by this means the articles are kept in better condition than was the case prior to the introduction of legislation prohibiting the use of certain preservatives in foodstuffs. There is no doubt that this greater care in storage, in addition to the packing of foodstuffs in hygienic containers, is responsible for the absence of illnesses reported as being due to unsound foodstuffs.

The district inspectors also supervise the private slaughterhouses and carry out the inspection of the dressed meat. The whole of the animals slaughtered for human consumption in the Borough are examined; this examination necessitates the inspectors being on duty long after the ordinary recognised hours.

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 40,333 animals slaughtered for human consumption, these figures being a decrease of 15,209 on those for the year 1929.

TABLE XVI.

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

General Shops	...	...	...	...	...	177
Grocers and Provision Shops	...	...	...	...	...	546
Greengrocers and Fruiterers	...	...	...	...	...	355
Confectioners, Bakers, and Pie Makers	...	...	...	...	...	482
Ice-Cream Shops	...	...	...	...	...	234
Hotel and Restaurant Kitchens and Dining Rooms...	...	...	...	...	...	222
Butchers	...	...	...	...	...	211
Fishmongers (including fried fish shops)	...	...	...	...	...	123
Ham and Beef Shops	...	...	...	...	...	45
Sweet Manufacturers	...	...	...	...	...	7
Other Food Premises	...	...	...	...	...	19
						<hr/> 2,421 <hr/>

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 six, 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.

The following animals were slaughtered at the Public Slaughterhouses during 1930 :—

Pitlake.

Public Slaughterhouses.	Cattle.	Sheep.	Pigs.	Calves.	Total.
Public section	109	97	715	76	997
Private section	668	6694	17087	4092	28541
Totals ...	777	6791	17802	4168	29538

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 1930 :—

<i>Description.</i>				<i>Cause.</i>	
8	beef carcasses and offal	...	...	General tuberculosis.	
3	„ forequarters	...	...	Localised tuberculosis.	
7	„ parts	...	...	„	„
43	sets beef lungs	...	...	„	„
23	beef heads	...	...	„	„
28	„ various offals	...	...	„	„
4	„ carcasses and offals	...	...	Inflammatory conditions, etc.	
4	„ heads and tongues	...	...	Actinomycosis.	
2	„ hindquarters	...	...	Inflammatory conditions, etc.	
93	„ various offals and 9 parts	...	...	„	„
2	veal carcasses and offal	...	...	General tuberculosis.	
6	„ plucks	...	...	Tubercular.	
2	„ quarters	...	...	„
6	„ carcasses and offal	...	...	Immaturity, etc.	
4	„ various offals	...	...	Localised tuberculosis.	
5	„ parts	...	...	Various causes.	
12	„ various offals	...	...	„	„
8	pig carcasses and offals	...	...	General tuberculosis.	
28	„ quarters	...	...	Localised tuberculosis.	
16	„ various parts	...	...	„	„
255	„ heads	...	...	„	„
172	„ plucks	...	...	„	„
54	„ various offals	...	...	„	„
3	„ carcasses and offals	...	...	Swine Fever.	
9	„ carcasses and offals	...	...	Inflammatory conditions.	
4	„ carcasses	...	...	Jaundice.	
193	„ plucks	...	...	Inflammatory conditions, etc.	
223	„ various offals and 32 parts	...	...	„	„
12	sheep carcasses and offals	...	...	Emaciation, parasitical, etc.	
12	„ various parts	...	...	Inflammatory conditions, etc.	
6	„ plucks	...	...	Parasitical, etc.	
33	„ various offals	...	...	„

Total weight destroyed : 26,058 lbs.

PRIVATE SLAUGHTERHOUSES AND MEAT INSPECTION.

At the end of 1930 there were 4 registered slaughterhouses in the Borough. Of these 3 are in use. The number of visits paid to the private slaughterhouses for the purposes of inspecting the meat during 1930 was 1,451.

TABLE XVII.

The number of animals slaughtered in the private slaughterhouses during the year was :—

Cattle.	Sheep.	Pigs.	Calves.	Total.
264	3292	4236	3003	10,795

The following meat and offal from private slaughterhouses was surrendered and destroyed during 1930 :—

<i>Description.</i>	<i>Cause.</i>
4 beef heads	Localised tuberculosis.
5 sets beef lungs	" "
4 beef offals (various)	" "
1 set beef lungs	Inflammatory conditions, etc.
3 beef sundry parts	" "
28 " livers or parts	Parasitical, abscesses, etc.
1 veal carcase and offal	Dropsical.
2 " plucks and 1 part	Localised tuberculosis.
5 " offals (various)	Inflammatory conditions.
2 pig carcasses and offal	General tuberculosis.
31 " heads	Localised tuberculosis.
21 " plucks	" "
5 " sundry offals	" "
4 " carcasses and offals	Inflammatory, etc.
4 " parts	" "
13 " plucks	" "
12 " offals (various)	" "
2 sheep carcasses	Unsound.
3 " parts	" "
3 " offals (various)	Parasitical.

Total weight destroyed : 2,259 lbs.

TABLE XVIII.

Total number of animals slaughtered for human consumption in the Borough during 1930 :—

Cattle.	Sheep.	Pigs.	Calves.	Total.
1,041	10,083	22,038	7,171	40,333

TABLE XIX.

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

Class of Animal.	Tuberculosis.	Emaciated and Dropsical.	Sapraemia.	Inflammatory Conditions.	Immaturity.	Traumatism.	Jaundice.	Swine Fever.	Asphyxiation.	Melanosis.	Unsound.	Total carcasses.
Cattle	8	...	1	1	...	2	...	...	...	...	2	14
Calves	2	1	...	1	4	..	...	...	...	1	...	9
Sheep ... ..	...	2	...	9	...	...	...	...	1	...	3	15
Pigs	10	1	...	9	...	1	4	3	2	...	...	30
Totals	20	4	1	20	4	3	4	3	3	1	5	68

TABLE XX.

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

Animals affected.	Carcass and all internal organs destroyed.	Quarters or parts of carcass destroyed (including heads).	All or parts of organs destroyed.	Total.
Cattle (including calves)...	10	30	56	96
Pigs	10	286	193	489
Total	20	316	249	585

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	1858
Fishmongers	185
Fried Fish Shops ...	114
Grocers	557
Greengrocers	406
Poultry and Game Dealers ...	26
Cooked and Prepared Meat Shops ...	145
Bakers' Premises	258

Confectioners' Premises	...	...	...	...	...	339
Markets	...	...	...	...	...	642
Hawkers' Carts and Barrows	...	...	...	...	...	175
Hotel and other Kitchens, etc.	...	...	...	...	...	440
Ice Cream Manufacturers and Vendors	...	...	...	...	...	246
General Shops	...	...	...	...	...	360
Other premises	...	...	...	...	...	34
						<hr/> 5,785 <hr/>

TABLE XXI.

The following articles of food were surrendered and destroyed during 1930 :—

2 beef carcasses	(Imported)	...	...	...	...	Unsound
5 „ forequarters	„	...	...	...	...	do.
33 „ hindquarters	„	...	...	...	...	do.
118 „ parts and trimmings	„	...	...	...	...	do.
314 lbs. ox kidneys or parts	„	...	...	...	...	do.
222 lbs. ox liver	„	...	...	...	...	do.
1 carcase mutton	„	...	...	...	...	do.
32 parts mutton	„	...	...	...	...	do.
16 doz. sheep hearts	„	...	...	...	...	do.
5 pork parts	„	...	...	...	...	do.
8 lbs. pork kidneys	„	...	...	...	...	do.
21 lbs. sweetbreads	„	...	...	...	...	do.
37 lbs. lambs liver	„	...	...	...	...	do.
9 lbs. bacon	...	...	...	...	...	do.
25 tins beef	...	...	...	...	...	do.
520 lbs. rabbit	...	...	...	...	...	do.
10 tins rabbit	...	...	...	...	...	do.
8 lbs. megrims, etc.	...	...	...	...	...	do.
1 box dog fish	...	...	...	...	...	do.
116 lbs. cod	...	...	...	...	...	do.
12½ lbs. prawns	...	...	...	...	...	do.
46 tins herrings	...	...	...	...	...	do.
30 tins sardines	...	...	...	...	...	do.
7 tins lobster	...	...	...	...	...	do.
11 tins salmon	...	...	...	...	...	do.
9 lbs. salmon	...	...	...	...	...	do.
24 boxes haddock, etc.	...	...	...	...	...	do.
1 bag winkles	...	...	...	...	...	do.
3 boxes kippers	...	...	...	...	...	do.
420 tins pineapple, peaches, cherries, etc.	...	...	...	...	...	do.
19 lbs. pears	...	...	...	...	...	do.
240 pomegranates	...	...	...	...	...	do.
154 lbs. black and red currants	...	...	...	...	...	do.
54 lbs. apples	...	...	...	...	...	do.
17 lbs. oranges	...	...	...	...	...	do.
31 lbs. dates	...	...	...	...	...	do.
12 lbs. apricots	...	...	...	...	...	do.
100 lbs. prunes	...	...	...	...	...	do.
132 lbs. tomatoes	...	...	...	...	...	do.
56 tins tomatoes	...	...	...	...	...	do.
22 lbs. sprouts	...	...	...	...	...	do.

8 lbs. beetroots	...	...	...	...	...	...	do.
17 lbs. beans	...	...	...	...	...	...	do.
90 tins vegetables	...	...	...	...	...	...	do.
20 lbs. potatoes	...	...	...	...	...	...	do.
325 tins condensed milk	...	...	...	...	...	...	do.
107 lbs. jam, syrup, etc.	...	...	...	...	...	...	do.
49 lbs. suet, etc.	...	...	...	...	...	...	do.
710 lbs. sweets, chocolate, etc.	...	...	...	...	...	...	do.
16 bottles pickles, etc.	...	...	...	...	...	...	do.
50 lbs. ice cream	...	...	...	...	...	...	do.
6 lbs. minced meat, etc.	...	...	...	...	...	...	do.
6 tins tongue and brawn	...	...	...	...	...	...	do.
56 lbs. dripping	...	...	...	...	...	...	do.
144 tins cafe-au-lait	...	...	...	...	...	...	do.
68 packets soup	...	...	...	...	...	...	do.
23 jars paste	...	...	...	...	...	...	do.

Total weight destroyed : 11,569 lbs.

TABLE XXII.

General Summary of Meat and other articles destroyed during the year 1930.

ARTICLES.	Weight in lbs.			Remarks.
	Diseased.	Unsound.	Total.	
Beef	8,812½	6,916	15,728½	Including 14 carcasses.
Veal	681	291	972	„ 9 „
Mutton	319	1,140	1,459	„ 15 „
Pork	8,525	1,069	9,594	„ 30 „
Offal	7,111¾	1,011	8,122¾	„ imported offal.
Fish ... ..	...	429	429	Cod, Haddocks, Winkles.
Fruit & Vegetables	...	646½	646½	Apples, Black Currants, Tomatoes, etc.
Tinned Goods ..	...	1,424½	1,424½	1,191 tins, 66 jars.
Rabbits ... ..	...	520	520	
Sundries ... ..	...	989½	989½	Sweets, Ice Cream.
	25,449½	14,436	39,885½	

MILK.

The milk supply of the Borough is derived principally from the south, south-east and south-west counties, the greater propor-

tion being rail-borne. Only a small proportion is produced in the Borough, due largely to the absorption of land for building purposes and the decreasing amount available for pasture.

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

The various premises used for the sale of milk have again received careful attention. Separate premises for the storage of milk and washing utensils are required before registration is granted. Additional alterations have been made to existing dairies, new dairies, including a large model dairy which embodies the latest ideas in dairy equipment, have been completed.

Mechanical refrigeration is largely used by dairymen in the Borough as part of their dairy equipment.

Three large firms retail bottled milk exclusively. Other firms are rapidly coming into line, with the result that an increase of over 5 per cent. in the sale of bottled milk has taken place during the year.

Enquiries show that approximately 17,616 gallons of milk are sold daily in the Borough; of this amount 90% is bottled, whilst only 6% is retailed as loose milk, the remaining 4% being sold wholesale to large consumers.

These figures are interesting and show the great changes which have taken place in the distribution of milk. I think a stage will soon be reached when the retail sale of loose milk in the Borough will be a thing of the past. 9,985 gallons of graded milk are sold daily in the Borough, this being an increase of over 600 gallons per day compared with the figures for 1929.

Sampling for both chemical and bacteriological analysis has been maintained during the year.

When a sample of milk is not up to the recognised standard the supplier, whether retailer or producer, is invited to interview the Chief Sanitary Inspector, when the methods of production and distribution are discussed and in consequence a number of producers have adopted suggestions made, with excellent results. These educational methods are appreciated by the producers, who are, from time to time, accompanied by employees.

**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 Purveyors of Milk Premises on the register :—

Cowkeepers on register (1929)	...	...	...	9
„ added to the register (1930)	...	...	...	—
„ discontinued (1930)	...	...	...	—
			Net ...	9
Cowsheds on register (1929)	...	...	...	26
„ added to the register (1930)	...	...	...	—
„ discontinued (1930)	...	...	...	—
			Net ...	26
Number of cows provided for	...	...	...	289
Average number of cows in sheds (1930)	...	...	...	243
No. of dairies and purveyor of milk premises on register (1929)	...	...	...	242
No. of dairies and purveyor of milk premises added to register (1930)	...	...	...	29
No. of dairies and purveyor of milk premises discontinued during 1930	...	...	...	17
			Net ...	254
Grand total of cowsheds, dairies and purveyor of milk premises on register, 31st December, 1930				280

During the year 690 inspections were made of dairies, cowsheds and milkshops.

Milk (Special Designations) Order, 1923.

The following licences were granted during the year under this Order and were in force on the 31st December, 1930 :—

<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"	18
(3) Dealers' Licences to use the designation "Grade A" (Tuberculin tested)—	
(a) Bottling establishments	1
(b) Shops	14
(4) Dealers' Licences to use the designation "Grade A"—	
(a) Bottling establishments	—
(b) Shops	7
(5) Dealers' Licences to use the designation "Grade A Pasteurised"—	
(a) Shops	—
(6) Dealers' Licences to use the designation "Pasteurised"—	
(a) Pasteurising establishments	—
(b) Shops	52
(7) Dealers' Supplementary Licences to use the designation	
(a) Certified	1
(b) Grade A	1
(c) Pasteurised	1

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	3
--	---

Grade A (Tuberculin Tested) and Grade A Milks.

Licensed country producer of Grade A (Tuber- culin Tested) milk supplying milk to a licensed local dairyman	1
--	---

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

The following tables summarise the results of the bacteriological examinations of Certified, Grade A (Tuberculin Tested) and Grade A samples, from 1st January to 31st December, 1930 :—

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.	Exceeding a trace.	Not exceeding a trace.
Tubercle bacillus	3										
Total number of bacteria	3								
Bacillus Coli				1	2						
Blood	3				
Pus	3		
Detritus	3
	...	3	...	3	1	2*	...	3	...	3	...	3

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

0—1,000	...	1
1,000—5,000	...	—
5,000—10,000	...	1
10,000—20,000	...	—
20,000—30,000	...	1
Over 30,000	...	—
		3

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	1										
Total number of bacteria	1								
Bacillus coli	1						
Blood	1				
Pus	1		
Detritus	1
	...	1	...	1	...	1	...	1	...	1	...	1

The 2 Grade A (Tuberculin Tested) and Grade A milks contained bacteria per c.c. as follows :—

5,000—10,000	...	1
		—
		1
		—

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, 1930 :—

TABLE XXV.

PASTEURISED MILK. (licences granted under the Milk (Special Designations) Order, 1923).											Exceeding a trace.	Not exceeding a trace.
	Present.	Absent.	Over 100,000 per c.c.	Under 100,000 per c.c.	Present.	Absent.	Present.	Absent.	Present.	Absent.		
Tubercle bacillus	55										
Total number of bacteria	...		5	50								
Bacillus coli				30	25						
Blood	55				
Pus	55		
Detritus	55
	...	55	5	50	30	25	...	55	...	55	...	55

The above 55 Pasteurised Milk samples contained bacteria per c.c. as follows :—

1,000—5,000	...	5
5,000—10,000	...	12
10,000—20,000	...	14
20,000—30,000	...	6
30,000—50,000	...	6
50,000—100,000	...	8
Over 100,000	...	4
		—
		55
		—

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 1930. *Bacillus Coli* was absent in each case, and the bacterial content was as follows :—

2 samples contained Nil bacteria per c.c.

MILK AND DAIRIES ORDERS 1926.

There were four offences discovered under the above Orders, namely :—

Bottling milk on premises other than the Registered premises.

In each case the roundsman was prosecuted and fines and costs amounting to £15 15s. were incurred.

PROVISION AS TO MILK SUPPLY.

During the year 374 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	...	29
Samples in course of delivery from country cowsheds to local dairymen and purveyors of milk in the Borough	... ..	120
Samples taken at dairymen's premises in the Borough	... ..	54
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	... ..	1
		<hr/>
		374
		<hr/>

Thirty-two samples proved to be tuberculous, but of these 23 were from supplies from which previous tuberculous samples had been taken and which were at the time the subject of action by the Authorities concerned and therefore could be taken to be duplicate samples. The milk came principally from farms in East Sussex, but other sources of supply were Surrey, Somerset, Wiltshire, and a farm in the Borough. The Authorities concerned were notified that samples of milk taken had been shown to contain tubercle bacilli and enquiries were made with a view of tracing the cows involved. A considerable number of cows were examined by the Authorities' Veterinary Officers, suspected animals isolated and samples taken, and as the result of their investigations seven animals were dealt with under the Tuberculosis Order, 1925. In six cases it was ascertained that the milk was a mixed supply coming from a considerable number of farms, and much difficulty is met with in these cases in locating affected animals. At the end of the year investigation was still proceeding in five cases.

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, 1930 :—

TABLE XXVI.

ORDINARY MILK.	Present.		Absent.		Over 200,000 per c.c.		Under 200,000 per c.c.		Present in 100 c.c.		Absent from 100 c.c.		Present.		Absent.		Present.		Absent.		Exceeding a trace.		Not exceeding a trace.	
Tubercle bacillus ...	32	342																						
Total No. of bacteria ...			132	242																				
Bacillus Coli ...					295	79																		
Blood ...													374											
Pus ...																374								
Detritus ...																					374			
	32	342	132	242	295	79		374				374			374					374				

The 374 samples of ordinary milk contained total bacteria per c.c. as follows :—

0—1,000	...	2
1,000—5,000	...	20
5,000—10,000	...	20
10,000—20,000	...	40
20,000—30,000	...	17
30,000—40,000	...	25
40,000—50,000	...	19
50,000—100,000	...	56
100,000—150,000	...	27
150,000—200,000	...	14
200,000—250,000	...	8
250,000—500,000	...	37
500,000—750,000	...	10
750,000—1,000,000	...	10
1,000,000—2,000,000	...	22
Over 2,000,000	...	47
		<hr/>
		374
		<hr/>

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 240 of the samples contained total bacteria below that standard. It has to be remembered that a proportion of this milk has been subjected to commercial pasteurisation.

The 374 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	26	4
Dorset	3	...
Kent	17	...
Somerset	1	1
Surrey	10	2
Sussex	74	24
Wiltshire	1	...
*Unclassified	242	1
Totals	374	32

*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.

SALE OF FOOD AND DRUGS ACT.

During the year 396 samples of milk (386 new, 10 condensed) and 437 other samples were taken.

In 1 instance the vendor was prosecuted and 9 were warned.

23 samples of Ice Cream were taken during the year. The Public Analyst reports that 10 of these samples contained fat in amounts varying from 2.1% to 3.9%. The remaining thirteen contained fat in amounts varying from 9.8% to 14.6%.

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 fell well below this suggested standard.

1. Summary of Samples.

During 1930 samples were obtained and submitted to the Public Analyst as follows:—

TABLE XXVIII.

Samples of	Total Samples.	Genuine.	Not Genuine.	Prosecutions.	Convictions.	Cautions.
Milk	386	373	13	1	1	6
Condensed milk	10	10	—	—	—	—
Cream	3	3	—	—	—	—
Arrowroot	5	5	—	—	—	—
Aspirin tablets	7	7	—	—	—	—
Bacon	7	7	—	—	—	—
Baking Powder	10	8	2	—	—	1
Boric Ointment	4	4	—	—	—	—
Brawn	12	12	—	—	—	—
Bread	7	7	—	—	—	—
Bun Flour	5	5	—	—	—	—
Butter	11	11	—	—	—	—
Camphorated Oil	3	3	—	—	—	—
Castor Oil	5	5	—	—	—	—
Cheese	2	2	—	—	—	—
Cheese, Cream	2	2	—	—	—	—
Cocoa	8	8	—	—	—	—
Cod Liver Oil	6	6	—	—	—	—
Coffee	9	9	—	—	—	—
„ Essence	6	6	—	—	—	—
Confection of Senna	2	2	—	—	—	—
Corned Beef	1	1	—	—	—	—
Corn Flour	5	5	—	—	—	—
Cream Buns	1	1	—	—	—	—
Cream of Tartar	6	6	—	—	—	—
Custard Powder	5	5	—	—	—	—
Dripping	8	8	—	—	—	—
Eggs (Dried)	2	2	—	—	—	—
Faggots	6	6	—	—	—	—
Fish Paste	7	7	—	—	—	—
Flour (includ. Self-raising)	7	7	—	—	—	—
Ginger Ale	5	5	—	—	—	—
Ginger Beer	3	3	—	—	—	—
Glycerine	3	3	—	—	—	—
Golden Syrup	4	4	—	—	—	—
Ground Almonds	2	2	—	—	—	—
Ground Ginger	3	3	—	—	—	—
Ground Rice	8	8	—	—	—	—
Ham	2	2	—	—	—	—
Honey	7	7	—	—	—	—
Ice Cream	23	23	—	—	—	—
Jam	12	12	—	—	—	—
Lard	8	8	—	—	—	—
Lemonade	3	3	—	—	—	—
Lemon Cheese	5	5	—	—	—	—
Lemon Crush Syrup	1	1	—	—	—	—
Lemonade Crystals	3	3	—	—	—	—
Lemonade Powder	4	4	—	—	—	—
Light Calcined Magnesia	1	—	1	—	—	1
Liquorice Powder Compd.	5	5	—	—	—	—
Liver Sausage	2	2	—	—	—	—
Margarine	7	7	—	—	—	—
Meat Paste	15	15	—	—	—	—
Mincemeat	3	3	—	—	—	—
Mixed Pickles	10	10	—	—	—	—
Olive Oil	3	3	—	—	—	—
Pearl Barley	7	7	—	—	—	—
Pepper	6	6	—	—	—	—
Carried forward ...	713	697	16	1	1	8

Samples of	Total Samples.	Genuine.	Not Genuine.	Prosecutions.	Convictions.	Fines.
Brought forward ...	713	697	16	1	1	8
Pickled Onions ...	2	2	—	—	—	—
Puff Pastry ...	1	1	—	—	—	—
Rissoles ...	2	2	—	—	—	—
Rochelle Salt ...	2	2	—	—	—	—
Sausage, Beef ...	16	16	—	—	—	—
„ Breakfast ...	5	3	2	—	—	1
„ Lunch ...	7	7	—	—	—	—
„ Pork ...	13	13	—	—	—	—
„ Smoked ...	1	1	—	—	—	—
Saveloys ...	2	2	—	—	—	—
Shredded or Chopped						
Beef Suet ...	5	5	—	—	—	—
Spice, Mixed ...	1	1	—	—	—	—
Sponge cake ...	2	2	—	—	—	—
Sweets ...	11	11	—	—	—	—
Syrup of Figs ...	3	3	—	—	—	—
Syrup of Rhubarb ...	4	4	—	—	—	—
Tea ...	9	9	—	—	—	—
Tinned Asparagus ...	3	3	—	—	—	—
Tinned Beans ...	1	1	—	—	—	—
Tinned Peas ...	6	6	—	—	—	—
Tinned Tomatoes ...	2	2	—	—	—	—
Treacle ...	4	4	—	—	—	—
Tripe ...	1	1	—	—	—	—
Vinegar, Malt ...	10	10	—	—	—	—
Vinegar ...	1	1	—	—	—	—
Wafers ...	1	1	—	—	—	—
Whiskey... ..	4	4	—	—	—	—
Zinc Ointment ...	1	1	—	—	—	—
Totals	833	815	18	1	1	9

2. Result of Analysis of New Milk Samples.

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

8.1 8.2 8.3 8.4 8.5* 8.6 8.7 8.8 8.9 9.0 9.1 9.2 9.3 9.5 .. Total 383

1 1 2 2 3 15 30 83 102 80 42 14 6 2

MILK FAT.* (Legal standard is 3%).

2.5 2.6 2.7 2.8 3.0* 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9

3 1 2 4 8 20 35 63 70 47 36 28 21 16

4.0 4.1 4.2 4.3 4.4 4.6 4.7 5.2 5.3

5 4 7 6 2 2 1 1 1 Total 383

Total Samples of New Milk ... 383

„ „ Separated Milk ... 3

„ „ (Informal) ... —

386

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

Country Milk in course of delivery at Railway Stations ...	1
Country Milk in course of delivery by Motor Lorry to Local Dairymen	7
On Milk Rounds (Sundays)	22
" " (Week-days)	259
Cowsheds	—
At shops	92
Taken at Institutions	2
"Appeal to Cow" Samples taken at farms outside Borough	3
	<hr/> 386 <hr/>

AVERAGE COMPOSITION OF NEW MILK SAMPLES.

Milk Fat	3.46%
Solids not Fat	8.9%
Percentage of New Milk Samples below legal standard : 3.37%	

Adulterated Samples.

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

No.	Sample.	Adulteration or Deficiency.	Remarks.
758.	New Milk	... .. 10% deficient in fat...	Vendor warned. Further sample proved not genuine. See sample No. 945.
762.	New Milk	... .. 2% added water. ...	Vendor warned. Further sample proved genuine.
B88.	New Milk	... .. 2% added water ...	Further sample to be taken at farm.
945.	New Milk	... .. 17% deficient in fat...	Vendor prosecuted & convicted. Fined £2 2s. and 15s. costs.
986.	New Milk	... .. 1% added water ...	Vendor warned. Explanation accepted.
1086.	New Milk	... .. 7% deficient in fat ...	See sample 1228.
1104.	New Milk	... .. 6% deficient in fat ...	Vendor warned. Further sample proved genuine.
1377.	Baking Powder	... Insufficient carbon dioxide.	See sample 1426.
1171.	New Milk	... .. 7% deficient in fat ...	Vendor warned.
1228.	New Milk	... .. 9% deficient in fat ...	Vendor warned.
1313.	New Milk	... .. 16% deficient in fat...	See sample D102.

1327.	New Milk	...	...	7% deficient in fat ...	See sample D102.
1328.	New Milk	...	...	18% deficient in fat...	See sample D102.
D102.	New Milk	...	...	8% deficient in fat ...	"Appeal to cow" sample. Authority in whose area the farm is situated notified of result and asked to follow up. This milk does not now come to Croydon.
1426.	Baking Powder	...	...	Insufficient carbon dioxide.	Old stock. Balance surrendered and destroyed. Vendor warned.
1495.	Light Calcined Magnesia.	...	...	Not according to British Pharmacopœia.	Vendor warned. Due to exposure.
1395.	Breakfast Sausage	...	...	Contained sulphur dioxide 0.004%	Further sample taken. See sample No. 1415.
1415.	Breakfast Sausage	...	...	Contained sulphur dioxide 0.003%	Vendor warned. Explanation accepted. Further sample proved genuine.

SECTION IV.

CANCER.

Deaths from Cancer numbered 339 as compared with 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 past 10 years are as follows:—

1919—1.28 (235)	...	1924—1.50 (293)
1920—1.14 (218)	...	1925—1.60 (319)
1921—1.14 (218)	...	1926—1.60 (330)
1922—1.31 (252)	...	1927—1.62 (344)
1923—1.34 (259)	...	1928—1.54 (327)
		1929—1.48 (330)

For 1930 the rate is 1.52 (339).

Deaths From Cancer in Municipal Wards.

TABLE XXIX.

Ward.	Male.	Female.	Total.	Death-rate	Population Census 1921	
					Male.	Female.
Upper Norwood	10	11	21	1.43	6405	828
Norbury ...	5	12	17	1.80	4208	520
West Thornton	7	11	18	1.37	6059	766
Bensham Manor	9	18	27	1.82	6321	742
Thornton Heath	13	16	29	2.25	6067	684
South Norwood	15	15	30	1.99	6700	836
Woodside ...	9	5	14	0.94	6940	780
East ...	11	24	35	3.15	4819	627
Addiscombe ...	4	16	20	1.45	6395	788
Whitehorse Mnr	8	13	21	1.24	7985	890
Broad Green ...	15	12	27	1.73	7238	838
Central ...	3	14	17	1.33	5530	728
Waddon ...	15	15	30	2.14	6510	747
South ...	14	16	30	2.30	5585	747
No fixed abode.	1	—	1	—	—	—
Addington ...	2	—	2	—	—	—
Total ...	141	198	339	1.52	86762	10411

TABLE XXX.

Based on 1921 Census figures.

Deaths from Cancer occurred at the following ages:—

Age period.	Male.	Female.	Total.	No. of popula- tion at this age period.	Incidence per 1,000 persons liv- ing.
Under 25 years ...	—	1	1	81480	0.01
25 and under 35 years	1	2	3	28220	0.11
35 and under 45 years	9	11	20	29651	0.67
45 and under 65 years	70	79	149	38464	3.87
65 years and over ...	61	105	166	12869	12.90
	141	198	339	190684	1.52

TABLE XXXI.

Sites of Fatal Cancer.

Site.	Male.	Female.	Total.	Percentage of Total.
Skin	1	5	6	1.77
Tongue and Mouth ...	12	2	14	4.13
Tonsils	2	—	2	0.59
Oesophagus	9	2	11	3.24
Stomach	31	34	65	19.17
Liver	7	10	17	5.01
Bowel	18	35	53	15.63
Rectum	21	14	35	10.32
Bladder	5	1	6	1.95
Prostate	8	—	8	2.36
Larynx	2	—	2	0.59
Uterus	—	19	19	5.60
Breast	—	43	43	12.68
Ovary	—	11	11	3.25
Pancreas	7	6	13	3.84
Gall Bladder	1	1	2	0.59
Abdominal	—	4	4	1.18
Bones	1	3	4	1.18
Mediastinum	3	—	3	0.89
Lungs	5	5	10	2.95
Kidneys	3	2	5	1.48
*Glands	2	1	3	0.89
Not stated	1	—	1	0.29
Spleen	2	—	2	0.59
	141	198	339	

*Probably secondary to Cancer elsewhere.

Points arising out of the previous tables:—

(1) The Cancer mortality rises as age rises; this is 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 80.8% of the total deaths fall within these groups and in females 89.3%. In both sexes Cancer of the digestive system is the commonest situation, amounting to 75.1% in males and 52.5% in females. Cancer of the reproductive system caused 36.8% of the total deaths in females. Cancer of the larynx, tongue and mouth is much commoner in males than females, 16 deaths occurring in males as compared with 2 in females. The organs most often attacked in descending order of incidence are, in males—the Stomach (22.0%), Rectum (14.8%), Bowels (12.7%), Tongue and Mouth (8.5%), and Oesophagus (6.4%); in females—the Breast (21.7%), Bowels (17.7%), Stomach (17.1%), and Uterus (9.6%). This is slightly different from the incidence in 1929.

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.

SECTION V.

PREVALENCE AND CONTROL OF INFECTIOUS DISEASE.

Table XXXII. gives the figures for ages and wards.

The largest incidence of Scarlet Fever has been in Addiscombe, West Thornton, Broad Green, Norbury and South Norwood Wards. Based on the estimated ward populations, the case rate for these five wards was respectively, 448; 404; 363; 429; and 264 per 100,000 of the population. The age group 5-15 years, as usual, suffered most; cases in this group comprising 61.6% of the total. An unusual number of adults were attacked. Attention is drawn to this phenomenon in the report on the Borough Hospital.

Diphtheria was most prevalent in Upper Norwood (case rate 448); West Thornton (290); Waddon (316); Whitehorse Manor (194) and Broad Green (205). Once again the age group 5-15 years gave the highest figures.

Twenty four cases of Small Pox occurred, all were of the modified type. Twelve cases arose in Woodside, but the others were widely scattered and sporadic.

There were 13 cases of Puerperal Fever and 24 of Puerperal Pyrexia; 14 occurred in the age group 16-25 years and 23 in the age group 26-45 years. A majority of the cases occurred in women having their first confinement.

All the notifiable infectious diseases showed a decreased incidence with the exception of Small Pox and Ophthalmia Neonatorum. The notifications of the Pneumonias decreased over 50%, due to the absence of any severe outbreak of Influenza.

The bulk of the cases of Notifiable Infectious Disease occurred in the area North of a line drawn from Waddon Station in the South-West to Woodside Station in the North-East.

The following streets or districts showed the highest incidence of Scarlet Fever, namely, the Corporation Housing Estate, Waddon; Leighton Street East; Thornton Heath; the area around Oval Road. Otherwise the cases were widely scattered over the whole borough area. Diphtheria showed the highest area incidence in Morland Road owing to an outbreak in a Boys' Home in this road. Stanley Road; Wilford and adjoining roads and the Waddon Housing Estate.

The incidence of the commoner infectious diseases in Croydon during the past seven 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. During 1930 the incidence has been relatively constant, with a slight decline in the number of cases in August and September. The weekly average of cases has been 15.

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. The weekly average was 7.

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. Until December the average number of cases brought to our knowledge was two weekly.

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, 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, reaching its maximum in the second week of March and dying away gradually until terminating at the end of June. The measles waves therefore were as follows: the first half of 1924, the second half of 1925, and first quarter of 1926; first half of 1928, the first half of 1929 and the first half of 1930. 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.

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. 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.

TABLE XXXII.
CASES OF NOTIFIED INFECTIOUS DISEASE, 1930.

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.	1929.	
	At all Ages.	At ages—years.							Upper Norwood.	Norbury	West Thornton.	Bensham Manor.	Thornton Heath.	South Norwood.	Woodside.	East.	Addiscombe.	Whitehorse Manor.	Broad Green.	Central.	Waddon.	South.	Addington.					
		Under 1 year.	1—5	5—15	16—25	26—45	46—65	66 and up.																				
Small Pox	24	...	1	6	11	3	2	1	3	1	2	2	...	2	12	1	...	1	2	...
Cholera
Diphtheria (inc. Membranous Croup)	394	2	99	222	39	24	7	1	70	13	46	22	23	13	4	23	22	36	35	18	53	15	1	413	14	159	276	
Erysipelas	64	1	2	4	5	11	27	14	6	2	8	2	4	5	2	5	6	6	7	2	4	4	1	6	7	30	41	
Scarlet Fever	681	7	136	420	65	47	6	...	36	52	64	37	35	49	28	39	73	30	62	31	105	28	12	603	2	346	413	
Typhus Fever
Enteric Fever (including Paratyphoid)	15	...	...	3	5	5	1	1	...	...	3	...	...	1	1	1	1	1	2	1	...	3	1	7	...	11	26
Puerperal Fever	13	...	...	...	4	9	...	...	1	1	7	...	...	...	...	1	...	...	...	1	1	...	1	4	3	...	16
Puerperal Pyrexia	24	...	...	...	10	14	...	...	...	...	11	...	1	...	1	...	4	4	...	1	1	...	2	...	...	23	...
Cerebro-Spinal Meningitis	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	...	2	2	2
Ophthalmia Neonatorum	19	19	...	...	...	...	...	...	...	...	7	1	...	3	...	1	...	4	1	...	1	1	...	6	...	3	2
Poliomyelitis	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	2
Encephalitis Lethargica	3	1	...	...	...	2	...	...	1	...	...	1	...	...	...	...	...	...	...	1	...	...	...	2	...	2	2
Dysentery ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Malaria ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Ac. Primary or Ac. Inf. Pneumonia	73	2	8	7	11	23	12	10	10	9	8	4	1	6	4	4	10	3	6	2	4	2	...	...	11*	93	65

*Influenzal Pneumonia only.

TABLE XXXIII.

Notified Disease.	Incidence Rate per 1,000 population.		Housing Conditions.			Case occurring in Institutions in the Borough.	Total cases notified.
	1930	1929	1-3 rooms.	4-5 rooms.	Over 5 rooms.		
Small Pox	0.103	0.009	1	10	9	4	24
Diphtheria	1.77	1.96	20	238	70	66	394
Erysipelas	0.24	0.32	3	27	14	20	64
Scarlet Fever	3.06	3.41	28	412	190	51	681
Enteric Fever (inc. Paratyphoid)	0.067	0.17	1	4	5	5	15
Puerperal Fever	0.05	0.07	—	—	—	5	13
Puerperal Pyrexia	0.10	0.10	—	—	—	13	24
Cerebro—Spinal Meningitis ...	0.004	0.02	—	—	1	—	1
Ophthalmia Neonatorum ...	0.085	0.21	—	—	—	5	19
Poliomyelitis	0.004	0.013	—	—	1	—	1
Encephalitis Lethargica ...	0.013	0.02	—	1	1	1	3
Acute Primary or Acute Influenzal Pneumonia ...	0.32	0.71	6	33	14	20	73

TABLE XXXIV.
SCARLET FEVER.

YEAR.	Cases notified in Croydon.	Attack Rate Per 100,000 of Population.	No. of Deaths.	Percentage of Death 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	0.54	714	3	0.42
1930	681	306	2	0.29	679	2	0.29

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

There was a decrease in the number of cases notified and admitted to Hospital in 1930 as compared with 1929. The type

was relatively mild. Waves in the severity of this complaint are usual and, in the comparatively short period covered by the above table, make themselves noticeable. The case rate (Col. 3) for England and Wales was 276. Croydon's figure shows an excess.

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	8.18
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	9.7
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

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

The incidence of diphtheria showed a decrease in 1930. The mortality was 2.6% in the Hospital cases.

The Case rate (Col. 3) for England and Wales was 184. Croydon's rate is therefore slightly lower than for the whole country.

THE BOROUGH HOSPITAL.

This Hospital is situated in Purley Way, Waddon Marshes, on a site of 22 acres and a height of 144 feet above sea level.

There are provided 96 beds for scarlet fever; 62 beds for diphtheria; and 26 beds for other infectious diseases. There are 2 glass cubicle blocks, containing 12 cubicles each for the nursing of heterogenous cases in one ward. One ward for measles containing 16 beds.

A portion of one of the old wards—A Ward—has been redecorated, and made suitable for the admission of patients.

The Hospital is a recognised training school for Fever Nurses, and during the year 2 probationers passed the examination of the General Nursing Council.

In order to relieve Mayday Road Hospital, and to concentrate infectious diseases in one institution, the practice was followed towards the end of the year, of admitting all cases of infectious disease—other than the pneumonias—which previously would have been admitted to Mayday Road Hospital. This has led to a greater variety in the diseases treated and also to an increase in the average number of patients.

During the year a new washing machine and hydro-extractor was installed in the laundry, and a new steamer in the kitchen. A refrigerator has also been fitted in one of the storerooms.

TABLE XXXVI.

Complaint for which Admitted.	Patients remaining in Hospital on Jan. 1st, 1930.			Patients admitted and discharged in 1930.			Patients remaining in Hospital on Jan. 1st, 1931.			Analysis of all Cases admitted in 1930 whether discharged or not during the year.							Average No. of beds occupied during 1930.
	Total.	Recovered	Died.	Total.	Recovered	Died.	Total.	Recovered	Died.	Total.	Recovered	Died.	Case Mortality.	Average No. of days in Hospital.			
Scarlet Fever	84	84	...	679	593	2	84	84	...	679	677	2	0.3	36.5	65.3		
Diphtheria	63	63	...	462	398	12	52	51	1	462	450	12	2.5	37.5	42.9		
Typhoid Fever	1	1	...	5	5	...	...	...	...	5	5	...	...	35	2.5
Paratyphoid Fever ... ..	...	...	...	3	3	...	...	...	...	3	3	...	...	35	2.5
Erysipelas ... ..	...	...	...	7	3	2	2	2	...	7	5	2	28.4	16.0	0.40
Measles	2	2	...	45	43	2	...	...	...	45	43	2	4.4	20	0.11
Puerperal Fever ... ..	...	...	...	8	7	1	...	...	...	8	7	1	12.4	40	1.0
Puerperal Pyrexia ... ..	...	...	...	1	1	...	...	...	...	1	1	...	...	19	0.5
Encephalitis Lethargica ... ..	...	...	...	2	1	1	...	...	...	2	1	1	50	7	0.05
Whooping Cough ... ..	...	...	...	5	4	...	1	1	...	5	5	...	...	30	0.59
Cerebro-Spinal Meningitis ... ..	...	...	...	3	2	1	...	...	...	3	2	1	33.3	12	0.09
Pneumonia ... ..	...	...	...	1	1	...	...	...	...	1	1	...	...	21	0.17
Chicken Pox ... ..	...	...	...	1	1	...	...	...	...	1	1	...	...	20	0.05
Acute Gastro Enteritis ... ..	...	...	...	1	...	1	...	...	...	1	...	1	100.0	7	...
Mumps ... ..	...	...	...	4	3	1	...	...	...	4	3	1	25.0	21	...
Ophthalmia Neonatorum ... ..	...	...	...	9	9	...	...	...	...	9	9	...	...	20	...
Meningitis ... ..	...	...	...	1	1	...	...	...	...	1	1	...	...	10	...
Tonsillitis ... ..	...	...	...	2	2	...	...	...	...	2	2	...	...	7	...
No Diseases ... ..	...	...	...	11	10	...	1	1	...	11	11	...	...	...	0.76
Total	150	150	...	1250	1087	23	140	139	1	1250	1227	23	...	...	...

The table gives a summary of all cases treated in hospital in 1930. Out of the total of 182 beds, 113 have been continuously occupied, i.e., 62%.

1,250 patients were admitted and discharged during the year, whilst, including the patients in at the commencement of 1930 (150), a total of 1,400 cases were dealt with. Twenty-three died, giving a case mortality for the whole Hospital of 1.8%, a decrease of 0.2% on 1929.

The average number of days of each patient in Hospital for all classes of patients was 29.07, a decrease of 1.5 days over 1929.

Penge Urban District Council has an agreement with the Corporation to send their cases into the Hospital. During 1930 a total of 159 cases were admitted from this district. These cases are included in the above table.

SCARLET FEVER.

The total number of cases admitted as scarlet fever during the year was 679. This was a decrease of 35 on last year's total.

623 cases were from the Borough and 56 from areas outside the Borough, a decrease in Borough cases of 33, and of 2 cases from outside the Borough. There were 11 definite return cases.

Though the type of scarlet fever in 1930 was of average severity, a peculiar feature was the large number of cases occurring over the age of 15 years (as shown by Table XXXVII). This was also a characteristic of 1929.

118 cases were recorded in the age groups 15-20, 20-30, 30 or over, as against 137 in 1929 and 93 cases in 1928. There were no less than 30 cases in the age group 30 or over, a very unusual occurrence.

The highest number of admissions occurred in January and December. As usual the admissions fell in August and September. The prolonged school holiday exerting an effect in the lowness of the numbers in the latter month.

The following complications and sequelæ occurred amongst the 509 scarlet fever patients (excluding the serum-treated cases, 170):—

Adenitis	...	...	48	Ac. Mastoid	...	...	1
Otorrhœa	...	...	34	Relapses	...	...	8
Rhinorrhœa	...	...	47	Sore throat	...	...	1
Albuminuria	...	...	13	Secondary	...	...
Nephritis	...	...	9	abscesses	...	...	7
Rheumatism	...	...	3	Endocarditis	...	...	1

10 cases sent in as scarlet fever were found not to be suffering from scarlet fever, the condition diagnosed being:—

1 case of food rash.

7 cases *no* disease found.

2 cases of teething rash.

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.	Deaths.
1—2	14	13	27	1
2—3	23	12	35	—
3—4	20	27	47	—
4—5	29	23	52	—
5—10	166	144	310	1
10—15	40	50	90	—
15—20	15	27	42	—
20—30	13	33	46	—
30 or over	13	17	30	—
Total 1930	333	346	679	2
Total 1929	319	395	714	3

The total deaths amongst true scarlet fever patients was 2.

The death-rate was 0.30% of the cases admitted.

Monthly Admissions of Scarlet Fever to the Hospital.

TABLE XXXVIII.

Month.	Cases ad mitted. 1929.	1930.	Cases notified.
January ..	56	75	83
February ..	51	54	56
March ..	69	59	64
April	58	56	59
May	59	62	62
June	44	51	48
July	62	54	51
August ..	30	33	34
September .	52	34	34
October ..	70	68	66
November .	91	60	63
December .	72	73	69
Total ..	*714	+679	689

*Including 58 cases from Penge.

+Including 56 cases from Penge.

The percentage of Croydon (623) cases removed was 90.4.

There were 10 cases showing relapses with repetition of the original symptoms as compared with 14 in 1929; 2 were boys and 8 girls. Two of the cases had received 10 c.c. doses of Scarlet Fever Serum on admission.

The following table gives the age groups and incidence of the cases shewing relapses:—

TABLE XXXIX.

Age.	Male.	Female.	Date of Disease when admitted.	Day of Relapse.
4—5	M	F	3	26
"	—	F	3	28
5—10	M	—	4	28
"	M	—	2	26
"	—	F	16	24
"	—	F	3	26
"	—	F	1	45
"	—	F	2	24
10—15	—	F	3	22
40 or over	—	F	2	15

I am indebted to Dr. J. Todesco for the following special report of Scarlet Fever Cases treated with Scarlet Fever Serum. 43 more cases were so treated than in 1929.

SCARLET FEVER SERUM CASES.

Total cases treated 170, or 64 males and 106 females.

Total cases uncomplicated 65.3%.

(1) TYPE OF CASE.

The serum was given in cases which on admission had

- (1). Marked general erythema.
- (2). Marked infection of throat with dirty tonsils.
- (3). Enlarged sub-maxillary glands.
- (4). Rhinorrhœa.
- (5). Abnormally high temperature.

(2) METHOD OF ADMINISTRATION.

The serum was given intra-muscularly in the thigh. The quantity of serum given as a single dose was 10 c.c. In some cases this was repeated within 24 hours.

(3) RASHES.

Thirty-six cases developed serum rashes which were either urticarial or morbilliform, often limited to the area around the site of injection and lasting from 2-3 days without leaving any staining; this=38.8%.

Rashes were more numerous with some batches of serum than with others.

No cases of serum illness developed as a result of the serum injections, though headaches, slight œdema, joint pains and a slight rise of temperature occurred in some, these symptoms lasting for, 24 to 48 hours.

(4) INFLUENCE OF SERUM ON COURSE OF DISEASE.

This might be considered under the following:—

(a) *Effect on Temperature.*

The temperature usually came down rapidly after serum administration but in some the fall was gradual, taking 2-7 days to reach normal. In those cases to whom a second dose was given on account of the first dose not affecting the temperature, no noticeable effect was seen, the temperature and rash persisting. Possibly the day of the disease on which the initial dose was administered influenced the behaviour to serum.

(b) *Length of Stay in Hospital.*

Serum treated cases, 33.1 days.

Non-serum treated cases, 36.5 days.

It would appear, therefore, that serum did slightly shorten the period of isolation in hospital.

(c) *Reduction of Complications.*

Complications in serum treated cases... 34.8%

Complications in non-serum treated cases ... 33.3%

The following table contrasts the complications in the two types:—

Nature of Complications.			Serum treated (170 cases).	Non-serum treated (509 cases).
Adenitis	...	...	6	48
Otorrhœa	...	...	16	34
Rhinorrhœa	...	...	20	47
Albuminuria	...	...	2	13
Nephritis	...	...	—	9
Rheumatism	...	...	8	3
Relapses	...	...	2	8
2nd sore throat	...	...	3	1
Abscesses	...	...	2	7
Quinsy	...	...	1	—
Endocarditis	...	...	—	1
Acute mastoid	...	...	—	1
			—	—
			60	172
			—	—

It would appear, therefore, that the giving of scarlet fever serum did not have any effect in diminishing the number of complications.

The relapses occurred on the 28th and 36th day of disease respectively.

(d) *Desquamation.*

Desquamation occurred in 130 out of the 170 cases treated with serum, or 76.4%. In 15 cases there was no desquamation. There was no striking difference in the type of desquamation as between the serum treated cases and those not so treated. Both cases who had a relapse peeled a second time.

(e) *Day of Disease when scarlet fever serum given and number of cases and complications—*

Day of Disease.	No. of Cases.	Complications.
1	6	2
2	64	11
3	50	20
4	31	15
5	11	2
6	6	1
29	1	1
35	1	—

It will be seen that most cases had serum on the second day of disease, and that the proportion of complicated cases in this group was smaller than in those who received serum at a later date. In cases who received serum on the first day only a third showed any complications.

The cases which received serum late were those who had a relapse but had not received serum at the onset of the disease.

Table shewing the age groups and sex of Scarlet Fever Serum cases:—

Age.	Males.	Females.	Totals.
1—2	1	—	1
2—3	4	3	7
3—4	1	8	9
4—5	4	5	9
5—10	35	49	84
10—15	6	11	17
15—20	1	11	12
20—30	9	12	21
30 and over	3	7	10
Totals	64	106	170

Diphtheria.

462 cases were admitted with a diagnosis of diphtheria, a decrease of 8 cases on 1929. Of these 13 proved not to be diphtheria, and 98 cases were positive swabs, without clinical symptoms, leaving 351 cases of true diphtheria.

The negative cases were:—

- 5 cases of follicular tonsilitis.
- 1 case of simple laryngitis.
- 1 case of measles.
- 2 cases of coryza.
- 4 cases sent for observation in whom the diagnosis was not confirmed.

There were 47 cases admitted from outside the Borough, a decrease of 12; one death occurred amongst these.

Of the 351 cases, 10 had the larynx implicated, and tracheotomy was necessary in four instances; one died owing to progressive heart failure 4 days after operation.

The following complications and sequelæ arose amongst diphtheria patients:—

Adenitis	...	...	12	Albuminuria	...	...	6
Otorrhœa	...	...	10	Secondary sore throat	...	...	5
Rhinorrhœa	...	...	14	Laryngeal involvement	...	...	10
Paralysis—				Heart Failure	...	...	12
Palatal	...	...	12	Irregularity	...	...	3
Diaphragmatic	...	...	1	Tachycardia	...	...	1
Ocular	...	...	6	Bradycardia	...	...	1
Facial	...	...	2				

Table XL shews the ages and sexes of the diphtheria patients, and brings out clearly the greater incidence of, and mortality from, this disease in childhood. The most fatal age period was the 4 and 5 year groups. No deaths occurred in patients over 15 years.

TABLE XL.
Ages and Sexes of Diphtheria Cases Admitted.

Age.	Males.	Females.	Totals.	Deaths.	Death-rate 100 cases.
1—2	14	6	20	2	5.0
2—3	9	11	20	—	—
3—4	15	15	30	—	—
4—5	23	21	44	4	9.1
5—10	108	86	194	4	2.1
10—15	40	30	70	2	2.8
15—20	12	13	25	—	—
20—30	13	25	38	—	—
30 & over	1	20	21	—	—
Total 1930	235	227	462	12	2.5
Total 1929	178	292	470	23	5.3

TABLE XLI.

Admissions of Diphtheria cases to Borough Hospital in 1930 :—

Month.	Cases notified.	Cases admitted.	
		1930.	1929.
January ..	38	50	60
February ..	30	29	21
March ..	27	34	43
April	40	47	26
May	25	34	27
June	28	37	24
July	30	30	17
August ..	14	20	30
September .	23	25	22
October ..	63	64	63
November .	50	62	89
December .	25	30	48
Total ..	393	462*	470†

*Including 47 cases from Penge.

†Including 59 cases from Penge.

Particulars of Fatal Cases.

TABLE XLII.

<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) D.T. (M.) 2½ years.	5	Extensive membrane glands of neck + + cyanosis.	Showed signs of heart failure on admission, and died suddenly during night.	12 hours.
(2) E.B. (M.) 5½ years.	2	Extensive membrane glands of neck + + cyanosis, rhinorrhœa.	Toxic, restless and vomiting, increasing heart failure, death by this.	3 days.
(3) S.G. (F.) 5 years.	?	Extensive membrane glands of neck + + rhinorrhœa.	Developed eye paralysis and late heart failure, collapsed suddenly from this.	47 days.
(4) F.H. (M.) 12 years.	5	Extensive membrane bull neck, rhinorrhœa.	Developed heart failure 14 hours after admission, and died from this.	2 days.
(5) S.R. (M.) 7 years.	4	Extensive membrane glands of neck + + cyanosis.	Developed heart failure 2 days after admission and died from this.	4 days.
(6) V.B. (M.) 6 years.	3	Extensive membrane glands of neck, cyanosis.	Toxic, started vomiting 1 week after admission + pulse became irregular, died from progressive heart failure.	10 days.
(7) P.M. (M.) 10½ years.	5	Extensive membrane glands of neck + + foetor, rhinorrhœa, cyanosis.	Developed palatal paralysis, facial paralysis and late heart failure which was progressive, causing death.	43 days.
(8) E.H. (F.) 7 years.	4	Extensive membrane glands of neck + + rhinorrhœa.	Toxic, showed signs of heart failure 5 days after admission which was progressive till death.	13 days.
(9) R.C. (M.) 4½ years.	4	Extensive membrane glands of neck + + foetor.	Haemorrhagic case, bleeding from nose and throat, and general petechiæ, increasing heart failure till death.	5 days.
(10) J.C. (F.) 5 years.	5	Extensive membrane bull neck, cyanosis.	Moribund on admission, dying 5 hours later.	5 hours.
(11) F.S. (M.) 2 years.	5	V. toxic extensive membrane bull neck, rhinorrhœa + +	Moribund on admission, dying 6½ hours later, bleeding from mouth, nose and eyes.	6½ hours.
(12) J.I. (F.) 5 years.	2	Croupy, recession, v. restless, and cynosed.	Tracheotomy 2 hours after admission, but showed increasing heart failure, dying 4 days after admission.	4 days.

Analysis of 12 Fatal Cases.

The cases were divided as follows:—

- 2 were moribund on admission, dying within 12 hours.
- 2 were hæmorrhagic.
- 2 cases showed late heart failure.
- 4 cases showed early heart failure.
- 1 case was laryngeal, necessitating tracheotomy, and complicated by progressive heart failure.

There were 7 males and 5 females.

All the cases except one were admitted between the 4th and 9th day of disease.

All the cases were very severe with extensive membrane, glandular enlargement, rhinorrhœa and foetor, and did not respond to repeated doses of anti-toxin.

The cases who developed late heart failure were also complicated by other paralyses.

Intra-muscular doses of serum in doses between 24,000 and 100,000 units were given to all the cases. No intravenous injections were given.

The total deaths amongst the true diphtheria cases were 12 as compared with 23 deaths in 1929. The death-rate was 2.5%.

The giving of anti-toxin as soon as cases are seen at home, in adequate doses, would help to reduce the mortality. Waiting for the result of a throat or nose swab before taking action is a dangerous policy to adopt. Severe and even fatal cases of diphtheria have been known, not very infrequently, to give negative swab results.

144 phials of diphtheria anti-toxin were obtained by the Public Health Department for use by medical practitioners on demand. 7 phials were issued direct to medical men; 41 were issued to the various depots, and 14 postcards were received of phials having been issued to doctors; 16 phials were issued to the Pathological Laboratory and 6 to the Croydon General Hospital.

The list of depots where stocks of anti-toxin are kept for the use of medical men on demand, and free of charge in needy cases, is given below. In addition, at each of these depots swabs, sputum and other outfits are kept for the purpose of taking specimens for bacteriological examination.

The Public Health Department, Town Hall (during office hours).
The Borough Hospital, Purley Way, Croydon (any hour).

Upper Norwood—

Messrs. Henson & Co., 20, Beulah Hill, Upper Norwood.

Thornton Heath—

Fire Station, Brigstock Road, Thornton Heath (any hour).

Mr. R. Owen Jones, 105, High Street, Thornton Heath.

Mr. W. J. Mumford, 127, Beulah Road, Thornton Heath.

Squire & Co., 38, Green Lane, Thornton Heath.

The Tramways Offices, Thornton Heath Pond (8.30 a.m. to mid-night).

South Norwood—

Fire Station, South Norwood Hill (any hour).

Mr. Harding Rees, 31, High Street, South Norwood.

Mr. W. Sergeant, 156, Portland Road, South Norwood.

Norbury—

Messrs. Vincent & Co., 13, King Edward VII. Parade, London Road, Norbury, S.W.

West Croydon—

Mr. D. J. Williams, 300, London Road, Croydon.

Mr. D. P. Roberts, The Pharmacy, Poplar Walk, Croydon.

Selhurst—

Mr. E. Foster, 8, Selhurst Road, Selhurst.

Central Croydon—

Chief Fire Station, Park Lane, Croydon (any hour).

Addiscombe—

Mr. W. H. Deal, 87, Lower Addiscombe Road, Croydon.

Mr. R. Scott Wishart, 321a, Lower Addiscombe Road, Croydon.

Winifred M. Phillips, 191, Morland Road, Croydon.

South Croydon—

Mr. Dickinson, 1, Red Deer Parade, South Croydon.

Mr. S. A. Noble, 12, Ye Market, Selsdon Road, South Croydon.

Enteric Fever.

8 cases of enteric fever and para-typhoid fever were admitted.
No cases were admitted from Penge.

The following gives an analysis of these cases:—

Sent in as enteric fever and confirmed	...	...	3
Sent in as para-typhoid fever and confirmed	...	...	4
Sent in as enteric fever but not confirmed	...	...	1
			—
Total	...		8
			—

Although clinically of moderate severity, no deaths occurred.

Measles.

45 cases of measles were admitted during 1930. Of these 9 were complicated by broncho-pneumonia and 2 of these died.

One case was not confirmed, but was a teething rash.

Puerperal Fever and Puerperal Pyrexia.

9 cases were admitted with a diagnosis of puerperal fever. Of these 1 was a case of puerperal pyrexia; 1 was a case of simple constipation; 1 was pelvic cellulitis.

One case of puerperal fever died from septicaemia giving a death rate in the true puerperal fever cases of 16.6%.

Encephalitis Lethargica.

Of two cases admitted with this diagnosis one was confirmed, and recovered. The other was tubercular meningitis and proved fatal.

Ophthalmia Neonatorum.

Nine cases were admitted with this diagnosis, but 3 were found to be suffering from simple ophthalmia. All recovered, without impairment of sight, except in one severe case in whom corneal scarring resulted.

Other Diseases.

TABLE XLIII

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	1	1	1	2	...	5	...	
Paratyphoid B	1	1	1	...	...	...	...	...	...	...	3	...	
Puerperal Fever...	1	...	2	...	5	...	...	...	...	8	1	
Puerperal Pyrexia	1	...	...	1	...	
Erysipelas	1	...	1	1	...	1	...	2	1	7	2	
Measles	1	1	5	5	4	8	10	7	...	3	1	...	...	...	...	45	2	
Encephalitis Lethargica	1	...	...	...	...	...	1	...	...	...	...	...	2	1	
Cerebro-Spinal Meningitis	1	...	1	...	...	...	1	...	...	...	...	...	...	3	1	
Pneumonia	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Whooping Cough	2	...	1	...	1	1	...	...	...	...	...	...	...	...	5	...	
Chicken Pox	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Ophthalmia Neonatorum	5	4	...	...	...	...	...	...	...	...	...	...	...	...	...	9	...	
Mumps	1	...	...	...	...	...	...	1	...	2	...	...	...	...	...	4	1	
†T.B. Meningitis	1	...	...	...	...	...	...	...	...	...	...	1	...	
Gastro Enteritis	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
Tonsillitis	1	1	...	...	...	...	...	...	2	...	
*No disease	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11	...	
Totals	19	7	8	6	6	10	12	12	3	8	3	6	2	2	4	1	109	9

† This was not a case of T.B. Meningitis, though sent in as such.

* This includes 4 mothers with babies, 7 babies with mothers.

Out of Borough Cases.

TABLE XLIV.

Disease.	Males.	Females.	Total.	Deaths.
Scarlet Fever...	25	31	56	1
Diphtheria ...	29	18	47	1
Puerperal Fever ...	—	1	1	—
Cerebro-Spinal Meningitis.	1	—	1	—

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		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.
Swabs for Diphtheria ...	201	1456	...	...	...	27	137	2619	25	443	114	1258	477	5803
Virulence tests for Diphtheria...	2	..	2	..	...	...	9	7	2	7	5	4	20	18
Sputum for Tub. Bac. ...	134	527	...	...	296	518	...	...	35	98	10	66	475	1209
Pus for Tub. Bac. ...	...	...	...	...	...	1	...	...	...	66	...	...	...	67
Pus for Gonococci ...	...	...	...	...	...	...	...	...	18	44	...	...	18	44
Pus for other organisms ...	...	...	...	...	...	1	...	...	...	91	...	...	...	92
Blood for Typhoid Groups ...	6	27	...	...	...	...	...	...	1	8	2	16	9	51
Blood for Wassermann ...	...	...	...	1	...	1	...	...	25	74	...	...	25	76
Material for Spirochaetes ...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Faeces for Typhoid Group ...	...	6	...	...	...	...	...	...	...	16	...	...	...	22
Hair for Ringworm ...	1	...	...	...	...	...	...	...	16	16	...	...	17	16
Examination of Urine ...	...	...	...	...	1	...	...	...	13	...	...	...	14	...
Examination of Pleural Fluid ...	...	...	...	...	...	...	...	...	27	...	...	...	27	...
Examination of C.S. Fluid ...	...	...	...	...	...	...	...	...	24	...	...	...	24	...
Other Examinations ...	...	...	5	...	...	...	...	...	73	...	...	...	78	...

Examinations Done Under National Health Insurance Act.

TABLE XLVI.

<i>Nature of Examination.</i>		<i>Nature of Examination.</i>	
Pus for Gonococci ...	9 (5 pos.)	Differential white count ...	2
Pus for other organisms	8	Blood for culture ...	2
Pus for Tubercle B. ...	3	Blood for Sugar Est. ...	4
Blood for Wassermann..	15 (3 pos.)	Urine for Chemical Exam. ...	8
Faeces for Typhoid orgs.	6	Urine for Microscopical Exam.	9
Faeces for cultural exam	6	Urine for Tubercle B. ...	9
Faeces for occult blood..	7	Urine for Cultural Exam. ...	8
Faeces for Tubercle B...	7	Other Examinations ...	10
Complete Blood counts.	7		

Bacteriological Examination of Milk.

TABLE XLVII.

<i>Number of Samples submitted for Counts</i> ...	435
Number under 10,000 per cc ...	64
No. over 10,000 but under 50,000 per cc ...	128
Over 50,000 but under 100,000 per cc ...	62
Over 100,000 but under 500,000 per cc ...	90
Over 500,000 but under 1,000,000 per cc ...	21
Over 1,000,000 per cc ...	70

Bacillus Coli Content—

Not found in 0.1 cc ...	75
“ “ 0.01 cc ...	72
“ “ 0.001 cc ...	91
Present in 0.001 cc ...	197

Higher dilutions not made.

Tubercle Bacilli—

No. of samples of milk submitted ...	435
No. found positive by inoculation test ...	32

TABLE XLVIII.

II. At the Laboratory, Borough Fever Hospital.

	Positive.	Negative.	Total.
Swabs for Diphtheria ...	352	5906	6258
Blood for Typhoid groups ...	5	2	7
Faeces for Typhoid groups ..	0	16	16
Urine for Typhoid Groups ..	0	6	6
Sputum for T.B. ...	—	2	2
Miscellaneous Examinations ...	—	—	22
	—	—	6311

The positive diphtheria swabs were: from convalescent patients, to ascertain freedom from infection, 304; from cases on admission, 48. In the blood agglutination tests, 2 gave positive results for bacillus typhosus and 3 for bacillus paratyphosus B.

The miscellaneous examinations comprised:—Urines for organisms, 1; Pus for organisms, 2; Swabs for gonococci, 14; Specimens of blood, 2; Fluid for organisms, 2; Sputum for T.B., 2; Hair for ringworm, 1.

VACCINATION ACTS.

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

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 ...	928	391	9	396	38	...	23	26	45	...
West „ ...	1704	592	6	746	91	1	28	94	141	5
North „ ...	912	402	11	354	31	...	6	41	65	2
Penge „ ...	342	157	2	112	13	...	3	23	32	...
	3886	1542	28	1608	173	1	60	184	283	7

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, 1930:—

Name of Poor Law In- stitution or Vaccination District.	Numbers of successful Primary Vaccinations of persons.			No. successful re- vaccinations, i.e., successful vaccina- tions of persons who had been suc- cessfully vaccin- ated at some pre- vious time.
	Under 1 year of age.	1 year and upwards.	Total.	
Croydon No. 1 Area ...	111	23	134	17
No. 2 Area ...	140	29	169	10
No. 3 Area ...	62	4	66	4
No. 4 Area ...	125	36	161	16
No. 5 Area ...	138	37	175	22
Addington „ ...	2	1	3	0
Queen's Road Homes...	16	2	18	0
Mayday Road Hospital..	0	1	1	0
Children's Homes ...	0	19	19	23
	594	152	746	92

SECTION VI.

PREVENTION AND CONTROL OF TUBERCULOSIS.

The Tuberculosis Clinic is situated at 13, Katharine Street. The premises are not ideal, being cramped and noisy, though measures have been taken to reduce noise getting into the consulting room. The erection of three dressing cubicles, whilst encroaching on the limited waiting-room accommodation, has added to the comfort of the patients. Sessions are held daily in the mornings and afternoons except on Monday mornings and Friday afternoons. An evening session is held on Tuesdays. The Dispensary is a sorting house for cases. 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. It is essentially a consultative and not a treatment centre.

Sir Robert Philip, the originator of modern anti-tuberculosis schemes recently made some interesting comments on the outlook on tuberculosis.

He stated that "the tuberculosis index of a given area is dependent on, and governable by, the degree of intelligent action on the part of health authorities and of co-operation on the part of the inhabitants.

The chief weakness of the present day attitude is the disproportionate concentration of attention on pronounced lesions, more especially pulmonary tuberculosis which is a late manifestation of an infection contracted much earlier. Attention must be shifted more and more towards the earliest *indications of tuberculosis infection*—not to the neglect of late manifestations but to their better interpretation and progressive elimination.

If our efforts towards the eradication of tuberculosis from a community are to be effective, it is necessary that we should hunt for the earliest traces of tuberculous infection. He advocates the general use of tuberculin as a diagnostic agent in childhood and states that the tuberculin test which is painless and harmless should become routine practice from early infancy onwards. It is the lack of such scientific anticipation which has created and meantime maintains, the need for sanatorium and hospitals all over the country."

1.—It is recognised that infection during the first four years of life is dangerous, as during this period practically 100% of those infected are found to be suffering from tuberculosis.

2.—Infection in childhood is much less dangerous than in infancy as only about 40 to 60% of those infected are found to be suffering from tuberculosis.

3.—In adolescence, the general health is liable to be undermined by social, physiological and economic changes. Fresh infection is dangerous and the types of disease that develop are serious.

Among contacts it has been found that tuberculosis is commoner in females than in males. Contacts remaining healthy during childhood show a high incidence of the disease during adolescence, therefore, contact examinations to be effective must include the "following up" of contacts during adolescence, especially after leaving school.

About 90% of children up to the age of 18 years in the large towns in Europe and America are infected, as shown by the tuberculin test. From this fact it is clear that there must always be in the community a considerable number of persons with latent tuberculosis, such persons are potentially infective and are at any time liable to develop manifest disease. The actual extent and site of the lesion in latent tuberculosis can be ascertained only by X-ray examination, and it is for this reason that in certain parts of Canada and the United States all contacts are tuberculin tested and if found to be infected are examined radiologically as a routine measure, such examination has shown that more than 10% of school children have latent tubercular foci in the lungs and adjacent glands.

Careful watching of these children, with preventive treatment where necessary, should result in a considerable diminution in the number of cases of active tuberculosis among young adolescents. Elsewhere in this report it will be seen that there is an increase in the morbidity and mortality from pulmonary tuberculosis in young adults. In girls of 15 to 20 the mortality from pulmonary tuberculosis is greater than from tuberculosis from all causes in the infant.

No recognised method of protection against tuberculosis has been evolved either by tuberculin or living bacilli. The reported success of experiments with B.C.G. still awaits confirmation. The policy that appeals most is to prevent infection or to dilute it as far as possible. Where this has been done by sanitation cleanliness, correction of overcrowding, and protection of the milk supply, tuberculosis has decreased. There is no evidence that any success has followed attempts to diminish the incidence of the disease by artificially endeavouring to produce immunity, and in some cases

where tubercle bacilli have been injected, fatal tuberculosis supervened.

In Croydon more and more attention is being paid to the examination of contacts of cases of pulmonary tuberculosis, especially to the contacts of infectious cases, and an endeavour is made to keep contacts of school age under special observation at school; and after leaving school supervision at the Dispensary is carried out for some 4 or 5 years, as it has been found that about 15% of contacts develop active disease within a period of 3 years from the detection of the original case.

To carry out a complete scheme for routine tuberculin examination of infants and school children, with subsequent repeated X-ray examination of infected children, would necessitate a considerable increase in the medical staff and equipment of the public health department.

A tuberculosis scheme, however complete, will break down unless the co-operation of the public and of the general medical practitioners, is obtained. The public can help by availing themselves, without delay, of the facilities afforded. The assistance practitioners can render from the preventive aspect is in three main ways:—

- (a) To secure the proper disposal of the sputum.
- (b) To see that an infective patient has a bedroom to himself, or, if this is impossible, at least a bed to himself, and to emphasise the need for free ventilation.
- (c) To advise an infective patient not to handle milk or other foodstuffs or to have the intimate care of young children.

Two hundred and sixty-two cases of Pulmonary tuberculosis and 54 of Non-Pulmonary tuberculosis were notified on Form A (primary notifications); of these 144 males and 118 females were pulmonary cases, 27 males and 27 females non-pulmonary; 27 cases were notified from Poor Law Institutions and 222 cases were notified on Form C from Sanatoria. In addition 50 pulmonary cases and 21 non-pulmonary came to our notice as new cases otherwise than by notification on form A or B. In 1926 the notifications numbered 244 Pulmonary and 140 Non-Pulmonary; in 1927 the figures were 231 and 97 respectively; in 1928, 314 pulmonary and 75 non-pulmonary, and in 1929 250 pulmonary and 68 non-pulmonary.

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

312 of these were cases of Pulmonary Tuberculosis, 169 in men and 143 in women. There was one case less of Pulmonary Tuberculosis in men, but 11 more in women than in 1929.

There were 8 fewer cases of Non-Pulmonary Tuberculosis among children under 15 years than in 1929, the decrease being entirely among girls. Five fewer cases, however, occurred in adults, 7 fewer were in males and 2 more in females.

The gradual but steady decline in the number of cases of Non-Pulmonary Tuberculosis in children may be the outcome of the persistent efforts towards obtaining a milk supply free from the tubercle bacillus. The increasing use of reliable pasteurised milk, and of dried milk, probably help towards this welcome improvement.

Of the cases notified in 1930 27 males and 18 females died from the pulmonary form of the disease during the year, equal to 17.1% of those notified, and 5 males and 5 females from the non-pulmonary.

The incidence rate of Tuberculosis of all forms was 1.73 per 1,000 of the population; for Pulmonary Tuberculosis 1.40 and for Non-Pulmonary 0.33 per 1,000 population. The Notification rate was 1.42 per 1,000.

Public Health (Tuberculosis) Regulations 1912.

TABLE XLIX.

Summary of Notifications during the period from the 29th December, 1929, to the 27th December, 1930, in the area of the County Borough of Croydon:—

Age periods	Notifications on Form A.												Number of Notifications on Form C.		
	No. of Primary Notifications of new cases of tuberculosis.												Total Notifications on Form A.	Poor Law Institutions	Sanatoria.
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Total (all ages)			
Pulmonary Males ...	...	...	1	5	15	22	34	29	26	7	5	144	202	17	129
„ Females...	...	1	1	4	21	26	27	19	7	8	4	118	163	9	83
Non-pulmonary Males	1	4	8	3	1	4	1	2	...	2	1	27	31	—	6
„ „ Females	...	4	2	2	4	2	8	2	1	1	1	27	36	1	4

TABLE L.

New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the period from the 29th December, 1929, to the 27th December, 1930, otherwise than by notification on Form A or Form B under the Public Health (Tuberculosis) Regulations, 1912:—

Age periods	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Total Cases
Pulmonary Males ...	...	...	...	1	1	2	7	5	3	3	3	25
„ Females ...	...	1	...	...	2	2	11	5	2	2	...	25
Non-Pulmonary Males	...	3	2	2	...	...	1	...	2	1	1	12
„ „ Females	1	...	...	2	...	...	3	1	...	1	1	9

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 (i.e., from local Registrars, or transferable deaths from Registrar General)	13	14
“Transfers” from other areas (other than transferable deaths)	34	7
Forms C and D (in respect of cases not previously known to the M.O.H.)	1	...
Posthumous notifications... ..	2	...

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 154 deaths during 1930, 30 (19.4%) were either not notified at all or only notified a month prior to death. In 1929 this figure was 43 or 25.3%.

15 of these were not notified during life. Of these 15, 8 were certified by the Coroner or discovered after a post-mortem examination had been held; 1 died outside the Borough; 4 were cases of fulminating or complicated cases of Tuberculosis; 2 cases died in hospitals in Croydon.

Pulmonary Tuberculosis in the vast majority of sufferers is a relatively chronic disease and it rarely kills so rapidly that its entire course is only of a month's duration. It must be inferred either, that the victims omitted to seek advice until absolutely compelled to do so, or the medical men in attendance did not diagnose the condition until it was far advanced. Early notification is of great importance from both the preventative and the curative aspects of this malady.

In 27.2% 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 66.6%. In other words, out of a total of 21 deaths, 14 were not notified during life; only 5 of these 14 cases died at home.

Of the total deaths from Tuberculosis of all forms, 29 or 16.5%, were not notified prior to death, compared with 21.6% in 1929.

Interval Between Notification and Death From Pulmonary Tuberculosis in Cases Dying in 1930.

TABLE LI.

Not Notified	Under 1 week	1-2 weeks	2-4 weeks	1-2 months	2-3 months	3-6 months	6-12 months
15	6	3	6	6	7	14	27

One Year	Two Years	Three Years	Four Years	Five Years	Six Years	Seven Years	Eight years and over
30	11	8	9	...	2	1	9

Table LII shows the incidence rate of all forms of Tuberculosis for the various wards of the Borough, based on ward populations calculated from a total population of 222,300. The death rate for the whole Borough was 0.79.

TABLE LII.

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

Ward.	Density of Population persons per acre. 1921 census	Pulmon- ary	Non-Pul- monary	Total	Incidence Rate per 1000	Death Rate per 1000
Upper Norwood	13.2	32	8	40	2.6	0.77
Norbury	17.2	23	5	28	2.3	0.82
West Thornton	27.6	26	6	32	2.0	1.20
Bensham Manor	42.6	32	2	34	2.2	0.78
Thornton Heath	41.8	16	5	21	1.4	1.12
South Norwood	24.5	27	7	34	1.8	0.59
Woodside	34.7	22	1	23	1.4	1.13
East	5.9	19	6	25	1.9	0.23
Addiscombe	46.5	21	...	21	1.3	0.24
Whitehorse Manor'	63.5	23	11	34	1.8	0.75
Broad Green	69.8	21	5	26	1.5	0.88
Central	34.9	12	7	19	1.4	0.51
Waddon	14.2	20	9	29	1.7	1.01
South	10.9	16	3	19	1.2	0.82
Addington ... ..	...	1	...	1	1.0	0.96
No fixed abode ... ..	...	1	..	1	...	...
		312	75	387	1.7	0.79

The Wards showing the highest incidence of new patients in 1930 were: Upper Norwood (2.6), Norbury (2.3), and Bensham Manor (2.2).

The highest death-rates were in West Thornton (1.20), Woodside (1.13), and Thornton Heath (1.12). With the relatively small figures available, these rates are subject to wide annual variations.

Both the incidence and mortality rates for the various wards for 1930 show a substantial decrease on 1929 figures. They are not, however, so real as they appear, as in the 1929 figures we were only able to work on the 1921 Census figure but for 1930 we are able to use an estimated figure based on the Registrar General's population. The Census figure was 191,873 and the Registrar General's figure 222,300. Hence the decreases.

TABLE LIII. TUBERCULOSIS.

Age periods.	1921 Census Population at age period.		Pulmonary.								Non-Pulmonary.							
			New Cases.				All Cases.				New Cases.				All Cases.			
			Number.		Incidence Rate.		Deaths.		Death Rate (based on 1921 census).		Number.		Incidence Rate.		Deaths.		Death Rate (based on 1921 census).	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under one year	1757	1668	...	...	...	...	...	...	...	...	1	1	0.57	0.60	...	1	...	0.60
1— 5 years	5485	5475	...	2	...	0.36	...	1	...	0.18	7	4	1.28	0.73	3	2	0.55	0.36
5—10 „	8820	8690	1	1	0.11	0.12	...	...	...	...	10	2	1.13	0.23	3	...	0.34	...
10—15 „	9328	9478	6	4	0.64	0.42	1	2	0.10	0.21	5	4	0.54	0.42	2	...	0.21	...
15—20 „	7678	8864	16	23	2.08	2.59	7	15	0.91	1.69	1	4	0.13	0.45	1	...	0.13	...
20—25 „	6004	8233	24	28	4.0	3.40	9	9	1.41	1.09	4	2	0.67	0.24	...	1	...	0.12
25—35 „	12134	16086	41	38	3.38	2.36	24	11	1.98	0.68	2	11	0.17	0.68	1	...	0.08	...
35—45 „	13153	16498	34	24	2.59	1.46	14	8	1.07	0.49	2	3	0.15	0.18	...	1	...	0.06
45—55 „	10885	12860	29	9	2.66	0.70	17	9	1.56	0.70	2	1	0.19	0.08	1	...	0.09	...
55—65 „	6532	8187	10	10	1.53	1.22	13	6	1.99	0.73	3	2	0.46	0.24	2	1	0.31	0.12
65 and upwards	4814	9055	8	4	1.66	0.49	7	1	1.45	0.12	2	2	0.42	2.48	1	1	0.20	0.12
Totals	86590	104094	169	143	1.95	1.37	92	62	1.06	0.60	39	36	0.45	0.34	14	7	0.16	0.07

In the above table the death rate is based upon the total deaths in 1920, and not on deaths in New Cases only.

In 1930 the deaths from pulmonary tuberculosis in the age groups 15 to 20 years and over 55 years exceeded those for 1929 but in the intervening years there were fewer deaths. The greatest number of deaths in women occurred in the age group 15 to 20 years, after which there was a gradual fall whereas among men the maximum occurred in the 25 to 35 years age group. From 25 years onwards the deaths among males exceeded those in females.

The greater proportion of new cases of Pulmonary Tuberculosis were in the age groups comprising 15 to 35 years. In the age groups 15 to 25 years there was a greater number of new cases among women but after 25 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. The figures indicate that pulmonary tuberculosis is a rare disease in the first 10 years of life. This apparent result may be accounted for by the fact that physical examination alone is of little value in the detection of pulmonary tuberculosis in children which can as a rule only be shown by X-ray examination.

Non pulmonary tuberculosis shows its greatest incidence earlier viz., between the 5th and 10th years of life. The death rate, however, is highest in the first 5 years of life.

Tables LVIII—LIX. Summarise the condition of all patients whose records are at the Dispensary at the end of 1930. These tables show that of patients who came under treatment for pulmonary tuberculosis before 1926, 274 adults and 87 children have been discharged as cured. Of these all but 4 were early cases; 94 adults and 11 children in the same group were found to have the disease arrested. Of these 95 were early cases. Of cases first coming under notice in 1926, 21 adults had arrested disease of whom 19 were early cases. Of the 1927 cases, 20 adults and 2 children had arrested disease, all being early cases. 13 of the 1928 cases also had arrested disease.

Of patients who first attended prior to 1926, 282 have been lost sight of or otherwise removed from the Dispensary Register, and since that date 195. In 1930 16 patients were lost sight of.

Of patients who attended prior to 1926, 204 adults and 12 children are known to have died; since 1926, 355 are known to have died. Of patients attending for the first time in 1930 26 have died.

In sufferers from non-pulmonary tuberculosis who first attended prior to 1926, 27 adults and 454 children have been discharged as cured, and of those first attending in 1926, 3 adults and 20 children. Of the 1927 cases 4 adults and 7 children have been discharged as cured. 6 adults and 84 children attending prior to 1926 for the first time had the disease arrested. Of patients attending for the first time in 1926, 1927, and 1928, 17 adults and 76 children have had the disease arrested. 10 adults and 8 children died in the pre-1926 class; 15 adults and 13 children died in the 1926 and following years group. One child attending for the first time in 1930 died during the year. 173 cases covering the whole period have been lost sight of or otherwise removed from the register.

The contrast in the numbers cured, 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. This Table also emphasises the essential chronicity of the illness, more particularly in the direction of recovery.

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

During the year 335 cases of suspected tuberculosis were referred by private medical practitioners for the Tuberculosis Officer's opinion; 117 were diagnosed as suffering from Pulmonary Tuberculosis and were subsequently notified. 72.7% of all notified cases were sent for examination to the Dispensary or were seen at the request of the medical attendant at the patient's home.

Table LVI. 524 new cases were examined during the year. This is equal to 299 for each 100 deaths from the disease. 221 or 42% were found to be definitely tuberculous.

The contacts of definite cases are urged to attend the Dispensary for examination (and subsequent supervision). A small proportion avail themselves of this prophylactic facility. In 1930, 465 contacts were examined, equal to over 265 for each 100 deaths, compared with 389 in 1929 or 195 per 100 deaths, and of these 9 were considered to be tuberculous, this is equal to a tuberculosis rate per 1,000 contacts of 19.3, compared with 1.7 per 1,000 of the general population. In 226 adult contacts examined the tuberculosis rate per 1,000 contacts was 30.3. In addition 5 contacts who had been under observation from previous years were found to be suffering from tuberculosis.

The number of reports sent in by Insurance medical practitioners on their domiciliary cases (Form G.P. 36) was 450. This is a duty laid on all medical men accepting service under the National Health Insurance Act.

Public Health (Tuberculosis) Regulations, 1924.

Number of cases of Tuberculosis remaining on the registers of Notifications kept by the Medical Officer of Health of the County Borough on the 31st December, 1930:—

TABLE LIV.

PULMONARY			NON-PULMONARY			Total Cases
Males	Females	Total	Males	Females	Total	
802	680	1,482	308	328	636	2,118

These figures are considerably fewer than last year, due to a further revision of the Register. The figures are now a correct reflection of the number of "live" cases. This revision has entailed much work, but it was needed. Unless done periodically the Registers become overburdened with cases, and although the figures are obviously more impressive, the picture is out of perspective. The figures include all the notified cases in mental hospitals, poor law infirmaries and other institutions, and also cases not suitable for treatment under the Council's scheme.

A summary of the work of the Dispensary during the year 1930 will be found in Tables LVI and LXIV.

The Dispensary Register of Cases.

The number of cases of Tuberculosis under the supervision of the Dispensary at the end of the year was 1,189. This is equivalent to 5.34 persons per 1,000 of the population.

The Dispensary Register has been revised yearly during the past three years, so as to make it a correct record of the cases in the Borough who are under the supervision of the Dispensary. This has necessitated a lot of patient work in following up old cases, some of whom had not been seen for a number of years. A considerable proportion of the cases marked off had left the Borough or had recovered to such an extent that they could be considered as cured. The names of those who did not desire or require public medical treatment were also removed.

By these means the number of persons on this Register has been reduced from 1,965 on 1st January, 1928, to 1,227 on 31st December, 1930.

During the year 130 Dispensary cases died; of this number, 27 or 20.7% were seen for the first time in 1930.

The Medical Officer of Health and the Tuberculosis Officer visited a number of the institutions in which Croydon patients were being treated, in addition to frequent visits to the Borough Sanatorium at Cheam.

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 1930 are as follows:—

	For Dis- pensary.	For General Prac- titioners.	Totals.
Positive (<i>i.e.</i> , tubercle bacilli present)	353	126	479
Negative (<i>i.e.</i> , tubercle bacilli absent)	563	642	1205
	<hr/>	<hr/>	<hr/>
Total ...	916	768	1684
	<hr/>	<hr/>	<hr/>

For each 100 new cases and contacts examined at the Dispensary 92.6 specimens of sputum were examined.

The 768 examinations include a considerable number from Mayday Road Hospital and the Croydon General Hospital, in addition to those sent in by General Practitioners.

Only a small proportion of the total number of patients sent to the Dispensary have had their sputum examined before arrival, although many have had both sputum and symptoms for months. It is difficult to understand why this simple test is not universally applied and so avoid delay in diagnosis.

1930, however, shows an increase in the number of examinations of sputa made for General Practitioners.

Too much reliance is 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.

HOUSING STATISTICS OF PATIENTS.

TABLE LV.

	Patients occupying a separate bedroom.	Patients occupying a separate bed but not a separate bedroom.	Patients not occupying a separate bed.	Totals.
Number of Pulmonary cases:				
Under 15 years ...	15	6	10	31
15 years and over ...	367	93	372	832
	382	99	382	863
Number of Non-Pulmonary cases :				
Under 15 years ...	72	67	112	251
15 years and over ...	55	18	59	132
	127	85	171	383
Totals ...	509	184	553	1246

The above table gives a summary of the housing conditions found in notified cases. It is seen that 44.2% of the pulmonary cases and 33.1% of the non-pulmonary cases were occupying a separate bedroom. In 44.2% of the pulmonary and 44.6% of the non-pulmonary the sleeping arrangements were not satisfactory inasmuch as the patient did not have a separate bed.

40 patients who are definite cases of Pulmonary tuberculosis on the Dispensary Register at the end of 1930 resided in houses built by the Corporation and let at a rental.

CLASSIFICATION OF NEW PATIENTS.

A. Pulmonary Tuberculosis.

During 1930, 204 new patients were examined at the Dispensary and were found to be in the undermentioned stages of the disease on the first examination:—

T.B. minus (sputum negative or absent)	... 66 or 32.3%
T.B. plus 1 (early cases, sputum positive)	... 20 or 9.8%
T.B. plus 2 (intermediate cases, sputum positive)	93 or 45.5%
T.B. plus 3 (advanced cases, sputum positive)	.. 25 or 12.2%

204 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. This, as Sir George Newman remarks, "is not invariably due to neglect by medical practitioners under the regulations. Far too frequently there has been delay on the part of the patient in obtaining medical advice, or delay on the part of the practitioner in seeking the assistance of the tuberculosis officer in regard to patients suffering from chest trouble which may have a tuberculous basis."

The initiative to seek treatment when ill rests with the patient himself, and the remedy lies in the education of the public as to symptoms and common dangers of tuberculosis and the need for securing early treatment. In 1930 there was a small increase in the number of early cases and a corresponding decrease in the advanced cases. It is unfortunate that even still 57.7% of the new cases were advanced in the disease.

B. Non-Pulmonary Tuberculosis.

There were 37 cases examined at the Dispensary and found to have non-pulmonary tuberculosis in the following forms:—

Bones and Joints	...	12
Abdominal	...	6
Other Organs	...	4
Peripheral Glands	...	15
		—
		37
		—

X-ray Work.

A greater number of doubtful and difficult cases were sent for radiological examination than in previous years, and by this means cases of Bronchiectasis, Pulmonary tumour, etc., were discovered which otherwise would have been classed as suffering from pulmonary tuberculosis. A few such cases are sufficient to warrant the additional expenditure; also some cases were detected in a very early stage who otherwise would not have been diagnosed until a later date. Their chance of complete recovery was thus enhanced. Use was made of this method of examination to confirm or otherwise the clinical findings of cases considered to be cured. X-rays are a valuable help, but cannot take the place of thorough and expert physical examination.

188 X-ray examinations were made during the year. This is equivalent to 19 for every 100 new cases and contacts seen, and compares with a rate of 13 per 100 new cases and contacts seen in 1929.

It is hoped when the new X-ray plant has been installed at Cheam Sanatorium that a considerable amount of the X-ray work will be done at the Sanatorium.

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.

Travelling Scholarship.

One of the Travelling Tuberculosis Scholarships provided by the Sun Life Assurance Co. of Canada was awarded to your Tuberculosis Officer by the Joint Tuberculosis Council, for the purpose of visiting various centres in Canada and the United States. The acceptance of this Scholarship was rendered possible by the consent and help of the Council.

The tour lasted 5 weeks and although of a very strenuous nature it was found possible to visit all the centres as arranged. It was invaluable as it gave one an excellent opportunity of exchanging ideas, not only with medical colleagues from this country, but also with medical men doing Tuberculosis work in different parts of Canada and the United States.

The Anti-tuberculosis Schemes, of which there is no uniformity in both countries visited, were examined in considerable detail and showed the energy and enthusiasm with which the problem of tuberculosis is being tackled across the Atlantic.

Among the centres visited were Quebec, Montreal, Ottawa, Toronto, Winnipeg, Chicago, Detroit, London (Ontario), Hamilton, Niagara Falls and New York.

The work at the Tuberculosis Dispensary was continued unchanged during the Tuberculosis Officer's absence.

[illegible]

TABLE LVIII.

(a) PULMONARY TUBERCULOSIS.

Annual Return showing in summary form the condition of all Patients whose case records are in the possession of the Dispensary at the end of 1930, arranged according to the years in which the patients first came under Public Medical Treatment for pulmonary tuberculosis, and their classification as shown on Form A.

Condition at the time of the last record made during the year to which the Return relates.				Previous to 1926.					1926.					1927.					1928.					1929.					1930.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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ALIVE.	Discharged as cured.	Ch.	Ad.	M.	132	7	2	...	9

TABLE LIX.

(b) NON-PULMONARY TUBERCULOSIS.

Annual Return showing in summary form the condition of all Patients whose case records are in the possession of the Dispensary at the end of 1930, arranged according to the years in which the Patients first came under Public Medical Treatment, and their classification as shown on Form A.

Condition at the time of the last record made during the year to which the Return relates.			Previous to 1926.					1926.					1927.					1928.					1929.					1930.				
			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.
ALIVE.	Discharged as cured.	Ad.	M.	6	...	2	2	10	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F.	14	5	3	5	27	1	...	...	1	2	1	...	...	3	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		M.	12	1	3	259	275	3	...	1	12	16	...	...	...	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Disease arrested.	Ch.	F.	12	2	1	164	179	...	...	...	4	4	1	1	...	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ad.	M.	3	...	...	...	8	3	...	...	...	3	2	...	1	2	5	1	...	...	...	1	...	...	...	...	...	...	...	...
		F.	...	...	...	1	2	3	1	...	...	2	3	2	...	...	2	...	...	3	3	...	...	...	...	...	...	...	...	...	...
	Disease not arrested.	Ch.	M.	2	...	...	38	40	3	...	...	18	21	...	...	...	10	10	2	...	...	7	9	...	...	...	...	...	...	...	...
		F.	11	...	1	32	44	1	2	...	14	17	3	...	...	10	13	1	...	...	5	6	...	...	...	...	...	...	...	...	...
		Ad.	M.	1	...	3	...	4	...	...	...	...	2	1	1	...	4	1	...	1	...	2	...	1	2	...	3	3	1	1	6
	Totals	Ch.	F.	3	...	4	2	9	...	...	...	1	1	1	...	...	1	...	...	...	...	1	1	4	1	7	3	3	2	4	12
		M.	4	...	...	5	9	...	...	...	2	2	1	...	...	3	4	1	...	...	5	6	2	1	...	4	7	4	1	...	5
		F.	1	...	1	...	2	...	...	...	2	2	1	...	...	3	4	5	...	...	4	9	5	...	...	3	8	2	...	...	5
TRANSFERRED TO PULMONARY			...	1	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
CONDITION NOT ASCERTAINED DURING THE YEAR			...	8	3	2	73	86	...	1	1	6	8	...	2	...	3	5	3	...	...	2	5	...	...	2	1	3	...	...	...
LOST SIGHT OF OR OTHERWISE REMOVED FROM DISPENSARY REGISTER			...	14	7	8	77	106	3	5	4	20	32	3	2	2	17	24	1	1	...	4	6	3	...	...	1	4	...	...	1
DEAD.	Totals	Ad.	M.	2	1	2	1	6	2	...	1	1	4	...	...	...	...	2	1	...	...	3	1	...	...	...	1	...	...	...	...
		F.	2	...	1	1	4	1	...	...	1	2	...	1	...	...	1	1	...	2	...	3	...	1	...	...	1	...	...	...
		M.	1	1	1	2	5	...	...	...	2	2	...	...	1	...	1	...	...	1	1	2	...	...	...	...	1	...	...	1	
		F.	3	...	...	...	3	...	2	1	1	4	...	...	...	...	1	2	...	...	3	...	...	...	...	...	...	...	...	...

TABLE LX.

RESIDENTIAL INSTITUTIONS FOR TUBERCULOSIS.

(A) Average number of beds available for patients during the year 1930.

	Observation.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total.
		"Sanatorium" Beds.	"Hospital" Beds.	Disease of Bones and Joints.	Other Conditions.	
Adult Males	51	10	4	2	67
Adult Females	34	10	3	2	49
Children under 15	6	1	15	9	31
Total	91	21	22	13	147

TABLE LXI.

(B) Return showing the extent of residential treatment during the year 1930.

			In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Insti- tutions.	In Insti- tutions of Dec. 31.
Number of Patients	Adults.	M	67	119	104	22	60
		F	35	88	67	4	52
	Children	M	12	17	10	1	18
		F	15	13	14	1	13
Number of Observ- ation Cases	Adults.	M	...	3	3	...	...
		F	...	1	1	...	...
	Children.	M	...	...	...	...	...
		F	...	...	...	...	...
Total			129	241	199	28	143

NUMBER OF BEDS AVAILABLE FOR THE TREATMENT OF
TUBERCULOSIS ON THE 31st DECEMBER, 1930, IN POOR
LAW INSTITUTIONS BELONGING TO THE COUNCIL.

Mayday Road Hospital.—Beds reserved for Tuberculosis cases are used for Pulmonary or Non-Pulmonary as required 64

Return showing the extent of Residential Treatment provided during the year in Public Assistance Institutions for persons chargeable to the Council.

TABLE LXII.

			In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31.
Number of patients suffering from pulmonary tuberculosis admitted for treatment.	Adults.	M	...	6	2	...	4
		F	...	8	1	1	6
	Children.		...	1	1	...	...
Total	...	...	...	15	4	1	10
Number of patients suffering from non-pulmonary tuberculosis admitted for treatment.	Adults.	M	...	...	...	...	...
		F	...	...	...	...	...
	Children.		...	...	...	...	...
Total	...	...	...	...	...	...	...
Grand Total	...	...	...	15	4	1	10

The Immediate Results of Sanatorium Treatment.

Patients from Croydon have been sent to the following Sanatoria and Hospitals during 1930.

TABLE LXIII.

Cases of Pulmonary Tuberculosis Treated in Sanatoria, 1930.

	In at beginning of 1930		Admitted during 1930		Discharged during 1930		Died during 1930		In at end of 1930	
	M	F	M	F	M	F	M	F	M	F
Croy. Boro' San., Cheam	46	26	82	58	71	48	19	5	38	31
Grosvenor	6	5	21	15	16	11	...	...	11	9
St. Anthony's Hospital...	...	1	...	...	...	1	...	...	...	...
Burrow Hill Colony ...	1	...	1	...	...	...	...	...	2	...
Brompton	3	4	12	6	12	6	...	...	3	4
Papworth	2	...	...	...	...	...	...	...	2	...
Holy Cross Sanatorium...	...	...	...	1	...	1	...	...	...	...
Benenden National San.	...	...	1	1	...	...	...	...	1	1
East Anglian San. ...	1	...	1	...	...	...	1	...	1	...
Harpenden	1	1	2	...	2	1	...	...	1	...
St. Luke's Hospital ...	1	...	...	...	...	...	1	...	...	...
St. Thomas's Babies' Hostel	...	...	...	1	...	1	...	...	...	...
Midhurst ... ..	...	...	1	...	1	...	...	...	...	...
Heritage Craft School ...	...	...	...	1	...	...	...	...	...	1
Grove Park Hospital ...	...	...	1	...	1	...	...	...	...	...
	61	37	122	83	103	69	21	5	59	46

Types of Cases Treated.

Table LVII, Form T. 55 of the Ministry of Health summarises the results of treatment. From this table it is seen that among the Pulmonary cases 34.5 were classified as early cases; the percentage of early cases receiving treatment in institutions was in women, 12.8%, in men, 17.5%. 45.8% of the total cases were intermediate cases, the males also showing an excess in this group. 29.3% males to 15.4% females and 19.5% were definitely advanced. Of the total cases treated in Sanatoria 76.8% were potentially infectious.

Results of Treatment of Pulmonary Tuberculosis.

124 males and 74 females were discharged from, or died in, Sanatoria in connection with the Croydon scheme during 1930. In group (1) 7 males and 11 females were discharged with the disease in a quiescent condition, i.e., 40% of the total cases in this group; 6 male and 6 females were improved, 26.6%; 2 males and 3 females showed no material improvement, 11.1%; 2 males died, 4.4%. In group (2) the corresponding figures were 6 males and 3 females quiescent, 40.9%; 7 males and 1 female improved, 36.3%; 1 male no improvement, 4.5%, and 3 males and 1 female died, 18.1%. In group (3) 11 males and 3 females quiescent, 15.7%; 25 males and 16 females improved, 46.0%; 19 males and 8 females no improvement, 30.3%; and 2 males and 3 females died, 5.6%. In the advanced group no cases were discharged quiescent; 5 males and 4 females were discharged improved, 23.6%; 9 males and 6 females no improvement, 39.4%; and 14 males and no females died, 37.0%.

Taking all groups together, 22.6% of cases were discharged as quiescent; 38.1% as improved; 25.7% as no improvement; and 13.4% died.

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.

General Observations on the Results of Treatment.

The onset of Pulmonary Tuberculosis is insidious and considerable bodily damage has been caused before the majority of cases seek advice. The process of arrest is slow; once damaged, lung tissue does not regenerate, and the most that can be aimed at is prevention of an extension of the damage, and healing of the tissue affected, by the formation of scars.

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. Occupation suited to their medical needs is far more

beneficial than any medicine known to medical science, but the majority are not in a position to compete with healthy labour, and in order to make their work self-sufficient some form of endowment or protection is necessary. A condition of the reception of National Health sickness benefit is that the recipient does no work of any kind; this rule in the case of the Tuberculous condemns them to months of idleness which is an encouragement to pauperism and helpless dependency, and additionally is about the worst form of treatment psychologically as well as physically, that could be conceived. Undue introspection is not good for anyone; for the Tubercular patient it is an invitation to disaster. This inflexible rule should be modified. Sickness benefit for Tubercular persons could serve as a form of subsidy 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. A modification on these lines would act as an encouragement towards the formation of after-care occupation schemes such as is being carried out, to a limited extent, in Croydon.

The Tuberculosis Dispensary and Home Visiting.

Table LXIV gives a summary of the work done in connection with the Dispensary. At the beginning of the year there were 1,498 persons' names on the Register; the revision of the register commenced in 1928 was continued and by the end of 1930 the number was reduced to 1,227. These names are of persons known to be suffering from Tuberculosis in some form or other, in the County Borough area, with the exception of 38 cases not yet diagnosed. Ninety notified cases were examined for the first time and 335 cases who were sent for an opinion. Four hundred and sixty-five contacts were examined, of whom 14 were pronounced tubercular. This is an important preventive measure, and it is regrettable that so few contacts avail themselves of the facility. Patients attending the Dispensary made 5,482 visits during the year. One hundred and forty-six were on Domiciliary treatment. The Tuberculosis Officer paid 252 home visits, and the nurses 5,411. In connection with the latter figure, the district health visitors are responsible for the first visits to cases in their areas and the whole-time Tuberculosis Health Visitor for all subsequent visits. Cases requiring home nursing or surgical dressings are attended to by nurses from the Croydon Nursing Service, by arrangement with that organisation.

SUMMARY OF DISPENSARY STATISTICS AND OF HOME VISITING FOR 1930.

TABLE LXIV.

No. of Insured persons on Dispensary Register, January 1st, 1930 ...	551
„ Notified Cases examined for the first time	90
„ Cases sent for an opinion	335
„ Contacts examined	465
„ Contacts found suffering from Tuberculosis	14
„ Contacts not found suffering from Tuberculosis	365
„ Contacts under observation	86
„ First attendances	989
„ Consultations of T.O. with private practitioners	29
„ Visits paid by T.O. to homes of patients	223
„ Visits paid by nurses to homes of patients	5411
<hr/>	
„ Attendances of patients at the Dispensary—	
Men	1427
Women	1996
Children	2059
<hr/>	
Total ...	5482
<hr/>	
No. of patients under Domiciliary Treatment—	
Pulmonary	139
Non-pulmonary	7
<hr/>	
Total ...	146
<hr/>	
No. of reports received from Practitioners (G.P.36)	450
„ reports sent out to Practitioners (G.P. 36)	544
„ specimens of sputum examined at Laboratory in connection with the work of the Dispensary—	
Positive	353
Negative	563
<hr/>	
Total ...	916
<hr/>	
No. of X-rays taken—	
(i) At Brompton Hospital	118
(ii) At Croydon General Hospital	70
<hr/>	
No. of reports made to Ministry of Pensions by the T.O. on general progress of Tuberculous Discharged Ex-Service men ...	33
<hr/>	
No. of cases referred for “Light” Treatment	18
„ cases referred to Orthopædic Clinic	14
„ cases to whom Dental Treatment was given	17
„ cases on Dispensary Register, December 31st, 1930	1227
„ cases receiving extra nourishment at end of year	34

Ages at Death from Pulmonary Tuberculosis.

TABLE LXV.

Year.	0—5	5—15	15—25	25—45	45—65	Over 65	Total
1922	2	6	35	85	44	7	179
1923	1	3	51	55	30	10	150
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

The most fatal period is between 25 and 35 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. The fall in 1930 may be partly accounted for by the fact that there was no influenza epidemic.

In 1930 the death-rate from all forms of Tuberculosis was
0.787 per 1,000 population

„	„	Pulmonary Tuberculosis	0.69	„
„	„	Non-pulmonary Tuberculosis	0.094	„

Non-Pulmonary Tuberculosis.

TABLE LXVI.

The diagnosis in the new cases were as follows :—

	Male.	Female.
Glands	10	10
„ and Ankle ... ..	...	1
Spine	5	5
General Miliary	1	2
Bladder	1	1
„ and Kidney ... ..	...	1
Skin	3	...
Meninges	5	3
Intestines	1	1
Peritoneum	2	5
Mesentery Bowels	1	...
Knee	1	1
Hip ... ..	...	2
Kidney	1	3
Testicle	1	...
Mesenteric Glands	1	...
Dactylitis	1	...
Abdomen	1	...
Abdominal Glands	1	...
Tibia	1	...
Right Sacroiliac Joint	1	1
Genito Urinary Tb.	1	...
	39	36

Deaths from Non-Pulmonary Tuberculosis.

During 1930, 21 deaths were certified to be due to Non-pulmonary Tuberculosis, compared with 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	5	2	7
General Miliary Tuberculosis ...	1	1	2
Tb. Peritonitis	2	1	3
Tb. Intestines and Mesentery ...	1	0	1
Tb. Bladder	1	1	2
Tb. Spine	2	1	3
Genito-Urinary Tuberculosis ...	1	0	1
Tb. Left Knee	1	0	1
Tb. Peritonitis, Tb. Arthritis, right knee, left hip and right clavicle	0	1	1
	14	7	21
	=	=	=

Cases of Non-Pulmonary Tuberculosis Treated in Institutions, 1930.

TABLE LXVII

	In on 1st Jan., 1930		Admitted during 1930		Discharged during 1930		Died during 1930		In on 31st Dec., 1930	
	M	F	M	F	M	F	M	F	M	F
Royal Sea Bathing Hosp.	2	2	1	1	2	1	...	...	1	1
St. Anthony's Hosp. ...	3	4	2	2	2	2	1	...	2	4
St. Nicholas Hosp. ...	2	2	7	5	2	3	1	...	6	4
Children's Hosp., Coldash	...	1	...	...	...	...	...	...	...	1
Alexandra Hosp. ...	1	...	...	...	1	...	...	...	...	...
Tait Convalescent Home	...	...	...	2	...	2	...	...	...	...
Treloar Cripples' Hosp.	1	...	...	...	...	...	...	...	1	...
King George's San. ...	2	...	2	...	3	...	...	...	1	...
St. Peter's Memorial Home ...	...	...	...	1	...	...	...	...	...	1
All Saints' Hospital ...	...	...	...	1	...	1	...	...	...	...
Croydon General Hosp...	...	...	...	4	...	2	...	...	...	1
Pyrford ...	5	4	4	2	2	2	...	...	7	4
Wingfield ...	1	...	...	1	...	...	...	...	1	1
Heath End Sanatorium	1	...	1	...	2	...	...	...	...	...
	18	13	17	19	14	13	2	...	19	19

PULMONARY TUBERCULOSIS.

Shewing the Condition at the end of 1930 of cases discharged from Sanatoria during the years indicated.

	1926.		1927.		1928.		1929.		1930.		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	15 61.3%	74=67.2%	5 48.3%	66=55%	6 50.5%	81=57.4%	1 34.6%	44=39.6%	3 15.0%	19=16.38%	39 42.4%	284=47.49%
Working or Fit for Work...	19 25.5%	18=16.3%	19 33.3%	30=25%	23 31.3%	31=21.9%	18 37.3%	31=27.9%	25 40.4%	34=29.3%	104 33.5%	144=24%
Not able to Work	1 13.1%	18=16.3%	3 18.3%	24=20%	2 18.0%	29=20.5%	— 27.7%	36=32.4%	2 44.5%	63=54.3%	8 24.0%	170=28.4%
Left District ...	7	31	9	17	9	17	3	20	5	10	33	95
	42	141	36	137	40	158	22	131	35	126	175	693

Of the cases whose records are at the Dispensary, it will be seen that of the total number that received sanatorium treatment during the past five years only one-third 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 24% or less than $\frac{1}{4}$ are working or fit for work.

693, or 79.8% of the total cases discharged, were T.B. + cases.

128, or 14.7% of the total cases discharged, have removed from the Borough, and as we have no information about their condition at the end of 1930 they have been ignored in working out the above percentages.

CHEAM SANATORIUM.

TABLE LXVIII.

Local Authority.	In-patients on Jan. 1st, 1930.		Admitted during year 1930.		Discharged during year 1930, including deaths		In on Jan. 1st 1931.		* Died during year 1930.	
	M	F	M	F	M	F	M	F	M	F
Croydon C. B. ...	46	27	82	57	90	53	38	31	19	5
Kent C. C. ...	4	2	3	4	4	3	3	3	...	...
	50	29	85	61	94	56	41	34	19	5

Immediate Results of Treatment.

Group	Total number of cases discharged 1930.		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	10	12	4	6	2	3	...	2	...	1	156	4	1
Class T.B. Plus. Group I	11	6	8	3	1	1	...	...	...	...	153	2	1
" " " Group II	32	21	4	1	18	11	2	6	1	...	178	7	3
" " " Group III	40	17	1	...	3	4	17	9	18	4	222	1	...
Not Tubercular	1	...	...	...	...	...	...	...	...	...		1	...
	94	56	17	10	24	19	19	17	19	5		15	1

At the beginning of 1930 there were 79 patients in Cheam. During the year 146 were admitted and 126 discharged, whilst 24 died, thus leaving 75 patients in at the beginning of 1931.

Sir George Newman states in Annual Report for 1929: "The duration of treatment in the intermediate group should be limited to that necessary to restore general health and working capacity as fully as circumstances permit, to educate the patients in the mode of life they should endeavour to follow, and to teach them how to avoid spreading the disease to others. For these patients short periods of treatment repeated at intervals as required appear to meet the needs most effectively." In 42.7% of this group in 1930 the duration of residential treatment exceeded 6 months.

43 Croydon cases were discharged from Cheam at request of patient or parents, i.e., 23 males or 32.4% of males discharged and 20 females or 41.6% of females discharged.

In the latter part of the year structural alterations and painting of the walls have been in progress, rendering some of the ward accommodation unavailable. The alterations carried out in 1929 have greatly improved the Sanatorium, etc. The erection of an occupation pavilion to house the occupation centre which in the past was housed in quite inadequate quarters, is a valuable addition. Six additional single bed shelters, heated and lighted, have been erected. The verandahs have been completed and a rearrangement of the beds by erecting permanent glass screens in the wards has brought the total bed accommodation to 95. It is hoped to instal next year an X-ray plant.

In the main wards, glass partitions have been fixed between each two beds. This allows of greater privacy, as curtains are fitted to the partitions, without interfering with the nurse's attentions to the patients. This innovation has been appreciated by the patients.

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; women and children on Wednesday afternoons. An additional Clinic was commenced during the year, on Thursday evenings, for men.

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.

	1924.	1925.	1926.	1927.	1928.	1929.	1930.
New male patients	101	116	141	145	121	101	196 ^a
New female patients	125	156	192	160	158	94	171 ^a
Attendances, male patients ...	1774	2713	2360	2643	3502	3581	5050 ^a
Attendances, female patients ...	682	1230	1351	1417	1631	2127 ¹	3029 ^a

^a Includes 92 new cases from outside areas, who made 1914 attendances.

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

	1924.	1925.	1926.	1927.	1928.	1929.	1930.
New patients ...	163	138	130	132	139	131	125
Total attendances	2899	2648	2767	3160	3080	3089	3150

Of the 125 new patients in 1930, 13 had syphilis, 1 soft chancre, 56 gonorrhœa, and 55 were not suffering from venereal disease.

Pathological Examinations at London Hospitals for Croydon Patients.

	1924.	1925.	1926.	1927.	1928.	1929.	1930.
Tests for Clinics	551	642	542	540	716	924	715
Tests for practitioners	882	1069	799	667	570	932	2197

Five Croydon patients were admitted to approved hostels under the L.C.C. scheme, with an aggregate of 819 days in residence.

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

Authority	1927		1928		1929		1930	
	In-Patients (days)	Out-Patients	In-Patients (days)	Out-Patients	In-Patients (days)	Out-Patients	In-Patients (days)	Out-Patients
Croydon ...	161	3003	74	3586	132	3998	...	6159
Surrey C. C.	...	977	137	1451	46	1676	...	1686
Kent C. C. ...	...	80	40	77	...	11	...	184
London C. C.	...	...	...	2	...	23	..	46
Other Authorities ...	...	...	...	...	...	...	..	4
	161	4060	251	5116	178	5708	...	8079

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	Gonorrhoea	Soft Chancre				To In-Patients	To Out-Patients
St. Thomas's	3	31	1	31	1623	22	...	8
Guy's	1	11	...	7	917	...	...	10
King's College	3	5	...	3	278	8	8	...
Great Ormond Street	2	1	...	12	73	40	3	10
Royal London Ophthalmic	1	1	...	...	39	29	1	11
S. London Hospital for Women	...	2	...	...	34	...	...	...
Westminster	1	1	...	...	22	...	...	...
Whitechapel Clinic (L.C.C.) (half-year) ... ..	...	...	...	...	12	...	...	4
London Hospital (half-year) ... ..	...	...	...	...	6	...	...	...
Seamen's Hospital ... ..	...	1	...	...	15	59	...	...
	11	53	1	53	3019	158	12	215

TABLE LXXI.

Bacteriological Examinations carried out at London Hospitals for Croydon Patients.

Hospital	Detection of Spirochaetes		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	118	947	102	16	81	122	1386
Great Ormond Street	4	6	9	16	8	9	52
South London Hospital for Women...	6	...	...	1	...	...	7
Westminster	2	...	1	3	...	...	6
Seamen's Hospital	8	...	...	...	3	...	11
	138	953	112	36	92	131	1461

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, 1930.

	Syphilis.		Soft Chancre.		Gonorrhoea.		Conditions other than Venereal		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Number of cases which—										
(a) at the beginning of the year under report were under treatment or observation for	65	74	...	...	108	69	...	...	173	143
(b) had been marked off in a previous year as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report suffering from the same infection ...	1	2	...	...	7	4	...	...	8	6
Total—Items 1 (a) and 1 (b) ...	66	76	...	...	115	73	...	...	181	149
(a) Number of cases dealt with at the Treatment Centre during the year for the first time with infections of—										
1. less than one year's standing ...	30	26	...	...	132	59	29	81	191	166
2. more than one year's standing ...	3	...	...	...	2	5	...	...	5	5
Total—Items 1 (a), 1 (b) and 2 (a) ...	99	102	...	...	249	137	29	81	377	320
(b) Number of cases included in Item 2 (a) known to have received previous treatment at other Centres for the same infection	6	6	...	...	16	14	...	...	22	20
Number of cases which ceased to attend—										
(a) before completing the first course of treatment for	5	7	...	...	10	11	...	...	15	18
(b) after one or more courses but before completion of treatment for ...	2	...	...	...	...	...	...	...	2	...
(c) after completion of treatment, but before final tests as to cure of ...	...	...	...	...	...	...	...	...	...	...
Number of cases transferred to other Treatment Centres after treatment for ...	2	...	...	...	7	5	...	...	9	5
Number of cases discharged after completion of treatment and observation for ...	...	...	...	...	24	10	...	...	24	10
Number of cases which, at the end of the year under report, were under treatment or observation for	90	95	...	...	208	111	...	...	298	206
Total—Items 3, 4, 5, and 6 ...	99	102	...	...	249	137	...	...	348	239
Out-patient attendances—										
(a) For individual attention by the Medical Officer	1058	767	...	...	1252	735	67	128	2377	1630
(b) For intermediate treatment, e.g., irrigation, dressings, etc. ...	45	37	...	...	2618	1340	10	22	2673	1399
TOTAL ATTENDANCES ...	1103	804	...	...	3870	2075	77	150	5050	3029
Aggregate number of "In-patient days" of treatment given to persons who were suffering from ... ..	...	...	...	...	...	...	...	...	...	...
					For detection of			For Wassermann Reaction.		
					Spirochetes.	Gonococci.	Other Organisms.			
Examinations of Pathological material—										
(a) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre ...					...	...	...	...
(b) Specimens from persons attending at the Treatment Centre which were sent for examination to an approved laboratory ... ..					...	494	...	279		

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	Sussex West	Cardiff	Total.
A. Number of cases from each area dealt with during the year for the first time and found to be suffering from:—							
Syphilis	44	14	...	1	...	...	59
Soft Chancre ... ..	...	...	...	...	...	...	...
Gonorrhoea	141	45	6	3	2	1	198
Conditions other than venereal ...	90	19	...	1	...	...	110
TOTAL ...	275	78	6	5	2	1	367
B. Total number of attendances of all patients residing in each area ...	6159	1686	184	46	3	1	8079
C. Aggregate number of "In-patient days" of all patients residing in each area ...	...	...	...	...	...	...	...
D. Number of doses of arsenobenzene compounds given in the:—	855	387	...	4	...	...	1246
1. Out-patient Clinic	...	...	...	...	...	...	...
2. In-patient Dept. to patients residing in each area.	...	...	...	...	...	...	...
E. Give the names of arsenobenzene compounds used in the treatment of Syphilis and the usual initial and final doses.	N.A.B. 0.3 gr. 0.6 gr. Sulpharsenol Stabilarsan 0.3 0.45 0.6 gr.						
F. State the amount and kind of treatment usually administered to a case of Syphilis of each of the types usually dealt with at the Treatment Centre.	1st course. 8 weekly doses Salvarsan substitute followed by 8 weekly doses Bismuth and then Pil. Hyd gr. II O.N.G. 3 months—then 3 such courses in 2 years. Test 1 month and repeat if W.R. + after one course yearly.						
G. State the nature of tests applied in deciding as to discharge of patients referred to in Item 5 on previous page.	SYPHILIS W.R. at interval 3 months first year and 6 months 2nd. Negative pro. injection. GONORRHOEA. Smears and discharge of prostate secretion after massage micros. exam also ditto after alcohol. Sound and argent, rit. inj. Urethroscope if indicated. Pro. inj. Gon. Proteose followed by smear.						

SECTION VIII.

MATERNITY AND CHILD WELFARE.

Return (1) showing the arrangements made for maternity and child welfare by the Council and by Voluntary Associations providing maternity and child welfare services in respect of which the Council pay contributions under Section 101 of the Local Government Act, 1929, or otherwise; and (2) giving particulars of the work done during the year 1930.

1.—Population of the area served by the Council, 222,300.

2.—Number of births notified in that area during the year under the Notification of Births Act, 1907—

- (a) Live births, 3,410; (b) Still births, 78; (c) Total, 3,488;
- (d) By midwives, 2,620; (e) By doctors and parents, 868.

3.—Health Visiting—

- (i) Number of officers employed for health visiting at the end of the year by the Council, 19.
- (ii) If any of the Health Visitors are engaged on other work during part of their time, state the equivalent of whole-time services devoted by the whole staff to health visiting—(a) in the case of Health Visitors employed by the Council: 5/11, M.C.W.; 5/11, S.M.S.; 1/22, T.B.; 1/22, G.P.H.
- (iii) Number of visits paid during the year by all Health Visitors—
 - (a) To expectant mothers: First visits 466; total visits 813.
 - (b) To children under 1 year of age: First visits 3,808; total visits 10,210.
 - (c) To children between the ages of 1 and 5 years: Total visits 14,874

4.—Infant Welfare Centres—

- (a) Number of Centres provided and maintained by the Council: 1.
- (b) Number of Centres provided and maintained by Voluntary Associations: 15.
- (c) Total number of attendances at all Centres during the year—
 - (i) By children under 1 year of age, 33,566.
 - (ii) By children between the ages of 1 and 5 years, 28,733.
- (d) Average attendance of children per session at all Centres during the year, 67.2.
- (e) Total number of children who attended at the Centres for the first time during the year—
 - (i) Children under 1 year of age, 2,148.
 - (ii) Children between the ages of 1 and 5 years, 708.
- (f) Percentage of total notified births represented by the number in (e) (i), 62.99.

5.—Ante-natal Clinics (whether held at Infant Welfare Centres or at other premises)—

- (a) Number of Clinics* provided and maintained by the Council: 1.

- (b) Number of Clinics provided and maintained by Voluntary Associations : None.
 (c) Total number of attendances by expectant mothers at all Clinics during the year : 4,124.
 (d) Average attendance of expectant mothers per session at all Clinics during the year : 20.3.
 (e) Total number of expectant mothers who attended at the Clinics during the year : 1,023.
 (f) Percentage of total notified births represented by the number in (e) 29.3.

(*Including Ante-natal Clinics provided at institutions transferred to the Council under Part I. of the Local Government Act, 1929.)

6.—Maternity Homes and Hospitals.

I.

	Separate maternity institutions provided by the Council	Institutions (with maternity wards) transferred to the Council under Part I of the Local Government Act, 1929	Institutions provided by Voluntary Associations
Number of Institutions	...	1	Two St. Mary's The Retreat
Number of maternity beds	22	17 to Sept. 32 from Oct. 20
Total number of women admitted to these beds during the year	460	292 34 326

II.—Number of women (if any) sent by the Council during the year to other Maternity Institutions : 0.

7.—Homes and Hospitals for Sick or Ailing Children under 5 years of age.

I.

	Separate institutions provided by the Council for these cases	Institutions (with accommodation for these cases) transferred to the Council under Part I of the Local Government Act, 1929	Institutions provided by Voluntary Associations
Number of Institutions	1	...	...
Number of beds provided for such children ...	15	—	...
Total number of children admitted to these beds during the year ...	96	...	...

II.—Number of such children (if any) sent by the Council during the year to other Institutions : 0.

8.—Convalescent Homes—

- (a) Number of convalescent institutions with accommodation for expectant or nursing mothers or children under 5 years of age—
 (i) Provided by the Council, 1.
 (ii) Provided by Voluntary Associations, 0.

- (b) Number of beds for such cases in convalescent institutions—
 (i) Provided by the Council,* 10.
 (ii) Provided by Voluntary Associations, 0.
- (c) Total number of cases admitted to the beds included in (b) during the year : 18.
- (d) Total number of such cases sent by the Council through the Voluntary Association during the year to other convalescent institutions : 79.

9.—Homes for Mothers and Babies—

- (a) Number of such Homes—
 (i) Provided by the Council : 0.
 (ii) Provided by Voluntary Associations : 2—"The Retreat," Ross Road, and 34, Morland Road.
- (b) Number of beds in Homes—
 (i) Provided by the Council : 0.
 (ii) Provided by Voluntary Associations—"The Retreat" 20, 34, Morland Road 10.
- (c) Total number of cases admitted to these Homes during the year—
- | | 34, Mor-
land Rd. | The
Retreat. | Total. |
|-----------------------------|----------------------|-----------------|--------|
| (i) Expectant mothers ... | 17 | 34 | 51 |
| (ii) Mothers and Babies ... | 14 | — | 14 |
| (iii) Babies ... | — | — | — |
- (d) Total number of such cases sent by the Council during the year to other Homes for mothers and babies : 0.

(*Including any beds for convalescent cases of these classes in institutions transferred to the Council under Part I. of the Local Government Act, 1929.)

10.—Day Nurseries—

- (a) Number of Day Nurseries—
 (i) Provided by the Council : 0.
 (ii) Provided by Voluntary Associations : 1.
- (b) Number of places for children under 5 years of age in the nurseries—
 (i) Provided by the Council : 0.
 (ii) Provided by Voluntary Associations : 30.
- (c) Total number of attendances of children at these Nurseries during the year—
- | | |
|---------------|----------|
| (i) Whole day | } 5,171. |
| (ii) Half-day | |

A separate record of attendances of half-day children is not available. There are on an average five who attend for half-day.

11.—Infectious Diseases—

Disease.	Number of cases notified during the year.	Number of cases visited by Officers of the Council.	Number of cases for whom nursing was provided by the Council.	Number of cases removed to hospitals.
(1) Ophthalmia Neonatorum ...	19	19	3	9
(2) Pemphigus Neonatorum ...	...	...	...	...
(3) Puerperal Fever ...	13	13	...	9
(4) Puerperal Pyrexia ...	24	22	...	11
(5) Measles and German Measles (in Children under 5 years of age) ...	...	...	...	C.B.H. 24 Mayday 27 } 51
(6) Whooping Cough (do.) ...	...	...	...	C.B.H. 4 Mayday 15 } 19
(7) Epidemic Diarrhoea (do.) ...	...	...	...	1
(8) Poliomyelitis (do.) ...	1	1	...	1

12.—Midwives—

- (a) Number practising in the area served by the Council for maternity and child welfare at the end of the year : 72.
- (b) Number employed by the Council : Nil.
subsidised by the Council : Nil.
employed by Voluntary Associations : Nil.
- (c) Number of cases attended by midwives during the year—
(i) As midwives : 2,327.
(ii) As Maternity Nurses : 722.
- (d) Number of cases during the year in which the Council paid or contributed to the fee of a midwife : 14.

13.—Maternal Deaths—

- (a) Number of women who died in, or in consequence of, childbirth in the area served by the Council for maternity and child welfare during the year—
(i) From sepsis : 1. (ii) From other causes : 5.
- (b) Number of these cases which died—
(i) At Home : 1. (ii) In Institutions : 5.

MUNICIPAL 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	1 twice wkly	Mon. & Thur.	A Doctor and Nurse are in attendance at each Session.
Boston Road, Mission Hall	Weekly	Thur.	
Silverdale 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 Addiscombe 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.	
Drill Hall, Union Road, Croydon	"	Fri.	
Wesleyan School Room, London Road, S.W. 16 ...	"	Wed.	
Mission Hall, Purley Way, Waddon	"	Wed.	
St. Oswald's Hall, Green Lane, Thornton Heath ...	"	Thur.	

* 2 p.m.

Notification of Births Act, 1915.

This Act required 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 :—

	Live Births	Still Births.	Total.
Midwives	2598	22	2620
Doctors, parents, and others ...	812	56	868

As the total number of births and still births registered during 1930 was 3,618 (Live 3,514, Still 104), 130 births were not notified in accordance with the provision of the Act.

The percentage of births notified by midwives was 75.2% as compared with 61.5% in 1929; by doctors 16.4% compared with 31.6% in 1929; parents and others 8.4% compared with 6.9%. Unnotified births were 3.6% of the total, a decrease of 3.3% over 1929.

Although occasional difficulties still arise, the visits of the health visitors become more appreciated as the years pass. There is less hostility, and requests for a visit are frequently received. It is unfortunate that some medical practitioners still look with suspicion upon these visits, though I believe, if the objects were fully realised, suspicion would vanish.

Ante-Natal Supervision.

Four sessions are held weekly in the Lodge Road Clinic by the two lady medical officers. Owing to the absorption of cases for admission to the Maternity Block at the Mayday Road Hospital, who formerly attended an Ante-Natal Clinic held there, at three sessions, two medical officers now attend. This arrangement commenced at the beginning of November. Table LXXV gives a summary of the attendances.

Of the 1,023 patients who attended, 556 (54%) were sent by some branch of the Public Health Department; 303 (30%) were sent by midwives; 266 (26%) came on their own initiative; 36 (3.5%) were sent by their private doctors.

The increase in the number of women coming on their own initiative is a satisfactory feature of the returns.

TABLE LXXV.

	1929.	1930.
Number of sessions held	203	203
Number of attendances made	3437	4124
Number of individuals who attended and were examined	912	1023
Number of normal labours resulting	255*	265*
Number of abnormal labours resulting	54*	42*
Number of women found to be not pregnant ...	33	46
Women sent by Health Visitors and from Centres	509	556
Women sent by Doctors	29	36
Women sent by Midwives	302	303
Women who came on their own initiative ...	105	266
Women sent by Hospitals		7
Women sent by Mayday Hospital	2	45

*The results of the remainder are unknown.

These figures show an increase on those for 1929, due partly to the Mayday Road Hospital cases, though many of these mothers in former years attended the Ante-Natal Clinic at Lodge Road at least once before passing on to Mayday Road.

The 42 known abnormal labours were as follows :—

Instrumental	19	Premature Births	5
Still Births	7	Post-partum Hæmorrhage ...	2
Mal-presentation	11	Miscarriage	12
Induced Labour	10	Twins	7
Episiotomy	1	Placenta Prævia	1
Adherent Placenta	4	Cæsarian Section	2
Eclampsia	1		

In some cases more than one abnormality was recorded.

There were 38 cases of ruptured perineum recorded.

The following Table is of purely medical interest, and gives the complications found by the examining Medical Officers. I am indebted to Dr. O. B. Falk for the details in this and the previous Table.

TABLE LXXVI.

	Prima-gravidæ.	Multi-gravidæ.	Non-pregnant.	Total.
Contracted Pelvis	12	8	...	20
Albuminuria	34	35	...	69
Hyperemesis Gravidarum ...	19	14	...	33
Varicose Veins	15	53	...	68
Hæmorrhoids	5	5	1	11
Cardiac Disease	1	8	...	9
Anæmia	2	15	...	17
Threatened Abortion	9	9	...	18
Inevitable Abortion	2	1	...	3
Venereal Disease	5	1	...	6
Leucorrhœa	23	29	...	52
Uterine Displacement	12	8	...	20
Mal-presentation	25	24	...	49
Bronchitis and Asthma	2	1	...	3
Pulmonary Tuberculosis ...	1	1	...	2
Constipation	87	79	...	166
Sterility ... ..	...	...	7	7
Inguinal Hernia	1	6	...	7
Cervical Erosion ... ..	...	10	...	10
Menopause ... ..	...	...	3	3
Enlarged Thyroid	1	1	...	2
Heartburn	16	18	...	34
Carious Teeth	107	114	...	221
Worms	1	1	...	2
Depressed Nipples	22	8	...	30
Fibroids	6	3	...	9
Glycosuria	1	1	...	2
	409	453	11	873

Of the abnormalities found the most usual were: Carious Teeth 25.3% (24.7%); Constipation 19.0% (19.0%); Leucorrhœa 5.9% (6.8%); Varicose Veins 7.8% (6.8%); Excessive Vomiting 3.7% (6.7%); Albuminuria 7.9% (5.8%); Heartburn 3.9% (5.7%);

Malpresentation 5.6% (3.7%); Depressed Nipples (3.4% (3.7%); and Contracted Pelvis 2.3% (3.6%). The figures within brackets are those for 1929.

Maternal Mortality.

There were 7 deaths associated directly with pregnancy, as compared with 11 in 1929. The maternal mortality rate was consequently 2.0 per 1,000 births, compared with 3.2 per 1,000 in 1929. In other words, as there were 108 still births, one mother died for every 486 living babies born.

The deaths directly associated with pregnancy were caused by: Puerperal Septicaemia, 1 case; Retained Placenta, 1 case; Pulmonary Embolism, 1 case; Post-partum Hæmorrhage, 1 case; Abortion and Hæmorrhage, 1 case; Pyosalphynx and Empyema, 1 case; Septic infection of a degenerating Fibroid following pregnancy, 1 case.

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

TABLE LXXVII.

YEAR.	BIRTHS.	Puerperal Fever and Sepsis.	Hæmorrhage P.P.H.	Caesarian Section.	Shock.	Exhaustion.	Ruptured Uterus.	Eclampsia.	Contracted Pelvis.	Placenta Praevia.	Pulmonary Embolism.	Heart Disease.	Syncope.	Acute Nephritis.	Asthma and Pulmonary Disease.	Influenza.	Other Causes.	TOTAL.	Maternal Mortality.
1918	2626	3	1	1	...	...	1	1	...	1	...	...	...	...	...	3	...	11	4.2
1919	2965	5	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	6	2.0
1920	4351	6	...	...	...	...	...	2	...	2	2	...	3	1	2	...	...	18	4.1
1921	3631	4	2	...	2	...	...	2	...	1	...	...	...	3	...	...	...	14	3.9
1922	3505	8	1	...	...	...	...	1	...	1	1	2	...	...	...	...	1	15	4.3
1923	3373	4	...	2	...	...	...	2	...	1	...	...	...	...	...	...	1	10	3.0
1924	3456	2	2	...	...	...	1	1	...	...	2	...	1	...	...	...	...	9	2.6
1925	3406	5	2	1	...	...	1	1	...	...	2	...	...	1	...	...	...	19	3.8
1926	3477	13	1	1	...	...	...	...	2	2	1	...	1	...	1	...	2	24	6.9
1927	3174	5	...	...	...	...	...	...	...	1	1	...	...	1	...	...	1	9	2.9
1928	3374	2	1	...	...	...	...	4	...	...	3	...	...	...	...	...	3	13	3.9
1929	3399	4	*1	...	...	†1	1	...	1	1	1	...	...	...	...	...	1	11	3.2
1930	3514	1	‡2	...	...	...	...	...	...	...	1	...	...	...	...	...	3	7	2.0
		62	13	5	2	1	4	15	3	10	14	2	5	6	3	3	12	160	3.6

* Due to Ectopic Gestation.

† Due to pernicious vomiting.

‡ One due to abortion.

In a total of 160 maternal deaths over a period of 13 years, 46.8% came under causes which may be classified as preventable; 25% under possibly preventable and 28.2% under not preventable causes. The remainder could not be classified fairly under these headings.

Puerperal Fever and Puerperal Pyrexia.

Thirteen cases of puerperal fever, and 23 cases of puerperal pyrexia were notified. This is a rate of 3.7 per 1,000 births for the former and 6.5 per 1,000 for the latter. The death rates were: Puerperal fever 1.14 per 1,000 births; there were no deaths attributed to puerperal pyrexia.

The following Table gives fuller details concerning these cases :—

TABLE LXXVIII.

						Puerperal Fever.	Puerperal Pyrexia.
No. of cases notified	...	...	...	...	...	13	23
" " attended by doctor alone at confinement						—	1
" " attended by doctor and midwife					...	8	9
" " attended by midwife alone				...	...	5	12
" " attended in an institution				...	...	5	11
" " treated at home only			...	...	...	5	7
" " treated at hospital		...	...	...	...	5	11
" " treated partly at home and partly in hospital		...	...	...	...	3	4
" " who died		...	...	...	...	1	—

The Council have arrangements with a panel of local medical practitioners to act as Consultants for the purpose of a second opinion when this is desired by the patient's medical attendant. The fees are paid by the Council. The Council also retain the services of Drs. Wyatt and Richardson, of London, to act as consultants in exceptional cases. In addition, at the end of the year, the services of the whole-time Specialist Obstetric Surgeon became available for private medical practitioners. All the practitioners in the Borough were notified of the arrangement, and during the first six weeks of his services, he was called into consultation in 13 cases. When it is remembered that throughout 1929 only 7 similar consultations were requested, it is clear that the new scheme is appreciated. His services are given without cost to the patient.

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. Three applications were granted and a sum of £14 4s. paid.

Prior to the inception of the new scheme, members of the rota of private practitioners were called into consultation on three occasions during the year.

Accommodation for Confinement.

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

	Number.	Percentage.
In Private Houses	2156	61.3
In Public Institutions... ..	706	20.1
Registered Maternity Homes..	649	18.5
In other places	3	0.1

The Maternity Block at Mayday Road.

Under the provisions of the Local Government Act, 1929, which came into force on April 1st, 1930, the Mayday Road Hospital passed under the control of the Public Assistance Committee of the Council. The new scheme to bring about co-ordination between the various spheres of Maternity and Child Welfare activity, both municipal and voluntary, linked that portion of the hospital devoted to Maternity to the Health Department. A specialist obstetrician, who is also an Assistant M.O.H., resides at Mayday Road Hospital and is responsible, under the Medical Superintendent, for the conduction of all work in the Maternity Wards. In addition, in order to do away with any necessity for application to be made to a male relieving officer by a prospective patient, the Lady Almoner of the Health Department, appointed under the scheme referred to, is for the purposes of maternity, a relieving officer. The Ante-Natal Clinic, which was formerly held independently at the Mayday Road Hospital, was amalgamated with the Council's Ante-Natal Clinic at Lodge Road. Any patient attending the Ante-Natal Clinic is seen by the Almoner and, if institutional treatment is desired, is allocated either to St. Mary's Hospital or Mayday Road Hospital, according to the patient's wishes. Enquiries into income and assessment of payments is also undertaken by the Almoner.

There are two wards in the Maternity Block, with 10 beds in each. The accommodation is not very modern, and the labour room in particular needs bringing up to date by the provision of proper sterilizing apparatus and better facilities for washing. One or more single bedded wards would also be a great advantage. The hospital is a training school for midwives.

No. of cases admitted during the year ...	460	
Average duration of stay ...	12 days.	
No. of cases delivered by (a) Midwives ...	403	
(b) Doctors ...	43 (forceps).	14 cases were born before arrival at Hospital.
No. of cases in which medical assistance was sought by a midwife ...	87	43 on account of delayed labour. 35 ruptured perineum. 9 post-partum hæmorrhage.
No. of cases notified as (a) Puerperal Fever ...	4	
(b) Puerperal Pyrexia ...	4	
No. of cases of Pemphigus Neonatorum ...	Nil	
No. of cases notified as Ophthalmia Neonatorum ...	2	
Result of treatment in each case : both cured.		
No. of maternal deaths ...	2	
Causes of death—		
(1) Intestinal obstruction following operation for Cæsarian Section.		
(2) Pulmonary Tuberculosis .		
No. of foetal deaths (i) Stillborn ...	24	
(ii) Within 10 days of birth ...	13	
Causes of death in (ii)—		
Prematurity ...	7	
Congenital atelectasis ...	2	
Congenital cardiac defect..	1	
Hirschprung's Disease ...	1	
Broncho-pneumonia ...	1	
Deficient vitality ...	1	

The causes of the still births were considered to be : Eclampsia in mother 3 ; Forceps delivery 4 ; Abnormal presentation 4 ; Placenta prævia 3 ; Albuminuria in mother 2 ; Prematurity or intra-uterine death 4 ; Concealed hæmorrhage 2 ; Unknown 2.

St. Mary's Hospital.

This institution was enlarged from 17 to 32 beds, and the enlarged institution was opened for the reception of patients on the 27th of September, 1930.

Thirty of the beds are reserved for cases sent by the Local Authority, for which an annual grant of £3,600 is made.

No. of cases in the Hostel on 1st Jan., 1930 ...	8	
No. of cases admitted during 1930 ...	292	
Average duration of stay ...	14 days.	
No. of cases delivered by (a) Midwives ...	248	
(b) Doctors ...	23 (8%)	
No. of cases in which medical assistance was sought by the midwife with the reasons therefor—(a) Ante-natal ...	9	6 small pelvis. 3 hæmorrhage.
(b) During labour ...	15	4 mal-presentation. 8 uterine inertia. 2 obstructed labour. 1 small outlet.

(c) After labour	...	...	...	38	36 ruptured perineum. 1 adherent membrane. 1 post-partum hæmorrhage. 3 prematurity.
(d) For infant	...	...	...	3	
No. of cases notified as Puerperal Fever or Puerperal Pyrexia	...	...	...	5	
No. of cases notified as Pemphigus neonatorum	...	...	...	0	
" " " Ophthalmia neonatorum	...	...	...	1	
" " " Inflammation of the eyes, however slight	...	...	...	1	
No. of infants not entirely breast fed	...	...	...	25	These babies had supplementary feeds to assist breast feeding.
No. of maternal deaths	...	...	...	0	
No. of foetal deaths (a) Still-born	...	...	...	9	
(b) Within 10 days of birth	...	...	...	4	2 atelectasis. 2 prematurity and atelectasis.
(c) After 10 days of birth..	...	...	...	—

The Retreat, Ross Road.

This is a home for unmarried mothers and their babies, conducted by the National Free Church Women's Council and formerly aided by a grant from the Ministry of Health. With the cessation of percentage grants, on the coming into force of the Local Government Act, the Council decided to continue the grant on the same basis as the Ministry of Health, subject to the right of their authorised officers to enter and inspect. This was readily granted and the work of the institution is now a part of the general Maternity and Child Welfare provisions of the borough. 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 1930, and I am indebted to Mrs. Matthews, the Hon. Secretary, for them:—

Number of beds for patients	...	...	...	...	...	20
Number of cases admitted	...	...	...	...	...	25
Total number of cases	...	...	...	...	...	34
Average duration of stay	...	...	...	...	...	6 months
No. of cases delivered by (a) Midwives	...	...	...	...	...	23
(b) Doctors	...	...	...	...	...	6
No. of cases in which medical assistance was sought by a midwife..	...	...	...	...	...	17
No. of cases notified as (a) Puerperal Fever, (b) Puerperal Pyrexia..	...	...	...	...	...	Nil
No. of cases notified as Ophthalmia Neonatorum	...	...	...	...	...	Nil
No. of maternal deaths	...	...	...	...	...	Nil
No. of foetal deaths (a) Stillborn, (b) Within 10 days of birth	...	...	...	...	...	Nil

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.

Twenty-two babies were placed in the Nursery when the mothers left. Twenty-seven babies passed out of the Home, and of these 15 are still with the mother; the remainder have been placed with foster-mothers.

Still Births.

During 1930, 108 still births were registered in respect of Croydon, but of these 14 were outward transfers to other districts. There were 10 inward transfers, giving a total of 104 for the area. Of these 56 were male babies and 48 female; 5 male and 4 female were illegitimate. The proportion of still births to living children was as 1 to 33.8. The still birth rate was 3% of the registered live births. The rate in 1929 was 3.4.

The still birth rate, on the same basis as for Infant Mortality was 29.6 per 1,000 births.

TABLE LXXIX.

STILL BIRTHS, 1930.

Notified by Midwives	...	...	...	...	17
„ Doctors, etc.	...	...	...	...	24
„ Institutions	...	...	...	...	32*
Attended by Midwives alone	...	...	...	...	11
„ Doctors alone	...	...	...	...	11
„ Midwives and Doctors	...	...	...	...	18
„ Institutions	...	...	...	...	23
Occurred at 9 months	...	...	...	...	45
„ 8 months	...	...	...	...	10
„ 7 months	...	...	...	...	7

*Including registered Maternity Homes.

An Analysis of 62 Still Births Occurring During the Year.

Of the 62 still births investigated 34 were males and 28 females.

The causes assigned by the doctor or the midwife in attendance, for the still birth were: Malpresentation, 11 cases; Prolonged labour, 2 cases; Maternal illness, 6 cases; Contracted pelvis, 5 cases; Placenta prævia, 2 cases; Abnormal presentation, 11 cases; Ante-partum hæmorrhage, 3 cases; Large child, 2 cases; Injury or shock to mother, 4 cases; Twin pregnancy, 1 case; and in 3 instances no record is obtainable. In 23 cases no cause was assigned. It is remarkable for what a high proportion of still births no cause can be given.

Type of Delivery.—In 32 cases the confinement was difficult or prolonged. Normal confinement was noted in 24 cases; no information was obtainable in 5 cases, and one was a precipitate labour. In three instances it was a twin pregnancy. The fact that a large number of the labours were stated to be prolonged or difficult is of some importance, besides being of interest when compared with the small number of cases of still birth for which this factor was stated to be responsible.

Age of Mother.—Under 20 years, 3; between 20 and 29 years, 22; between 30 and 39 years, 24; between 40 and 49 years, 11. In two instances the age of the mother was not stated.

The Health of the Mother during her pregnancy was stated to be good in 45 cases and indifferent or poor in 11 cases; no particulars were obtained in 6 cases. In 17 instances the mother had attended the Ante-Natal Clinic more than one, and in 6 cases on one occasion only; 39 cases had never attended the Clinic.

Attendance at Confinement.—Thirteen of the still births investigated occurred in the Mayday Road Hospital; 9 in St. Mary's Hospital; 30 were attended in their own homes by a private medical practitioner either alone or in conjunction with a midwife; 9 were attended by a midwife alone, and 1 birth occurred before any skilled help was available.

Forceps were reported to have been utilised in 20 of the cases, while in 6 no record was available.

In 44 cases the baby was born at full term; in 9 at the 8th month of gestation; in 6 at the 7th month; and in 2 under 7 months. One case was stated to be over the 9th month. The baby was apparently a normal child in 53 cases, abnormal in 4, whilst in 5 no record was available.

Number of Child in Family.—The still birth was the first pregnancy in 22 instances; the 2nd in 12; the 3rd in 4; the 4th in 5; the 5th in 5; the 6th in 1; the 7th in 2; the 8th in 1; the 10th in 1; and the 11th in 3. In 6 cases the information was not obtained.

A history of injury to the mother during pregnancy was given in 10 cases, and in 4 no details were available. A history of previous still births was obtained in 10 cases; no previous still births in 41 cases and no details given in 6 cases; a previous miscarriage had occurred in 5 cases. Movements of the foetus were stated to have been felt up to the time of labour in 40 cases; some days previous to labour in 10 cases; never felt in 1 case; and the facts were uncertain or not stated in 11 cases.

Ophthalmia Neonatorum.

Nineteen cases were notified during 1930; in 1929 there were notified 5 cases; in 1928, 7 cases; and in 1927, 18 cases. 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. In 1930 the number notified showed a noticeable increase, due not so much to actual increase in the number of cases, as to a more complete notification of cases of inflammation of the eyes in newly-born babies.

The following table gives the notifications in Croydon during the past ten years.

	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
No. of cases ...	26	21	23	21	22	20	18	7	5	19
Rate per 1000 births	7.1	6.0	6.8	6.1	6.5	5.8	5.7	2.8	1.5	5.4

Results of Treatment.

Cases treated.			Vision Unimpaired.	Vision Impaired.	Died.	Removed.
Notified.	At home.	In hospital.				
19	8	11	17	1	...	1

Infant Mortality.

The Infantile Mortality rate was 48 per 1,000 births. This is 14 per 1,000 births less than in 1929, and is the lowest figure yet reached. Taking into consideration all the circumstances, the rate can be considered very satisfactory.

For the past 5 years the numbers of infant deaths have been :—1926, 211; 1927, 178; 1928, 178; 1929, 221; 1930, 171; 102 deaths of infants occurred in institutions, including Registered Nursing Homes.

Number of deaths within the first month of life:—

Year.	No. of Deaths.	No. of Births.	Rate.
1924	101	3456	29/1000 live births.
1925	68	3506	19 „ „ „
1926	80	3477	23 „ „ „
1927	83	3174	26 „ „ „
1928	66	3374	20 „ „ „
1929	88	3399	26 „ „ „
1930	82	3514	23 „ „ „

Among the 171 deaths, 93 occurred in boy babies and 78 in girls. 1,774 were born males and 1,740 females. The infantile mortality rate for the two sexes was, therefore: Boys, 53; girls, 45.

The rate of infant mortality amongst illegitimate children was 106 per 1,000. The rate in legitimate children was 45 per 1,000.

The following table gives the causes of death during the first two months of life.

I. COMPLICATIONS OF LABOUR—

Cerebral Hæmorrhage	...	...	...	6
Trauma at Birth	...	...	...	1
Sepsis of Umbilical Cord	...	...	...	1
				— 8

II. FOETAL STATES—

Congenital Heart Malformation	...	...	...	6
Other Congenital Deformities	...	...	...	7
Atelectasis	...	...	...	10
Congenital Debility and Marasmus	...	...	...	13
Purpura Neonatorum	...	...	...	1
Melæna	...	...	...	1
Hepatogenous Jaundice	...	...	...	1
				— 39

III. PREMATUREITY 39

IV. POST-NATAL CAUSES 15

— 15
101

The rate of infantile mortality for England and Wales in 1930 was 60, and for the 107 large towns 64. The rate for Croydon is therefore considerably lower than the average rate. An analysis of Table LXXX shows that of the total infant deaths, 20.5% occurred on the first day of life and 48% before the completion of the first month and it may reasonably be deducted that these deaths were due to causes operating before birth except in so far as accidents of birth (9) are concerned. It is interesting to note this percentage is very constant throughout England and Wales and does not vary to any great degree with variations in districts.

TABLE LXXX. 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.	8-9 mths.	9-10 mths.	10-11 mths.	11-12 mths.	TOTAL.
All Causes	Certified	...	35	10	6	5	3	...	12	4	1	6	82	19	18	5	14	9	4	5	7	3	3	2	171
	Uncertified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	3
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	2
Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis (<i>not Tuberculous</i>)	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	2
Convulsions	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	2
Laryngitis	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Pneumonia (all forms)	...	...	...	...	...	1	...	2	...	...	...	3	1	6	...	4	...	...	1	3	...	...	1	19	
Diarrhoea and Enteritis	...	...	...	...	...	...	...	...	...	...	...	...	6	4	2	4	6	2	...	1	...	...	...	...	25
Gastritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	2
Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital Malformations	...	...	6	2	1	...	...	...	2	...	...	11	2	3	...	1	...	...	...	...	...	...	...	...	17
Premature Birth	...	...	15	4	3	1	1	...	4	2	1	5	36	3	...	1	...	...	...	...	...	...	...	...	40
Atrophy, Atelectasis, Debility, and Marasmus	...	...	10	3	1	2	...	...	...	1	...	...	17	6	2	1	2	1	...	...	...	...	...	...	29
Injury at birth	...	...	4	1	...	1	...	...	1	...	...	7	...	1	...	...	...	...	...	...	...	...	...	...	8
Other causes	...	...	...	...	1	1	1	...	1	1	...	1	6	1	2	1	2	1	2	1	...	1	1	...	18

Deaths Under One Month.

An analysis of Table LXXX. shows that 20.5% of the infant deaths occurred before the baby was 24 hours old; 41.5% during the first week of life; and 48% before the end of the first month. In 1929 the corresponding figures were 13%, 28% and 40%. 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 44% of deaths under 1 month of life. In the same group can be placed the second great cause, debility which was the factor in 20.7%. Injury at birth is rather different inasmuch as it is, by skilled ante-natal and natal attention, avoidable; injury caused 8.5% of the deaths. Deaths under one month due to congenital deformities constituted 13.4% of the whole during this age period. It is interesting to see that conditions probably brought on by faulty feeding played no part in this mortality. This group of deaths contributed 23.3% per 1,000 births towards the infantile mortality rate.

Deaths Under Three Months.

One hundred and nineteen babies born died during the first three months of life, a percentage of the total infant deaths of 69%, and an infant mortality rate of 34 per 1,000 births. As the total infantile mortality rate was 48, it is seen nearly three-quarters 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 third month shows an alteration in the chief causes of death; these were Diarrhoea (27%), Debility (21.6%) and Pneumonia (18.9%). The effects of improper feeding are commencing to make themselves felt, and from this age period onward to the end of the first year of life, Diarrhoea, together with Pneumonia, are the two outstanding causes. The Pneumonia deaths occurred in the following months: January 1, February 1, March 1, April 2, May 2, June 1, July 1, August 2, October 2, December 6.

Deaths between the 4th month and the end of the first year of life were caused chiefly by Diarrhoea (28.8%); Pneumonia (17.3%) and Debility (7.9%).

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 just over 40% of the total deaths, and contributed 19.6 per thousand births towards the infantile mortality rate.

(2) Next to these come Pneumonia and Diarrhoea with 25.7% of the total deaths and a contribution of 12.6 per thousand to the infantile mortality rate.

(3) The influence of prenatal 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 2 deaths. In 1929 it caused 12 deaths. It is a dangerous foe to infant life. Measles caused 3 deaths and Scarlet Fever 1 death. In deaths of children under one year of age, the child who died was a first child in 28% ; a second child in 11.7% ; a third child in 11.7% ; a fourth child in 8.2% ; a fifth child in 5.3% ; a sixth child in 1.8% ; a seventh child in 2.9% ; an eighth in 0.6% ; a ninth in 0.6% and a tenth in 2.3%. In 26.9% no data were forthcoming owing to the parents having moved, or the child being a foster child, or for other various reasons.

The following table gives the chief causes of infant deaths, as compared with 1929.

TABLE LXXXI.

	Percentage Deaths per Total Infantile Deaths.		Deaths per 1,000 Births.	
	1930.	1929.	1930.	1929.
Premature Births ...	23.3	21.3	11.4	13.8
Respiratory Diseases ...	11.7	21.3	5.7	13.8
Infectious Diseases (inc. Tuberculosis) ...	4.7	6.3	2.3	4.1
Debility and Marasmus	11.1	13.1	5.4	8.5
Diseases of Digestion..	15.2	15.8	7.4	10.3
Accidental & Congenital	14.6	11.8	7.1	7.7

TABLE LXXXII.

	1930					1929			1928		
	Births	Deaths	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	263	11	42	16.9	11.6	90	15.4	16.6	65	19.7	19.8
February	226	17	75	14.2	12.9	90	14.1	23.5	100	16.5	14.4
March	259	16	60	15.1	13.8	100	16.0	20.9	62	14.5	13.0
April	320	14	44	14.7	11.6	58	16.1	13.1	59	15.8	12.3
May... .. .	420	21	50	20.7	11.7	31	17.6	11.7	44	17.6	10.7
June... .. .	257	14	54	19.8	8.6	28	17.9	8.6	17	19.3	10.8
July... .. .	301	8	26	16.3	8.7	33	16.6	9.4	37	18.0	9.4
August	316	16	50	16.7	9.3	63	15.8	10.0	66	17.9	8.0
September	337	12	37	17.4	8.6	76	16.0	7.5	74	14.9	9.1
October	253	11	44	15.6	10.7	77	14.4	11.7	46	14.7	10.6
November	252	9	36	16.3	9.7	70	15.7	10.6	33	15.2	10.3
December	247	22	89	13.7	11.2	65	15.4	11.5	47	14.4	13.0

The Birth Rate was highest in May, June and September, and the infantile mortality was lowest during July, September and November. The death rate was highest in February and March. Infantile mortality was highest during February, March and December.

Infantile Mortality in Wards from 1924 to 1930.

TABLE LXXXIII.

	1924	1925	1926	1927	1928	1929	1930	Average over years.
Upper Norwood	45	50	54	73	80	70	108	69
Norbury	48	45	58	27	37	20	48	40
West Thornton	30	28	29	34	94	63	29	44
Bensham Manor	58	55	69	97	45	55	39	60
Thornton Heath	86	71	38	60	75	99	66	71
South Norwood	74	85	81	39	53	54	51	62
Woodside	41	22	50	57	42	59	40	44
East	25	23	22	32	25	63	40	33
Addiscombe	39	56	57	58	45	71	33	51
Whitehorse Manor	67	97	114	75	59	74	62	78
Broad Green	37	24	33	50	48	76	38	44
Central	64	65	93	29	58	42	51	57
Waddon	30	71	85	46	46	63	56	57
South	151	98	83	68	66	61	25	79

The wards with the highest average infant mortality over a seven year period are : Upper Norwood, Thornton Heath, Whitehorse Manor and South; the lowest averages are recorded in East, Norbury, Broad Green, West Thornton and Woodside.

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.

76 midwives notified the Local Supervising Authority of their intention to practise within the Borough during 1930, 3 of whom were in respect of periods of 2/3 weeks only; 1 case removed out of the Borough, so that 72 remained on the Register at the end of the year. Of these 67 were trained and held the certificate of the Central Midwives Board, and 2 were bona-fide midwives, i.e., were in practice as midwives 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	...	...	...	2327	i.e., 66% of total births.
Cases attended by midwives when a doctor was also engaged	...	...	...	722	
Cases attended by midwives when a doctor was also summoned	...	...	...	351	
				<hr/>	
			Total	3049	i.e., 86.7% of total births.
				<hr/>	

The number of confinements attended by midwives in 1930 was considerably in excess of those in 1929, when the cases attended by midwives alone only constituted 50% of the total. The number of cases attended by a doctor and a midwife was nearly doubled.

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 approved a scheme during the year for the payment of her fees to a midwife who attends a necessitous patient in her confinement. No attempt is made in such cases to recover from the patient. The object of this was that even the poorest mother could engage the services of a competent midwife, whilst the latter would have no cause to hesitate to attend on the grounds that she would probably receive no payment for her services. Midwives are also compensated if they lose a case through its admission to a hospital or maternity home on the advice of the Ante-natal Clinic. The sum of £12 12s. was paid out during the year.

TABLE LXXXIV.

FOR COMPLICATIONS DURING PREGNANCY :

Oedema	...	...	2	Abortion	...	...	5
Malposition of foetus	...	...	1	Vaginal Discharge	...	...	1
Albuminuria	...	...	2	Other causes	...	...	2
							<hr/>
							13

FOR COMPLICATIONS DURING LABOUR :

A.—Malpresentations—

Breech	...	...	10	Extended Breech	...	...	2
Vertex pres.	...	...	1	Transverse	...	...	1
Foot	1	Occipito-Posterior	6
Face	6	Undiagnosed	5
							<hr/>
							32

B.—Obstructed Labour

4	4
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C.—Delayed Labour—

Uterine Inertia	10	Prolonged	30
Delayed	26				
							<hr/>
							66

D.— <i>Hæmorrhage</i> —			
Ante-partum	...	14	Post-partum 7
Placenta Prævia	...	2	
			— 23
E.— <i>Other Causes</i> —			
Retained Membranes	1	Prolapse of Cord	... 2
Adherent Placenta	...	Fœtal distress	... 1
Retained Placenta	...	Fits	... 2
Torn Perineum	...	Twins	... 1
Illness of Mother	...		
			— 120
FOR COMPLICATIONS DURING PUERPERIUM :			
Pyrexia	...	10	Other causes 11
Pain in Legs	...	12	
			— 33
FOR COMPLICATIONS IN REGARD TO THE BABY :			
Inflammation of Eyes	28	Premature Birth	... 4
Still Birth	...	2	Malformation 4
Feebleness of Baby..	16	Convulsions	... 1
Inflammation of		Hernia	... 1
Umbilicus	2	Melæna	... 1
Abscess	...	1	
			— 60

In accordance with Rule 12a of the Central Midwives Board, the following reasons for the discontinuance of breast feeding were received:—

Insufficient supply of milk	...	8	Baby adopted	...	1
Child refused breast	...	1	Retracted nipples, etc.	...	2
Mother anæmic	...	1	Previous history	...	1
					—
					Total ... 14
					—

Inspection of Midwives.

Dr. Falk is the inspector of midwives; she had 11 interviews with midwives at the Town Hall or at the Ante-natal Clinic and paid 175 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 satisfactory, whilst the necessary case records and temperature charts were on the whole properly kept. 4 midwives were reprimanded for various minor lapses, and 3 were interviewed by the Medical Officer of Health.

The revised rules of the Central Midwives Board for 1927 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.

Disinfection of Midwives Bags, Etc.

This is done by the Local Supervising Authority, free of charge for any midwife asking for it. In 17 instances midwives availed themselves of these facilities.

Nursing Homes (Registration) Act, 1927.

No. of applications for registration of Maternity Homes received before 1/7/28	62
No. of homes registered	60
No. of orders made refusing or cancelling registration	2
No. of applications for registration of Nursing Homes received (from 1/7/28 to 31/12/28)	10
No. of applications for registration of Maternity Homes received (from 1/7/28 to 31/12/28)	9
No. of applications for registration of Maternity, etc., Homes refused to 31/12/28	3
No. of Nursing or Maternity Homes Registered end of 1929	49
No. of Nursing or Maternity Homes Registered during 1930	6
No. of registrations cancelled during 1930	Nil
No. of applications for registrations refused 1930	Nil
No. on Register at end of 1930	55

Doctors' Accounts Under Section 14 (1) of the Midwives Act, 1918.

149 accounts were received from doctors for services rendered under the provisions of this section. This compares with 112 in 1929, and 131 in 1928. The total amount of the accounts was £270 6s. 3d., £71 6s. was ultimately recovered from the patients. In 1929 the amount paid to doctors was £149 8s., and in 1928, £199 13s. 6d.

The Maternity and Child Welfare Clinics.

There are 16 Maternity and Child Welfare Centres, 15 of which are conducted by the Croydon Mothers' and Infants' Welfare Association, and 1 by the local authority. A total of 19 sessions per week are held and at all of these a doctor and a nurse on the staff of the health department attend. At the Norbury Centre, owing to the size of the clinic, arrangements were made for two doctors to attend the one session held there; it will be noticed in the subjoined table that the attendance figures for this centre are considerably higher than any other centre other than the Municipal.

During 1930, 2,148 new cases under 1 year of age, and 708 over a year of age attended for the first time; this is an increase of 157 in the first class but a decrease of 105 in the second class. The total attendances of babies and infants from 0-5 years increased from 55,794 in 1929 to 62,299 in 1930. Consultations with doctors increased in numbers from 21,088 to 21,697. Five hundred and

thirty one expectant mothers were seen, a decrease of 42 on 1929, and a total of 1,652 visits to the centres were paid by them. The total of all visits to the Centres was 63,951, an increase of 6,427 over 1929. This is the greatest total yet reached and serves to indicate the appreciation of the services being rendered.

The decrease in the number of first attendances of infants over one year of age is disappointing. The figure for 1929 was on the low side, and a further diminution is recorded this year.

The highest average attendance of mother and babies at each session was recorded at Norbury (93.1), Municipal (81.2), South Norwood (78.5), West Croydon (78.3) and South Croydon (78.0). At the first named centre two doctors were in attendance at each session. 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 only remedy is a multiplication either of the number of sessions at each clinic, or an increase in the number of clinics.

The foundation of new centres has not, however, 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 from outside the Borough. In connection with Norbury, owing to the congestion, it has been impossible for these mothers to be seen by the doctors, and they are always advised to attend a centre in their own area. Unfortunately it is often the case that such a centre is too far away for the mother to go to. As these mothers do not live in the Borough and consequently do not contribute towards the cost of these services, it does not seem reasonable that they should have the same facilities as those mothers who live within the borough boundary.

Attendances at Infant Centres—1930.

	Municipal.	Boston Road	Sylverdale Road	South Croydon.	Shirley.	Woodside.	Lr. Addiscombe Road.	South-Norwood	Naseby Road.	Moffatt Road.	St. Alban's.	St. Paul's.	St. Oswald's.	Union Road.	Norbury.	Waddon.	Total 1930.	Total 1929.	Total 1928.	Total 1927
INFANTS.																				
New cases under 1 year ...	338	94	114	133	72	95	138	273	68	86	225	80	87	145	117	83	2148	1991	1918	1712
No. of re-attendances ...	4493	1432	1928	1904	964	1603	1816	3827	1155	1212	3374	1547	1249	1716	2093	1105	31418	27431	27059	22211
New cases over 1 year ...	84	49	28	28	29	32	42	81	37	27	75	30	33	41	51	41	708	813	923	795
No. of re-attendances ...	3000	1392	1102	1538	690	1484	1337	3270	2222	1190	3202	1932	629	1673	2352	1012	28025	25559	24371	20544
Attendances of children 0-5	7915	2967	3172	3603	1755	3214	3333	7451	3482	2515	6876	3589	1998	3575	4613	2241	62299	55794	54271	45262
Consultations with Doctor	1821	1132	1315	1189	744	815	975	2861	1232	1214	3042	1371	787	1058	1150	991	21697	21088	21243	17773
No. of Sessions ...	100	51	47	48	48	49	48	97	50	47	99	49	50	47	50	47	927	881	885	731
EXPECTANT MOTHERS.																				
No. of new cases ...	99	8	21	32	18	19	39	64	38	19	94	18	9	15	11	27	531	573	481	494
„ re-attendances ...	109	19	20	100	36	20	31	96	159	88	194	32	8	90	33	86	1121	881	1038	987
Total attendances of Expectant Mothers ...	208	27	41	132	54	39	70	160	197	107	288	50	17	105	44	113	1652	1730	1519	1481
Total attendances ...	8123	2994	3213	3735	1809	3253	3403	7611	3679	2622	7164	3639	2015	3680	4657	2354	63951	57524	55790	46743
Average attendance per Session ...	1930	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		
1929	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		
1928	62.5	37.0	60.7	70.0	24.8	55.7	67.9	77.8	68.5	55.8	63.5	84.3	...	66.3	93.6	38.7	...	...	*63.0	
1927	61.1	15.7	72.6	69.0	16.0	57.7	69.5	70.6	63.0	42.9	66.3	83.1	...	61.6	55.0	...	...	...	...	*64.0

Table LXXXVI. 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 had never attended. If a baby only attended once it is included in the clinic returns:—

TABLE LXXXVI.

Deaths	Attended M. & C. W. centre		Attended at Birth by				Full Time Baby			Births during the same period	Deaths in Institutions				
	Yes	No	Doctor	Midwife	Doctor & Mid-wife	Not Known, etc.	Yes	No	Not Known		Mayday Road	Sick Nursery	Regd. Maternity Homes	St. Mary's Hostel	Other Institutions or Elsewhere
132	25	107	23	50	43	16	83	44	5	3514	27	13	16	4	6

2,148 babies under one year of age attended the clinics during 1930. Within the same period 3,514 babies were born and 171 died; 39 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 132 babies who died, 25 had attended a clinic in Croydon and 107 had not attended, i.e., 19% of the deaths were in clinic babies and 81% in non-clinic babies. Of the 3,514 babies born approximately 61% attended or would attend on calculation based on past attendances. The infantile mortality, estimated on this basis is 11 per 1,000 births for the "clinic" babies, and 50 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 83% 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 however only 65% were found healthy on the first visit, which may be interpreted to mean when a mother first attends a clinic with a child over a year old she does so because progress is not satisfactory; 65% of babies under 1 year were being breast fed at their first visit, this figure being less than 1929 (69), and 24 were

on the bottle; 9.1 of the ailing babies were suffering from digestive troubles, 1.6 from respiratory trouble and only 0.10 from rickets. In the babies over a year of age found to be ailing, 4.5 were suffering from digestive trouble, 5.4 from rickets, and 6.8 from respiratory trouble; 80.7 of babies over 1 year had been weaned.

When compared with the figures for 1929, there is a remarkable similarity in the percentages, a fact which seems to indicate that they are substantially accurate, and give a true picture of the conditions and states referred to specifically in the enquiry into the infant population of Croydon.

The individual centre showing the highest percentage of babies found healthy on their first visit was St. Oswald's (99), a result rather to be expected taking into consideration the district served; Shirley and Woodside with 92 were next. The centres showing the highest percentage of babies found ailing on their first visit were Upper Norwood and East Croydon, followed by St. Paul's and South Norwood.

Breast feeding seemed most usual in babies living in the Boston Road and South Croydon districts, and least usual in the Norbury and Upper Norwood districts. In infants over one year of age, attending for the first time, the highest percentages healthy was shown by St. Oswald's Centre (97); the highest percentages found unhealthy were at Sylverdale Road (50) and St. Paul's (59).

The largest number of first attendances was recorded at the Municipal Centre, followed by South Norwood. Both these centres hold two sessions weekly. Among the single session weekly centres, the largest number of first attendances was shown by East Croydon.

The Conditions of Babies on First Attendance at a Maternity and Child Welfare Clinic.

TABLE LXXXVII.

	BABIES UNDER ONE YEAR.												INFANTS 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) ...	309	91	29	13	0	7	9	225	67	75	38	61	73	23	5	4	2	12	2	74	88	0	0	8	422	
St. Albans (2) ...	163	76	52	36	0	2	13	144	67	55	16	41	54	35	2	3	7	23	1	62	82	3	0	10	288	
Boston Road ...	70	82	15	12	0	0	5	61	72	14	10	22	48	20	7	2	0	14	0	42	100	0	0	0	127	
East Croydon ...	99	72	39	0	0	8	31	80	58	27	31	30	71	12	0	0	3	9	2	32	76	0	4	4	180	
Norbury ...	84	86	14	9	0	0	5	51	52	38	9	28	74	10	1	4	1	4	0	36	95	1	0	1	136	
St. Paul's ...	38	75	13	10	0	0	3	36	71	15	0	7	41	10	2	2	3	3	0	17	100	0	0	0	110	
All Saints...	43	75	14	5	0	0	9	32	56	21	4	10	53	9	0	1	0	8	0	11	58	0	0	8	76	
Shirley ...	60	92	5	3	0	0	2	42	65	17	6	20	87	3	1	0	2	0	0	16	70	0	1	6	88	
South Croydon ...	110	86	18	8	0	0	10	92	72	23	13	15	60	10	0	2	0	8	0	15	60	1	1	8	153	
South Norwood(2)	174	74	61	44	0	4	13	167	71	54	7	43	74	15	1	3	5	6	1	57	98	0	0	0	293	
Silverdale Road ...	85	82	19	6	0	1	12	71	68	23	10	15	50	15	0	4	0	11	1	15	50	0	1	13	144	
Upper Norwood ..	47	71	19	9	1	1	8	35	53	21	10	17	56	13	0	1	3	9	0	25	83	1	2	2	96	
Waddon ...	76	91	7	3	1	3	0	51	61	7	25	25	61	16	2	1	5	8	1	16	39	0	7	17	124	
West Croydon ...	118	87	18	14	0	0	4	87	64	41	8	30	75	10	0	4	4	2	0	33	82	1	0	6	176	
Woodside ...	87	92	8	4	0	2	2	56	59	19	20	18	56	14	3	3	4	4	0	27	84	0	0	5	127	
St. Oswald's ...	72	99	1	4	0	2	1	50	69	22	8	29	97	2	4	0	4	2	0	29	94	0	0	12	121	
Totals ...	1635	83	332	180	2	30	127	1280	65	472	215	411	65	217	28	34	43	123	8	507	81	7	16	100	2651	

Clinic Sessions Attended by Health Visitors.

TABLE LXXXVIII.

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.	XXI.	XXII.	
Maternity & Child Welfare Clinics	45	8	58	4	36	9	73	78	13	48	46	44	17	93	67	94	55	46	15	45	11	22	927
Ante-natal Clinics	...	...	...	134	...	...	...	...	...	...	57	...	...	...	...	...	...	12	...	...	..	...	203

Owing to an abnormal amount of sickness among the Health Visitors during 1930, the work was at times dislocated and Health Visitors had to take on the district of a colleague who was away ill, with the result that the visiting in both areas suffered. During the year 66.5 weeks were lost owing to sickness and this is the reason for the decrease of 3,573 in the visits paid. A Health Visitor's work is of a strenuous nature and in a town where there is considerable housing development and a steady increase in population, it is necessary from time to time to revise Health Visitors' districts and to appoint new Health Visitors. During 1930, two additional visitors were appointed and at the end of the year a redistribution of area was worked out. This came into operation on January 1st, 1931.

TABLE LXXXIX. The Work of the Health Visitors.—Home Visiting.

	I. C.W.	II. R.A.	III. D.H.	IV. U.G.	V. A.W.W.	VI. J.T.	VII. M.S.	VIII. V.C.	IX. A.P.	X. A.C.	XI. V.B.	XII. H.S.	XIII. A.W.	XIV. J.C.	XV. E.H.	XVI. C.G.	XVII. W.L.	XVIII. M.J.	XIX. A.H.	XX. B.W.	XXI. A.M.	XXII. K.T.	TOTALS.
Visits to Expectant Mothers.																							
First visits ...	61	10	14	28	41	27	14	9	10	48	43	1	27	4	29	52	9	1	16	11	6	5	466
Re-visits ...	35	5	15	37	28	8	12	1	5	12	30	4	22	14	76	35	3	...	4	1	...	...	347
Infants under 1 year.																							
First visits ...	314	151	273	137	159	147	209	68	150	252	197	32	263	225	233	298	92	46	143	301	88	30	3808
Re-visits ...	443	262	742	248	317	237	178	150	190	550	244	29	528	394	495	274	105	78	470	233	165	70	6402
Children 1—2 years.																							
First visits ...	47	2	7	4	2	87	2	2	44	32	8	...	...	30	1	5	5	37	...	4	11	19	349
Re-visits ...	411	263	421	270	271	193	187	165	121	419	181	20	529	296	513	321	116	285	20	319	137	68	5526
Children 2—5 years.																							
First visits ...	48	2	1	1	1	58	4	...	1	15	6	...	...	21	3	...	7	...	9	27	2	30	236
Re-visits ...	959	643	473	335	571	427	312	146	477	372	143	22	819	269	1133	458	209	13	456	226	142	158	8763
Ophthalmia Neonatorum.																							
First visits ...	2	1	...	...	...	...	2	...	...	...	2	...	6	...	...	...	...	...	1	1	...	...	15
Re-visits ...	2	...	...	...	1	...	...	...	...	...	6	...	...	1	...	...	...	...	...	1	...	...	11
Still Births ...	3	5	4	...	1	4	9	1	5	2	4	4	11	4	4	6	2	1	2	3	1	1	77
Milk (Mothers' and Children's Order) ...	2	18	16	3	...	3	...	3	6	1	2	...	5	...	22	10	...	...	...	4	27	...	122
Puerperal Fever and Pyrexia Visits ...	1	...	...	...	1	...	...	...	...	...	...	...	33	...	...	1	...	...	...	...	1	...	37
Houses where deaths of Infants occurred ...	20	22	7	4	8	4	16	7	5	17	13	1	19	3	16	19	2	2	5	3	4	...	197
Miscellaneous Visits ...	6	5	27	7	19	11	34	...	6	24	39	2	12	13	39	28	17	1	6	95	44	1	496
Ineffective Visits ...	604	276	321	282	377	440	426	186	300	210	292	36	188	378	491	318	130	16	119	114	28	65	5597
Totals—1930	2958	1665	2321	1356	1797	1646	1465	738	1320	1954	1210	151	2462	1652	3055	1825	697	480	1251	1343	656	447	32449
1929	2974	2099	2104	1714	1659	1662	2128	2352	2260	3747	1629	1522	2380	1969	3717	2106	*	*	*	*	*	*	36022

*Appointed during year 1930. †Temporary duty only. "W.L." Left during the year.

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. A revision was made during the year in the previous arrangement whereby the Voluntary Association stood the cost of dried milk distributed at the Voluntary Centres below cost price. The Borough Council now 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.

	On Jan. 1st, 1930.	New cases during the year.	Cases discontinued.	On Dec. 31st, 1930.
Free	79	162	122	119
Half-price	23	85	66	42
Total ..	102	247	188	161

In cases where there has been a change from free milk to milk at half price it has been counted as a new case.

I am indebted to Mrs. Chambers, who is in charge of the food department of the Voluntary 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 1929 under all three headings, the increase being greatest in the amount of free milk. The increase is also shown in the figures for the Municipal Centre.

TABLE XC.

Dried Milk in Pounds.

	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... ..	127	83	1205	26	43	140
February	114	68	1012	9	44	143
March	97	86	1106	12	33	182
April	116	78	1050	8	33	168
May	108	97	1131	15	37	214
June	104	88	1008	17	51	222
July	128	106	1280	14	73	264
August	116	96	961	20	55	247
September	120	86	958	29	36	263
October... ..	185	98	1013	23	30	302
November	126	154	1172	24	28	209
December	179	158	1197	44	24	209
Totals	1520	1198	13093	241	487	2563

Assisted Milk Scheme.

Supplied to Families.	No. of Pints.	Corporation Liability.
Milk at 1½d. pt. ...	19324	£ s. d. 147 19 11
Milk Free	23306	324 17 4
	42630	472 17 3

Total Number of Families assisted—	
In receipt on Jan. 1st, 1930	102
New Cases... ..	247
	<hr/> 349

Average number of pints supplied weekly 820
This is an increase of 146 pints supplied over the figures for 1929.

Sick Nursery, Lodge Road.

This institution is for the reception of sick babies and young children up to the age of 5 years. The majority of the admittances are for the correction of dietetic errors, the re-establishment of breast feeding, and for weaning. There are nominally 14 cots for babies and 2 beds for nursing mothers, the demand on the cots, however, has been such that more often than not 15 or 16 cots are in use. Cases for admission are referred from the infant welfare centres in the majority, but on occasion babies are admitted at the request of the private medical attendant. The parents are expected to contribute towards the expenses of maintenance according to their means; assessment is made on a scale of income.

Cases are retained at the Nursery until the termination of the treatment unless surgical intervention of a major character is required or one of the infectious diseases develops, when the child is sent to the hospital of the parents' choice, or to the Borough Isolation Hospital.

The Hanovia mercury vapour lamp, the gift in 1927 of Mrs. Lewis and the mothers and helpers at the South Croydon Infant Welfare Centre, has been in constant use during the year. A new burner was purchased during the year.

Eighty-two babies and 8 mothers were admitted, as compared with 77 babies and 10 mothers in 1929. The average length of stay was 48 days as compared with 38 in 1929.

The following table gives particulars:—

No. of cases in on 1st January, 1930	...	...	...	13
No. of cases admitted during 1930	...	...	...	96
Average duration of stay	...	...	...	48 days
No. of cases discharged	...	...	...	81
(a) In good health	...	...	...	47
(b) Improved	...	...	...	28
(c) No improvement	...	...	...	6
No. of cases who died	...	...	...	15
No. of cases in at end of 1930	...	...	...	13

The chief reasons for the admission of cases were as follows:—

Alimentary disorders	...	...	12	Marasmus	...	...	5
Failure to thrive	...	...	17	Rickets	...	...	8
Re-establishment of breast feeding	...	...	10	Weaning troubles	...	...	1
Mismanagement	...	...	21	Prematurity	...	...	2
				Other reasons	...	...	11
				Total	...	...	87

The causes of the deaths were:—

Prematurity	...	...	...	3	Endocarditis	...	...	1
Marasmus	...	...	...	6	Gastritis	...	...	1
Pneumonia	...	...	...	4				

The fatal cases had been in residence during the following respective periods: Prematurity, 1 day, 2 3-7 weeks, 1 6-7 weeks; Marasmus, 4 days, 1 day, 6 1-7 weeks, 2 2-7 weeks, 2 2-7 weeks, 3 6-7 weeks; Pneumonia, 15 5-7 weeks, 4 3-7 weeks, 3 2-7 weeks, 13 3-7 weeks; Endocarditis, 2 weeks; Gastritis, 3 5-7 weeks.

Four cases were discharged to other hospitals on account of illness outside the scope of the nursery. The diagnosis and destinations of these cases were: two cases of congenital pyloric stenosis and one case of acute gastritis to Great Ormond Street Hospital; one case of cystic kidney to Croydon General Hospital.

Three cases were discharged on account of infectious diseases to the Borough Hospital, two with whooping-cough, and one with measles.

This small institution is doing valuable work, its usefulness is becoming more widely known and its results are encouraging. The repeatedly expressed thanks of the parents. The accommodation, however, is insufficient to meet all the need.

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 Centre. A few cases are also referred from the Orthopaedic Clinic.

The following Table summarises the work done, and indicates the type of case referred.

Total number of female patients ...	...	47
„ „ „ male patients ...	...	62
Total ...		109

Conditions for which referred,	Males.	Females.	Total.
General myopathy ...	1		1
Weak legs ...	21	30	51
Bow legs ...	21	10	31
Knock-knees ...	13	5	18
Flat-feet ...	1	1	2
Hemiplegia ...	1	1	2
Constipation ...	1	...	1
General debility ...	2	...	2
Erb's paralysis ...	1	...	1
Totals ...	62	47	109

Total number of sessions ...	248
„ „ „ attendances ...	1,654
Average attendance per session ..	7
Cases still under treatment at end of 1930	32

Dental Treatment of Maternity and Child Welfare Patients, 1930.

I am indebted to Mr. W. G. Senior, L.D.S., the senior dental surgeon, for the particulars which follow.

Expectant and Nursing Mothers and Young Children.

TABLE XCI.

	Expectant	Nursing	Young Children	Total.	
				1930	1929
Number Examined	184	257	539	980	688
Referred for treatment .. .	181	245	358	784	566
Treated	175	145	329	649	504
Attendances	315	444	475	1234	1263
Fillings	52	84	202	338	315
Extractions	375	468	428	1271	1289
"Gas" cases	82	88	117	287	319
Local anæsthesia	37	96	10	143	168
Scalings	15	27	...	42	35
Dressings	84	190	172	446	337
Sessions at centres .. .. .	...	...	...	25	6
" treatment .. .. .	...	...	...	93	94
Dentures supplied .. .. .	...	...	...	85	93

The improvement in the nature of the treatment required, noted in last year's report, has continued, and it will be seen that fillings have increased and extractions decreased.

The hope that more time would be available for visits to centres has been realised, this year each centre has been visited twice. Much of the time spent at centres is utilised in advising the mothers of young babies on such subjects as teething, habits, and the future care of the teeth and should bear fruit in the next few years. Where possible short talks are given to groups of mothers, in addition each mother is given a leaflet setting out rules for the prevention of decay. It is to be greatly regretted that sweet biscuits are still supplied at centres; apart from the fact that it encourages the mothers to give children "between meal tit-bits," it is definitely bad for the teeth of toddlers, in that a film of sugary food is left clinging to the teeth contrary not only to the advice contained in our leaflets but to the advice often being given to the mother at the moment the child is eating the biscuit.

Expectant Mothers.

TABLE XCII.

Month of pregnancy at which first examined :		2	3	4	5	6	7	8
% of cases seen	1928 ...	13.8	17.3	18.0	19.4	15.9	6.9	8.7
%	" " 1929 ...	10.2	14.1	17.3	16.5	18.8	9.4	13.3
%	" " 1930 ...	3.4	15.1	18.6	17.9	17.5	15.1	12.4

The above table illustrates the difficulty of commencing treatment sufficiently early to ensure full benefit being received before birth of the child.

Nursing Mothers.

Age of baby when mother was first seen :		Under 1 month.	1-3 months.	4-6 months.	6-9 months.	Over 9 months.
% mothers seen	1928 ...	5.7	49.4	30.4	10.4	4.1
%	" " 1929 ...	5.1	31.3	57.9	19.0	6.7
%	" " 1930 ...	3.6	34.5	34.5	23.2	4.2

The centres at which patients were examined or which they were referred from are given in the following list:—

Ante-natal	143	South Norwood	123
Addiscombe	62	St. Oswald's	18
Broad Green	144	Thornton Heath (1)	16
East (Shirley)	19	" (2)	68
Lighthouse Mission	4	Waddon (1)	49
Norbury	24	" (2)	34
Upper Norwood (1)	18	Whitehorse	24
" (2)	39	West Thornton	43
South	32	Woodside	49
The Retreat		14	
Milton House		2	

The sum of £30 15s. 6d. was received in payment for attendances made by mothers and children at Lodge Road and Selhurst clinics.

The Pre-School Child.

Causes of death in children from 1 to 5 years of age.

	1929.	1930.
Pneumonia	29	11
Measles	1	11
Respiratory Disease	3	1
Infectious Diseases (not Tubercular)	18	4
Tuberculosis (all forms)	13	6
All Other Causes	18	15
	82	48

In the infectious diseases group the causes of death were diphtheria, 3; whooping cough, 1.

TABLE XCIII.

Year.	Popula- tion.	Births.	Deaths under 1 year.	% of total Deaths	Deaths 1—5 years.	% of Total Deaths.	Deaths over 5 years.	% of Total Deaths.	Total Deaths
1924	196000	3456	195	8.6	77	3.4	2008	88.0	2280
1925	199300	3406	187	8.6	80	3.7	1902	87.7	2169
1926	205900	3477	211	9.3	81	3.6	1977	87.1	2269
1927	211700	3174	178	7.2	84	3.4	2192	89.4	2452
1928	214800	3374	178	7.6	96	3.9	2083	88.5	2354
1929	216900	3399	221	7.9	87	3.1	2484	89.0	2792
1930	222300	3514	171	7.3	48	2.0	2118	90.6	2337

As the result of the medical inspection of the entrant group of school children it is found that a considerable number of children develop maladies between the time of cessation of attendance at Welfare Centres and the time of entering school. Enlarged tonsils and adenoids, and chronic ear discharge are among the commonest ailments discovered. A considerable proportion of the notifiable diseases attack children between these ages. Table VII. (Vital Statistics Section) emphasises still more the necessity for careful supervision during this period of life. Fourteen (63%) of the deaths from measles and all the deaths from whooping cough occurred in children under 5 years of age.

'The Babies' Help Committee of the Croydon Mothers and Infants' Welfare Association.

I am indebted to Mrs. W. Philpott for the particulars presented herewith. During 1930, the Committee has considered 23 cases. One girl was referred to the Queen's Road Homes, one obtained a Barnardo's grant and thus required no more help from the Committee, and one decided she did not need help. Twenty were helped by grants given at the Welfare Centres and one mother was sent away for a convalescence holiday. All the babies have made progress during the year and are taken regularly to the Welfare Centres. One baby with double club foot is under the Orthopædic Clinic.

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 Miss E. Hall, the Convalescence Secretary, for the data given.

Children sent away with their mothers to					
Cottages or Homes	...	...	...	...	58
Children sent away alone to Convalescent					
Homes	...	...	...	...	22

A grant of £300 was made by the Council to the Association for this work in 1930. This has been increased to £350 for 1931. I am indebted to Mrs. W. Horn for the following particulars of the cost entailed by the Association. The year is the financial year.

	Children under		Total No. of weeks.	Cost.			Cost of other forms of convalescence.		
	5 sent to Homes.			£	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 (to end of Nov.)		17	77	87	19	0	216	13	9

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 late Mrs. C. T. Neve for the subjoined particulars. Number of beds in home, 14. Six beds are reserved for mothers and babies and 4 are reserved for expectant mothers. Total number of cases admitted in 1930, 118.

- (a) Expectant mothers ... 17
- (b) Mothers and babies ... 14

Children Act, 1908—Part I.

As from April 1st, 1930, the date of coming into operation of the Local Government Act, this Act has been administered by the Health Department. The work has been delegated to the Health Visitors who are made responsible to the M.O.H. for all foster children and foster mothers in their respective districts. As many of the children were known to the Health Visitors before April, and have been in the habit of attending the Centres, the amalgamation of these duties with the routine child welfare work has resulted in simplification of supervision.

The tables below give figures for 1930, as from April 1st.

CHILDREN ACT, 1908—PART I.**Summary.****FOSTER CHILDREN.**

No. as at April 1st, 1930	Notice of Reception of Children	Notice of Removal to—					Children Adopted	Died	Children reaching age of 7	No. as at December 31st, 1930
		Parent	Adoption Society	Another area with Foster Parent	Another Foster Mother	Public Institution				
186	154	70	20	5	36	8	4	2	6	189

FOSTER MOTHERS.

No. as at April 1st, 1930	Applications for Registration	Removals		Registration cancelled for other reasons	No. as at December 31st, 1930
		With Child	Without Child		
124	40	6	...	1	157

During the period April—December the Health Visitors paid 1,925 visits under Part 1 of the Children Act, 1908.

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.

Such a scheme was drawn up and the sums specified were based on the (i) Exchequer grants paid for National services to the blind in respect of the standard year and which are now discontinued (ii) the amounts of contributions made by the Council to such associations in the standard year and (iii) upon the developments or alterations of the work which may have been made since the standard year.

Under this scheme the Council will pay grants to twelve societies, among which by far the largest grant is made to the Croydon Voluntary Association for the Blind.

The scheme came into force on April 1st, 1930, and will remain in force until 31st March, 1933.

The detailed inspection formerly exercised by officers of the Ministry of Health ceased on March 31st, 1930, and the Council have now to satisfy themselves as to the efficiency of the services

provided by the associations to whose funds they contribute. Under the Grant Regulations of 1919, which also ceased to operate on March 31st, 1930, home teachers, employees of a workshop, home workers and inmates of homes, subject to grant, were visited and interviewed by an officer of the Ministry of Health. This duty is now carried out by the Medical Officer of Health, who reports from time to time to the Blind Persons Act Committee.

Close touch has been maintained with the Secretary of 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. The Blind Persons' Register is in process of complete revision.

Mr. J. S. Bookless, the honorary oculist to the Association, who is also the part-time specialist for the School Medical Service, is also acting as medical referee for the Corporation.

I am indebted to the Secretary of the Voluntary Association for the figures below.

Number of blind on Register ...	...	...	...	361
Number of blind who benefit from instruction in Braille or Moon Type (including those who already read) ...	...	...	...	62
Number of blind who benefit from part-time instruction ...	...	...	...	34
Number in remunerative handicrafts—				
(a) Home workers ...	...	...	...	24
(b) In workshops ...	...	...	...	5
Home Teacher ...	...	...	...	1

The Health Visitors since April 1st paid 43 visits to blind persons.

SECTION IX.—MISCELLANEOUS.

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 6, Morland Road, for the reception of 20 low grade mentally deficient boys under the age of 16 years.

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 XCIV.

Number of known Mentally Defective Persons in the Borough—

I. *Statutory Cases—*

	1929.	1930.
Aged 0—5 years	8	7
„ 5—16 „	50	63
Over 16 years	309	322
Total ...	367	392

II. *Education Cases—*

Aged 7—16 years	115	119
Combined Total ...	482	511

Compared with 1929, the Statutory cases show an increase of 25 and the Education cases an increase of four.

The Statutory cases are distributed as follows :—

	1929.	1930.
In Certified Institutions	94	124
In Places of Safety or Approved Home	6	3
On Leave from Institutions	10	4
Under Statutory Supervision at Home	202	213
Under Guardianship	30	36
In Mental Hospitals	15	12
In Poor Law Institutions	10	—

An unsatisfactory feature of the above figures is the large number of cases under statutory supervision and the increasing number having to be placed under guardianship, brought about by the great difficulty in obtaining institutional accommodation. This is made more acute each year as more and more institutions which formerly took in a limited number of cases from outside authorities, are reserving all their accommodation for their own cases. The task of supervising the guardianship cases adequately is becoming more and more difficult owing to their increase.

The Education cases were distributed as follows :—

	1929.	1930.
In Certified Residential Schools	6	6
In Certified Day Schools	80	81
At Private Schools	20	6
At Council Schools		14
At no school, resident at home	8	11
In other Institutions	1	1

Three school children were certified as not further educable and were drafted into the Occupation Centre. Three boys and one girl have been released from school to take up work during the year.

In connection with mentally deficient cases, the Medical Officers made examinations and paid visits to the number of 92 for Statutory cases and 187 for Education cases, a total of 279. The mental deficiency visitor paid 1,615 visits to Statutory cases and 656 to Education cases, a total of 2,271.

During the year 47 names have been added to the Statutory list, 11 being new cases; 12 were referred on from the Education Authority for supervision on leaving the Special School on attain-

ing the age of 16; 9 were transferred as ineducable or not further educable, and 15 taken over from Guardians under the Local Government Act, 1929. Two boys and 3 girls died during the year; three of these occurred in institutions and two in their own homes. Five left the Borough, and 12 were discharged from supervision.

Four cases chargeable to other Local Authorities are under supervision in the Borough.

There are 6 children under observation, ages from $1\frac{1}{2}$ to 6 years.

Thirty-seven Statutory cases were dealt with as follows:—

Sent to Certified Institutions	...	...	13
Placed under Guardianship	...	...	7
Sent to Places of Safety	...	...	2
Allowed home on long leave	...	...	2
Discharged from Order	...	...	2
Returned to Institutions	...	...	5
Transferred from one Institution to another			6

In addition to the above the 15 cases transferred from the Guardians have been placed under Order in institutions.

The number of cases sent to certified institutions shows a decrease of 8. The difficulty of obtaining places is the explanation of the fall in this figure.

Guardianship Cases.

There are 36 cases under Statutory guardianship; 26 of these are under the care of relatives, and 10 are with guardians who are not relations. Seven males and two females are at work. Six cases are out of the Borough: three under the Brighton Guardianship Society, one with a guardian in Essex, another in Maidstone and one in Devon. Six boys and three girls attend the Occupation Centre at Grangewood.

Cases on Leave from Institution.

Four boys are on leave, and of these 3 are in regular employment.

St. Christopher's Special School.

The Special School at Grangewood is the first pivot around which work amongst mentally defective children revolves. All

certifiable children with the exception of the ineducable are drafted there, not only to their own advantage, but to the relief of ordinary schools where their presence is a worry to the teachers and a handicap to the progress of normal children. Their progress at St. Christopher's is closely watched and yearly reports from the scholastic, the physical, and the mental aspects are made. Thus when they reach the age of 16 these children are well known to those whose duty it is to supervise them. Their educational attainments, their vocational capabilities, their reactions to school and home environment, and their probable reaction to the experiences of after-school life have been estimated, and in their last term at school a decision is made regarding the best method of continuing this supervision. Under the Mental Deficiency Act children by virtue of inherent incapability of social adaptation, perhaps aggravated by faulty home environment, may be referred for admission to an Institution or placed under Guardianship. Those who may with safety be so dealt with are put under no restriction except the supervision of the Mental Deficiency Authority which helps in placing such children in suitable occupations and from time to time advises the parents in their difficulties. In the absence of such a school, not only would control and supervision be difficult during school life, but the advantage of being able to deal with cases statutorily at the age of 16 would be lost and the children would tend to drift.

Mr. Carter, the Head Teacher of the School, continues to show much initiative in his work for the children, with very satisfactory results. Although the relief from unfair competition in the ordinary elementary school plays a large part in the happiness of these children, the personality of the staff is of the utmost importance, and at St. Christopher's is reflected in the obvious air of contentment amongst the scholars.

The number of names on the School register at the end of the year was 81.

Town Hall Clinic for Mentally Defective and Backward Children.

84 children were examined during 1930. The classifications arrived at, together with the recommendations made, are summarised as under:—

I. (a) Certified as Mentally Defective	...	...	...	...	42
(b) Confirmed as Mentally Defective	...	...	...	...	11
					<hr/>
					53

Recommendations—

(a) Recommended for Special Day School	29
(b) Recommended for Residential Schools... ..	2
(c) Referred to Occupation Centre	5
(d) Supervision at home <i>pro. tem.</i>	6
(e) Examinations <i>re</i> Residential Schools or convalescent holidays	11
	—53
II. Found to be dull and backward	18
	—
(a) Referred to a Special Class	14
(b) To have special coaching at home	2
(c) Further trial in ordinary class	2
	—48
III. Found to be Physically Defective	5
	—
(a) Recommended for P.D. School	4
(b) Referred to Hospital	1
	—5
IV. Considered to be of normal intelligence and referred to ordinary school	—
V. Referred for re-examination	8
	—
(a) To attend ordinary school till 7	3
(b) Observation at home <i>pro. tem.</i>	3
(c) To have hospital treatment	2
	—8
	—
	84
	—
VI. Mental and physical examinations at St. Christopher's School ...	187

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. Miss Stupart, the organiser, has continued during the year the new features introduced in 1929 with gratifying results. The Sale of Work done by the pupils of the Centre revealed an encouraging standard of attainment considering the handicaps under which these unfortunate children labour. In spite of the general low grade of intelligence, the children respond to and appreciate elevating influences. At no time so much as during the mid-day meal taken at the Centre is this response so noticeable to onlookers. Their behaviour is better than that sometimes exhibited by normal children. In addition there is a tone of happiness about the Centre which impresses visitors with the fact that the work is enjoyed by the children. From the parents' point of view the Centre affords a relief with the knowledge that their children are in capable hands, and their appreciation is often expressed.

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 occupying the floor above. 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 staff consists of a supervisor and three assistants; the third assistant commenced her duties in November. 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, ravelling, 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 Centre had made £9 worth of goods by the time of the sale in November. The proceeds of the sale amounted to £3 in addition to a number of orders. The children gave an exhibition of singing and rhythmic games and dances.

The Christmas Party was held as usual, tea being provided together with presents off the Christmas tree for 40 children, unfortunately the inclement weather reduced the numbers present.

<i>Details.</i>	<i>Full Time.</i>	<i>Part Time.</i>
No. on register January 1st, 1930 ...	29	11
No. of pupils who left during year...	9	2
No. of pupils admitted during year...	14	3
No. of pupils on register January 1st, 1931...	34	12
Total attendances ...	4405	773
Average morning attendance 21.5 (whole-time class)		
Average afternoon attendance senior girls' class ...		5.25
" " " " boys' " ...		2.0
Sessions held ...	207	

The highest whole time day attendance has been 43. No epidemic has occurred among the children during the year.

The attendance of the Senior Girls' Class and of the Senior Boys' Class has dropped for the satisfactory reason that pupils have obtained employment of some kind. Should this employment cease it is open to the parents to send them back again to the school.

Dental Treatment of Mentally Deficient Patients.

Mr. Senior, L.D.S., carried out the following work on patients coming within the scope of the Committee.

<i>Mental Deficiency Patients.</i>				<i>Occupation</i>			
				<i>Centre.</i>	<i>Adults.</i>	<i>Total.</i>	<i>1929.</i>
Number examined	...	...		15	3	18	23
Referred treatment	...	...		11	3	14	13
Treated	...	...	...	7	3	10	7
Fillings	...	...	...	3	0	3	3
Extractions	...	...	...	18	16	34	10
"Gas" cases	...	...	...	4	3	7	1
Attendances	...	...	...	9	5	14	0

A large proportion of the patients exhibited swollen and spongy gums. To meet the difficulty of the patients using a brush at home, the co-operation of the supervisor was enlisted in teaching the use of brushes on arrival at school and after the mid-day meal. The chief difficulty to be overcome being the lack of accommodation for rinsing purposes.

The reduction in the number of occupation centre patients referred for treatment is due to previous treatment in 1929 and 1928.

Morland Road Home.

Frequent visits were paid to the home, and the teeth of all the children were examined on repeated occasions. During the year there were five extractions and two administrations of nitrous oxide. Treatment of gum conditions was required for four children and proved a difficult task since the patients were able to render little or no assistance, what success was achieved was due to the constant care exercised by the nursing staff.

ORTHOPÆDIC DEPARTMENT.

Orthopædic cases, referred from the School, Maternity and Child Welfare and Tuberculosis Departments are seen and treated at the Croydon General Hospital by Mr. A. Todd, the orthopædic surgeon attached to the Hospital, who holds a session every Thursday. The arrangement is based financially on payment per attendance of patients. Mr. Todd is also the consulting orthopædic surgeon to the Mayday Road Hospital under the Public Assistance Committee. In view of the rearrangements and adjustments in

local government, it might be advisable for the orthopædic work under the Public Health and School Authorities to be amalgamated with similar work carried on by the Public Assistance Committee, beds could be allocated for Mr. Todd's use at the Mayday Rotad Hospital and a complete, self-contained orthopædic unit built up to deal with all cases coming under the Local Authority. The Croydon General Hospital would then undertake such orthopædic work as was not properly included in the above category, *e.g.*, accident cases, paying patients, etc.

In addition to the Clinic at the General Hospital, concerning which the tables below relate to only, 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 XCV.

Summary of Cases Attending the Orthopædic Clinic.

Jan. 1st, 1930.			New Cases, 1930.			Cases Discharged, 1930.			Cases on books, Dec. 31st, 1930.		
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.
95	241	51	112	204	23	84	171	32	123*	274	42
387			339			287			439		

*To be transferred from M. and C.W. to S.M.S. on 1-1-1931.

The expansion of the Clinic is clearly shown by these figures. On January 1st, 1928, there were 229 cases on the books, by January 1st, 1930, this figure had risen to 387 and on January 1st, 1931, the figure was 439. Two hundred and eighty seven cases were discharged as compared with 211 in 1929, and there were 339 new cases compared with 252 in the latter year.

The primary aim of the Orthopædic Scheme is preventive. Many physical defects are easily remedied if taken early and treated skilfully. Unfortunately much of the work is still largely compensatory and ameliorative. This is due to parents and others not appreciating the true significance of an apparently minor deviation from the normal mechanical efficiency.

Tuberculosis is one of the great crippling diseases of childhood. The prolonged efforts to eradicate tubercle bacilli from the milk supply are, however, having effect. 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. 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 XCVI.

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	30	94	5	20	...	...	35	114
Scoliosis	72	161	1	1	...	...	73	162
Pes Cavus	5	10	1	2	...	...	6	12
Pes Planus	98	205	10	17	...	...	108	222
Talipes*	52	123	46	111	...	...	98	234
Genu Valgum	49	84	42	95	...	...	91	179
Obstetrical Paralysis	18	35	5	13	...	...	23	48
Tubercular Joint Disease ...	32	51	6	10	36	62	74	123
Injuries... ..	29	54	9	23	...	...	38	77
Rickets... ..	9	17	42	92	...	...	51	109
Wry Neck	9	17	11	18	...	...	20	35
Spastic Paraplegia	9	25	1	5	...	...	10	30
Other Deformities	65	129	34	50	...	...	99	179
	477	1005	213	457	36	62	726	1524

*Includes cases of ankle valgus, spasmodic valgus, and other predisposing causes of flat feet.

Summarised, the Table shows 477 school children attended and made 1,005 attendances; 213 babies made 457 attendances; and 36 adult tuberculosis made 62 attendances, a total of 726 cases, making 1,524 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. The figures show a reduction, due to an arrangement come to whereby a number of cases, who formerly would have been referred for exercises, etc., at the Croydon General Hospital, are now referred to the Authority's Clinics at St. Andrew's Hall or Lodge Road, the necessary treatment advised by the orthopædic surgeon being done there by the whole-time masseuses. Cases so referred are shown in Table XCVII.

TABLE XCVII.

Cases Referred from Orthopædic Clinic for Remedial Treatment 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	235	1	5	112	...	...	...	...	11	347	1
Scoliosis... ..	22	619	...	...	...	...	...	...	...	22	619	...
Pes Cavus ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Pes Planus	17	185	1	1	5	...	...	...	...	18	190	1
Talipes	6	102	...	6	170	1	...	...	...	12	272	1
Genu Valgum	7	137	...	7	127	2	...	...	...	14	264	2
Obstetrical Paralysis ...	2	81	...	...	...	...	...	...	...	2	81	...
Tuberc. Joint Disease ...	...	...	...	...	...	...	21	122	19	21	122	19
Injuries	6	87	4	3	27	2	...	...	...	9	114	6
Rickets	2	13	1	10	71	7	...	...	...	12	84	8
Wry Neck	6	68	...	1	3	...	...	...	...	7	71	...
Spastic Paraplegia ...	1	7	...	...	...	...	...	...	...	1	7	...
Other Deformities ...	14	118	9	4	11	2	...	...	...	18	129	11
	89	1652	16	37	526	14	21	122	19	147	2300	49

TABLE XCVIII.

Cases Sent to Residential Institutions.

Name of Institution	School Cases			M.C.W. Cases			Tuberculosis Cases			Total		
	No. in on Jan. 1st, 1930.	Admitted	Discharged	No. in on Jan. 1st, 1930.	Admitted	Discharged	No. in on Jan. 1st, 1930.	Admitted	Discharged	No. in on Jan. 1st, 1930.	Admitted	Discharged
Purford	2	1	2	2	2	2	9	7	4	13	10	8
Croydon General ...	1	12	12	...	7	6	...	4	2	1	23	20
Wingfield ... ..	...	...	...	...	...	...	1	1	...	1	1	...
	3	13	14	2	9	8	10	12	6	15	34	28

From this Table it is seen the number of cases in residential institutions was 15 at the beginning of the year and 21 at the end. Two School cases, three Maternity and Child Welfare cases, and sixteen Tuberculosis cases were in residential institutions at the end of 1930. Tuberculosis of joints is a difficult condition to eradicate, requiring time, patience and prolonged skilled attention. Institutional treatment is naturally the most expensive part of the scheme, but it is also an essential part if permanently satisfactory results are to be obtained.

The following Table shows the conditions for which patients were admitted to Hospitals and the results of treatment.

TABLE XCIX.

Condition.	In on Jan. 1st, 1930.	Admitted.	Discharged				In on Jan. 1st, 1931.
			Cured.	Much Improved.	Improved.	Died.	
Infantile Paralysis ...	1	1	...	...	1	...	1
Scoliosis ... ..	...	1	...	1	...	...	...
Tuberc. Joint Disease ..	10	12	4	1	1	...	16
Pathological Dislocated Hip	...	1	...	...	...	...	1
Injuries	1	2	1	1	...	...	1
Rickets	1	4	5	...	...	...	...
Wry Neck ... ..	...	5	4	...	...	...	1
Spastic Paraplegia ...	1	2	...	...	3	...	...
Other Deformities ...	...	6	5	...	1	...	...
	15	34	19	3	6	...	21

The percentage of cures for the whole series of cases was 68%, whilst 10.7% were much improved.

Table to show number of cases for whom appliances were ordered and how the expenses thereof were met:—

Total cases on the books of the Clinic Jan. 1st, 1931 ...	439
Total number actually in receipt of massage, electrical, Swedish remedial on Jan. 1st, 1931	28
New splints and appliances supplied	71
Repair of existing appliances	28
Part cost met by parents	27%

Full cost met by parents	41%
Full cost met by Local Authority	32%
Number of cases in which Hospital contributions were authorised	21

Under the Tuberculosis after-care scheme, 62 families were considered by the Tuberculosis After Care Committee. The total amount expended in assisting in various ways was £276 6s. 3d.

Mrs. D. B. Connor, the organiser of this department, attended 49 Clinic sessions, interviewed 1,860 people, made 251 enquiries into financial conditions of families, and sent out 1,017 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 being devoted to the children at St. Giles' School which she attends each morning.

During 1930, 109 children attended this Clinic and made 1,654 attendances; 62 were boys and 47 girls. The conditions for which they were referred were: General Myopathy, 1 boy; Weak Legs, 21 boys, 30 girls; Bow Legs, 21 boys, 10 girls; Knock Knees, 13 boys, 5 girls; Flat Feet, 1 boy, 1 girl; Hemiplegia, 1 boy, 1 girl; Constipation, 1 boy; General Debility, 2 boys; Erbs Paralysis, 1 boy. At the end of 1930, 32 cases were still attending.

ULTRA-VIOLET LIGHT CLINIC.

This Clinic is held at the Croydon General Hospital on two days a week under the superintendence of Dr. F. Hernaman-Johnson. The majority of the cases referred were from the Tuberculosis Dispensary (20). The M. and C.W. Department referred 16 cases and the School Medical 13 children.

The following Table gives a summary of the attendances made:—

TABLE C.

Department.	No. of Cases.	Aggregate duration of treatment in weeks.	Average per case.	Aggregate No. of Sessions Attended.	Average per Case.	No. of Patients discharged.	No. continuing treatment end of 1930.
School Medical ...	13	149	11·8	370	28·5	11	2
M. & C.W. ...	16	174	10·6	351	21·9	13	3
Tuberculosis ...	20	362	18·2	774	38·7	12	8
	49	685	...	1495	...	36	13

The Table under gives the complaints treated and the results achieved in completed cases. Four cases ceased attending before completion of treatment and one case left the district.

TABLE CI.

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	1	2	...	...	...	1	...	1	5
Malnutrition ... ..	...	...	...	...	...	1	...	...	1
Corneal Ulcers...	...	1	...	...	...	...	...	...	1
Asthma ... ..	...	...	...	2	...	...	...	...	2
Bronchitis ... ..	...	1	...	...	1	1	...	...	3
Glands	1	...	...	...	...	...	...	1	2
Rickets ... ..	...	...	...	...	2	...	...	3	5
Miscellaneous	3	...	...	...	...	...	...	2	5
	5	4	...	2	3	3	...	7	24

Two school children suffering from debility were still attending the Clinic at the end of the year, and 3 M. and C.W. cases, namely, one suffering from debility, one from malnutrition and one from rickets.

TUBERCULOSIS CASES, 1930.

	Much Improved	Improvement	Slight Improvement	I.S.Q.	Still attending at end of 1930	Total
Lupus ... ..	...	1	...	1	2	4
? T.B. ... ..	...	1	...	...	...	1
Adenitis ... ..	...	2	...	1	2	5
Anaemia ... ..	...	...	...	...	1	1
Latent T.B.	1	...	...	...	...	1
Sinosis... ..	...	1	...	1	...	2
Glands ... ..	...	...	...	2	2	4
T.B. Kidney and Bladder ...	...	...	...	1	1	2
	1	5	...	6	8	20

Of the School cases, 4 were boys and 9 girls; the maternity and child welfare cases, 7 boys and 9 girls, and the Tuberculosis patients, 8 male and 12 female.

There has been a tendency in some quarters 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; 25% were much improved, 30.6% were improved, and 41.7% 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 35 of the cases; the latter alone in 3 cases, and both lamps in 11 cases.

VETERINARY INSPECTION.

I am indebted to Mr. P. Thrall for the following report:—

There are only 8 cow-keepers in the Borough and these are located practically entirely in the Shirley and Addington areas. Owing to the rapid and widespread encroachment of housing schemes and estate development the agricultural and dairying interests within the Borough are speedily declining.

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

During 1930, all the farms were visited for this purpose at least 4 times. From one farm Tubercular milk was found from the mixed milk of the herd, and an exhaustive enquiry was necessary before the offending cows could be discovered. Eventually two were found, and destroyed. The Sanitary Inspectorial staff assisted the veterinary surgeon in this investigation; in which the farmer cordially co-operated.

A total of 978 cows were inspected during the year. Of these 795 were in milk and 171 were dry. Twelve cows were found with unhealthy quarters and steps taken to separate their milk from the bulk supply until the quarter had become healthy. Two cows were found, by means of bacteriological and inoculation tests, to be suffering from Tuberculosis and these were slaughtered.

VETERINARY INSPECTION.

As reported to Mr. P. Thrøle for the following reports:—
There are only 8 cow-keepers in the Borough and these are all practically entirely in the Shillay and Aghishay areas. The cow-keepers are all experienced and well-versed in the management of their cattle and are all very keen and interested in the health of their animals. The cow-keepers are all very keen and interested in the health of their animals. The cow-keepers are all very keen and interested in the health of their animals.

MEMBERS OF THE EDUCATION COMMITTEE.

 NOVEMBER, 1929-1930.

The Mayor (Mr. Alderman T. Arthur Lewis, J.P.).
 Mr. Alderman W. Peet, F.C.A. (Chairman).
 Capt. J. Stevenson, J.P. (Vice-Chairman).

Alderman T. Betteridge, J.P.	Councillor Major F. W. Rees.
Alderman H. J. Morland, M.A.	Councillor Mrs. B. J. Roberts.
Alderman A. Peters, C.B.E., J.P.	Councillor Dr. A. Sandison, B.A.
Alderman T. W. Wood Roberts, J.P.	Councillor A. J. Stubbs.
Alderman W. West.	W. A. Clarke, Esq.
Councillor E. E. L. Arkell.	W. Field, Esq., M.A.
Councillor E. S. Baker.	Mrs. M. A. Hinks.
Councillor A. J. Carpenter.	N. F. Roberts, Esq., F.G.S., F.R.A.I.
Councillor Rev. A. F. G. Fletcher.	Mrs. M. M. Wood Roberts.
Councillor W. J. Gibbins.	G. Robinson, Esq.
Councillor A. H. Harding.	Rev. G. M. Scott, M.A.
Councillor H. P. Hawkes.	P. Squire, Esq.
Councillor R. G. P. Howie, M.A.	The Lord Bishop of Croydon.
Councillor W. H. Jarvis.	
Councillor J. Marshall.	

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:

Patrick J. O'Connell, M.D., B.S., D.P.H., B.Hy.

F. W. Gavin, M.D., Ch.B., D.P.H.

Olive B. Falk, M.B., B.S.

Elizabeth Wheatley, M.B., Ch.B., D.P.H.

Specialist Part-Time Medical Officers:

J. S. Bookless, F.R.C.S. (Ophthalmic Surgeon).

J. D. McLaggan, M.A., M.B., Ch.B., F.R.C.S. (Ionization Clinic).

Rota of 8 local medical practitioners for surgical treatment of tonsils and adenoids.

Senior Dental Surgeon: W. G. Senior, 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 Jessie Roe (part-time).

Mental Deficiency Visitor: Miss E. A. McDougall (part-time).

Orthopaedic 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. & Sat. 9 a.m.
MINOR AILMENTS	Treatment of Minor Diseases of Skin, etc.	Lodge Road. Selhurst Road.	Daily 9 a.m. Mon., Wed., & Thurs., 9 a.m.
OPHTHALMIC.	Treatment of visual defects.	Lodge Road.	Tues. & Fri., 9 a.m.
DENTAL.	Dental Treatment.	Lodge Road and Selhurst Road.	Daily 9 a.m. & 2 p.m.
IONIZATION.	Treatment of chronic ear discharge.	Lodge Road.	Tues., 2 p.m.
DEFECTIVE CHILDREN	Examination.	Town Hall.	As required.
X-RAY.	Treatment of Ring worm.	Dr. Greig's Surgery.	By appointment.
ORTHOPAEDIC.	Treatment of crippling defects.	General Hospital	Thurs., 10 a.m.
THROAT.	Operative treatment of enlarged tonsils and adenoids.	do.	Mon. & Wed. 2 p.m.
SYNTHETIC SUNLIGHT.	Treatment of Rickets etc.	do.	Tues. & Thurs. 2 p.m.
REMEDIAL EXERCISES.	Treatment of deformities.	St. Andrew's Hall, Old Town.	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. & Sat., a.m.

County Borough of Croydon.

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

For the Year ending December 31st, 1930.

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

LADIES AND GENTLEMEN,

I have the honour to present to you my report on the work carried out by the School Medical Service in 1930.

Certain expansions of the work have taken place during the year. A branch Clinic was opened in Selhurst Road to deal with cases of Minor Ailments and Dental defects in children attending schools in that area. In order that the dental scheme could be more complete, and to staff the new Clinic a third dental surgeon commenced his duties in March. This addition to the professional staff has enabled an expansion of dental inspection and treatment, and the five year old group, and the 14 year old group are now included for this purpose. An increase of 5,216 children inspected and 1,722 treated shows that the appointment was justified. The total number of dental sessions held during the year increased from 839 in 1929 to 1,201 in the year under review. It is hoped the larger proportion of school children now being reached will result in a gradual raising of the standard of the teeth, though a certain responsibility also rests on the parents both from the preventive and the remedial aspects.

Another small, but useful expansion was the establishment of a class for Myopic children. This is held in a room at the Thornton Heath Library, and is conducted by a specially qualified teacher. The children are examined each term by one of the school medical officers, and when the occasion arises, by the part-time specialist ophthalmic surgeon, on whose recommendation the children are admitted.

The average attendance of scholars in the Elementary Schools throughout the year was 90 per cent., a small improvement on 1929, although measles was very prevalent in certain schools during the first half of the year, and the number of individual children excluded for various reasons greater. On the whole, however, the year was a satisfactory one from the aspect of the general level of the children's health.

Routine Medical Inspection of the usual groups was proceeded with as in former years. The number of children showing a greater or lesser degree of uncleanness rose slightly, but unfortunately the figures are kept up by members of certain families who, year after year, contribute to the unsatisfactory findings, and who, although there are exceptions, do not improve in spite of constant supervision and admonition. New tables have been introduced when dealing with the important, but difficult subject of child nutrition. Relatively slight illnesses and periods of malnutrition exact a lasting effect on the growing skeleton demonstrable by suitable X-Ray examinations. Owing to the lack of definite standards precise comparisons are not possible; but on a broad basis, children from the poorer families are on a lower level than those more fortunately circumstanced. The scheme, inaugurated by the National Milk Publicity Council, whereby a child may obtain a third of a pint of milk in sealed bottles for a penny, at the school, has now spread to practically all the schools. Nearly 9,000 bottles of milk were supplied. When the proved beneficial influence of wholesome milk on child growth is considered, the increased consumption must have had some effect on the nutrition of those who partook of it. New tables have also been introduced in the section dealing with vision. These were compiled with a view to ascertain if there was an excessive amount of defective eyesight in any particular schools. The results so far have not shown any localised undue incidence, though, as a group, Secondary School children have poorer sight than Elementary School children.

The chief causes necessitating the exclusion of children from school on medical grounds, were the common infectious diseases, and of these measles and mumps were the worst offenders. Impetigo, and verminous conditions also caused trouble. Impetigo is a common disease of childhood, and although not as a rule bringing about serious bodily ill-health, is sometimes slow to cure and thereby necessitates a considerable degree of absenteeism. Verminous conditions are essentially a reflection of mothercraft and home care, and the relative importance they assume is unfortunate. As mentioned above they relate to a comparatively small group of families.

Schick immunization has not been practised among Elementary School children, though the protection it affords against outbreaks of Diphtheria in institutions is increasingly recognised, as the section in the body of the report indicates. A special report on this matter was made to the Elementary Education Committee during the year.

Although there was a considerable amount of sickness among the School Nurses the number of visits they have paid in pursuance of their duties shows a noticeable increase. One additional nurse was appointed during the year in connection with the Selhurst Road Clinic. As her duties in the Clinic only occupy half the day, this nurse has also been able to work a small district.

In practically all the various Clinics large increases in attendances are recorded, once again serving to emphasise the essential part they play in a proper School Medical Scheme. The children who attend these Clinics are those whose parents would in all probability not obtain private medical attention on the grounds of cost or who would otherwise visit the out-patient's department of General Hospitals. The increase is most marked in the Minor Ailments Clinic to which the attendances were more than doubled; the Dental Clinics for reasons already given, and the Remedial Exercises Clinic. The increase in the latter is due in some degree to the concurrently larger numbers furnished by the Orthopædic Clinic, from which children are referred if necessary for Remedial Exercises.

Special reports are included on the activities of the Ionization and Rheumatism Clinics, both of which are fulfilling a need and doing work of much importance. Though the Rheumatism Clinic is only concerned with the ascertainment of cases and advice, it has been able, through the helpful co-operation of one of the visiting physicians to the Croydon General Hospital, to play a useful part in obtaining necessary treatment. The establishment by the Public Health Committee of a Convalescent Home for infants and children at Coombe Cliff, will be an additional implement towards the prevention and the eradication of this serious malady of childhood.

At the end of the main report there is included a supplementary report made to the Elementary Education Sub-Committee on the subject of Health Education in Schools. This is a matter on which the Chief Medical Officer of the Board of Education, in

his last report on the Health of the School Child, expressed emphatic views, and it is one which appears, unfortunately, to be rather crowded out owing to the bulk of the routine scholastic curriculum. The suggestion is made that special health teaching should be given by medical men and women to children in their last year of school life. This is put forward, not with any intention of belittling the excellent work of teachers, but because it is felt to be a specialised subject requiring specialised treatment, and also with the opinion that if presented by medical practitioners, it would carry more conviction to the minds of the listeners. Healthy living is a fundamental basis of life. Much avoidable illness is due to ignorance of the simplest physiological functions, and epidemic sickness is not seldom spread by lack of appreciation of the duties of citizenship. If a child is instructed before leaving school in the principles of personal and communal health, it is felt more good will be done than by elaborating widespread schemes of Public Health reform before those who are unable to understand their purport.

In conclusion, I tender my thanks to you, ladies and gentlemen, for the consideration and courtesy you have at all times extended to me. I wish also to acknowledge my indebtedness to your Education Officer, Mr. Morgan, for his helpful co-operation and advice, and to the members of his staff for their assistance. I also desire to bring to your notice the valuable services rendered by the Deputy Medical Officer, Dr. Watson, and other colleagues in the School Medical Service. They have at all times exhibited an unwaning enthusiasm for the aims and objects towards the consummation of which the department strives.

I am, Yours faithfully,

OSCAR M. HOLDEN,

School Medical Officer.

SECTION I.

Co-ordination and School Hygiene.

A close co-operation exists between the Public Health department and the School Medical Service. The Medical Officer of Health is also School Medical Officer, and the assistant medical officers all take part in school work.

During 1930 an attempt has been made to link up more closely Maternity and Child Welfare work with the school medical work; difficulties have arisen, the chief of which are that children do not always attend the school which their parents state they will prior to their going; and a comparatively small proportion of entrants have attended in years previously, a Maternity and Child Welfare Centre. A third difficulty is that routine medical inspection cards are kept at the schools. This has other disadvantages also, but is necessary owing to the very limited office room available at the Town Hall.

Structural Work and Decorations carried out in the Elementary 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 Schools—

Howard.
West Thornton.

Internal Painting and Distempering at the following Schools—

Ecclesbourne.	S. Norwood Polytechnic.
Croydon British.	St. Andrew's.
Davidson.	St. Mark's.
Howard.	St. Michael's.
West Thornton.	St. Saviour's.
Whitehorse Manor.	Parish Church (Senr. Boys).
Woodside.	

New Schools or Departments Opened—

Tavistock ...	Infants' Department.
Gonville ...	Junior Mixed and Infants' School.
Elmwood ...	Senior Boys, Senior Girls, Junior Boys, Junior Girls, and Infants' School.
Waddon ...	Senior Department.

TABLE I.

Sanitary Accommodation in the Schools.

Name of School.	Number on Roll 31.12.30	No. of Pedestal W.C's. flushed by separate cisterns.	No. of Pedestal W.C's. flushed by automatic flush.	No. of urinals with sparge pipes.
Beulah	1192	27	...	2
West Thornton	1447	30	...	3
Purley Oaks	508	23	...	2
Davidson	716	28	...	2
Howard	389	21	...	2
Ecclesbourne	926	10	23	3
Ingram	1193	24	...	2
Ashburton	443	14	...	1
Rectory Manor	958	25	...	3
Oval	638	21	...	2
Portland	1109	...	26	2
South Norwood	924	26	...	2
Norbury Manor	884	25	...	2
Sydenham	736	25	...	4
British	573	21	...	3
Tavistock	847	32	...	3
Rockmount	503	...	18	2
Waddon	1012	41	...	4
Whitehorse Manor	1056	38	...	3
Winterbourne	1378	26	...	2
Woodside	999	34	...	3
Heath Clark (Central)	408	15	...	1
St. Christopher's	81	4	...	1
St. Giles	71	3	...	1
Myopic	15	2	...	1
Addington	68	...	...	2
All Saints'	305	12	...	2
Christ Church	541	...	...	3
Holy Trinity	288	11	...	1
Parish Church	564	...	...	2
St. Andrew's	417	10	...	2
St. Joseph's	204	7	...	2
St. Mark's	164	5	...	1
St. Mary's	347	15	...	2
St. Michael's (Central)	202	9	...	1
St. Peter's	187	...	...	1
St. Saviour's	409	...	...	2
Shirley	184	5	...	2
Archbishop Tenison's (Boy's Central)	386	12	...	1
Elmwood	1052	37	...	4
Gonville	225	14	...	2

Trough closets only were in use, flushed by automatic cisterns at Christ Church, Parish Church, St. Peter's and St. Saviour's; in conjunction with pedestal W.C's. at St. Andrew's. Pail closets only were in use at Addington.

The above return does not include the John Ruskin (401) and Lady Edridge (300) Central Schools which are housed in temporary premises.

The English regulations relating to public elementary schools prescribe the number of closets to be provided for girls and boys respectively as follows :—

No. of Children	30	50	70	100	150	200	300	400
No. of closets respectively :								
Boys	1	2	2	3	3	4	5	6
Girls	3	4	5	6	8	10	14	18

Co-operation of Parents.

The presence of parents is always welcomed at the various clinics and routine medical inspections, as a satisfactory personal history is only obtained thereby ; this information may be of much value to the examining medical officer.

Co-operation of Teachers.

The head teachers have been very helpful in many and various ways ; their co-operation is essential for the efficient carrying out of the work, and as this is fully recognised by them, matters are made much easier than they would be otherwise.

Co-operation of the School Attendance Officers.

I should like to express my thanks to the Superintendent Attendance Officer for the valuable assistance he has rendered us during the year, in connection with the tracing of cases temporarily lost sight of, in seeing that urgent treatment is carried out, in proceedings against parents whose children are kept in an habitually dirty condition, and also with children on the exceptional children's register.

The Voluntary School Care Committees have continued their work of assisting in the provision of treatment, and their interest is not infrequently a deciding factor in the successful issue.

The Croydon Council of Social Service gives information and assistance in dealing with necessitous cases for whom provision could not otherwise readily be made.

Close co-operation is maintained with the Society for the Prevention of Cruelty to Children, whose inspector has rendered much assistance with a few difficult cases. 35 cases reported by us have been dealt with ; these cases were, neglect to provide glasses, 7 ; neglect (general), 12 ; adenoids and enlarged tonsils, 7 ; failure to obtain medical or dental treatment, 8.

In addition to visits for preliminary investigation the Society's Inspector paid 134 supervision visits.

Cost of the School Medical Service.

The gross cost of the medical, dental and nursing services was £9,549; from this an income of £530 should be deducted, making a nett cost of £9,019. The rateable value of the Borough in 1930 was £1,893,722. The Government grant is 50 per cent. of the expenditure, hence the actual cost to the rates was £4,510, *i.e.*, a rate of 0.60 pence. The net cost of these services to the rates for 1930 per child on the school registers was 3s. 5.7d.

The figures do not include £300 for Medical Inspection (Higher Education) and for Blind persons £100.

Cost of Special Schools.

Schools maintained by the Council £4,191; Contributions to schools under other authorities £3,112; Other expenses (travelling, etc.) £191; Income from parents' contributions £744, giving an actual cost of £6,750, of which £3,375 was payable out of local rates, giving a rate of 0.51 pence.

Cost of Milk and Meals.

Milk and meals cost £999; Income from parents' contributions £66; giving an actual cost of £933.

SCHOOL POPULATION AND AVERAGE ATTENDANCE.

TABLE II.

	No. of Schools.	No. on Rolls.	Average Attendance.	Percentage Attendance.
Boys	15 C. 2 N.P.	6044 384	5593 360	93 93
Girls	15 C. 6 N.P.	5335 1489	4858 1342	91 90
Mixed	13 C. 8 N.P.	4848 2146	4408 1882	91 88
Infants (396 under 5)	16 C. 2 N.P.	4718 271	4039 227	86 84
Schools—				
Church of England	13	4290	3811	89
Roman Catholic	2			
Council	26	20945	18898	90
Total	41	25235	22709	90

"C" = Elementary.

"N.P." = Non-provided.

There was no closure of schools or school departments in 1930 on account of epidemic infectious disease; 34 certificates were issued under Article 23 of the Code of Regulations for Public Elementary Schools, 1926, owing to the school attendance falling below 60 per cent. due to epidemic illness. The average percentage of attendance was better in 1930 (90 per cent.) than in 1929 (87 per cent.).

School closure is not an effective means of controlling epidemics. By closing a school valuable aids for the detection of cases are lost. For example, a child attends school one day, but is absent the next. The school nurse is made aware of this absence, visits the home, ascertains the cause, and urges the calling in of a doctor. Again, systematic supervision is kept on class contacts, and the teacher is able to bring to the notice of the nurse any slight divergencies from health of her pupils. This helpful co-operation is lost if the school is closed. Some parents, also are a little lax in evaluating the meaning of what appear to them to be trivial matters. There are so many ways in which children can meet outside school, especially in urban areas, that merely closing the school has little preventive influence. To be logical, if a school is closed then all Sunday Schools, cinemas, or other places of entertainment in the area served by the school should be closed to the children also.

SECTION II.

MEDICAL INSPECTION IN SCHOOLS.

The four assistant medical officers devote the following proportions of their time to this work:—Dr. Falk 2/11; Dr. Jenkin-Lloyd 3/11; Dr. O'Connell 7/11; Dr. Gavin 9/11. Elder girls in schools are as far as possible examined by the two lady doctors. The Deputy School Medical Officer assists with routine inspections when the need arises.

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 III. 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 8,426 children were examined as compared with 8,698 in 1929, and 5,644 parents attended the examinations. Rather fewer children, 139, were examined in each of the statutory groups. The percentage attendance of parents in the entrants group was for boys 83 per cent. and girls 83 per cent.; in the intermediate group, boys 70 per cent., girls 72 per cent.; and in the leavers group, boys 34 per cent., girls 54 per cent. As would be expected the percentage 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 and co-ordination 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 attendance of parents was satisfactory in the entrant and intermediate groups, and was practically the same as last year. It is always helpful to the examining medical officers to have one or other of the parents present. If defects are found the need for their rectification can be explained. In the nature of things this entails the expenditure of time, and consequently fewer children can be inspected during a session, but the compilation of large numbers of children inspected is by no means the aim of the school medical service. Its aim is the early detection of actual or incipient defects

and the prompt treatment thereof. To ensure this the active co-operation and trust of the parents is of much greater importance. It will take many years of continued effort, however, to get all parents to appreciate the meaning of small abnormalities which may cause no immediate distress but may lead to vague impairment of health and efficiency as the years pass, or even, in some cases, serious breakdowns and permanent damage.

TABLE III.

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 Beulah ...	65	85	56	78	124	113	85	93	31	—	15	—	4	—	1	—
2 West Thornton	31	93	25	61	85	114	52	75	42	69	15	39	...	...	...	...
3 Purley Oaks	33	27	23	21	30	23	16	13	33	30	8	12	...	...	...	...
4 Davidson	55	43	42	34	54	40	44	30	48	22	8	12	...	...	...	...
5 Howard ...	15	18	15	16	28	18	21	14	22	22	9	10	...	...	...	...
6 Ecclesbourne	73	66	59	54	59	101	39	67	9	48	4	25	...	1	...	...
7 Ingram ...	119	74	105	64	98	55	89	36	55	50	35	29	...	10	...	6
8 Rectory Manor	59	40	43	31	16	49	9	32	18	25	6	17	...	...	...	...
9 Oval ...	42	32	39	31	49	29	41	28	46	45	24	32	2	22	2	17
10 Portland ...	84	84	72	74	96	78	76	65	60	48	45	32	15	6	11	4
11 Elmwood, North Park	66	57	56	45	14	28	6	16	26	26	7	5	2	2	2	2
12 South Norwood	78	58	65	44	30	43	14	27	66	23	27	6	...	...	...	...
13 Norbury Manor	44	33	36	26	68	71	52	65	11	...	5	...	...	...	...	...
14 Sydenham	64	36	51	26	57	18	43	12	8	...	3	...	...	...	...	...
15 Croydon British	...	...	...	...	...	15	...	8	12	53	7	25	...	...	...	...
16 Tavistock	48	74	40	63	42	43	29	30	52	52	18	22	...	...	...	...
17 Rockmount	34	30	30	27	39	33	23	23	20	13	9	9	...	...	...	...
18 Whitehorse M'r	34	32	29	20	47	94	31	64	48	1	20	1	...	...	...	...
19 Winterbourne	110	87	101	82	134	55	113	55	25	63	21	52	1	1	1	1
20 Wood-side	67	51	63	48	24	2	22	2	46	18	34	10	...	...	...	...
21 John Ruskin	...	...	...	...	...	...	...	...	445	...	36	...	...	...	...	...
22 Lady Edridge	...	...	...	...	...	...	...	...	...	161	...	72	...	...	...	...
23 Ashberton	39	33	34	32	10	22	9	19	...	...	...	...	...	...	...	...
24 Heath Clark	...	...	...	...	...	...	...	...	151	200	71	126	...	...	...	...
25 All Saints'	24	10	19	10	19	21	18	17	2	...	1	...	...	...	...	...
26 Christ Church	41	48	39	41	27	34	22	25	...	16	...	11	...	...	...	...
27 Holy Trinity	...	41	...	39	...	37	...	28	...	1	...	1	...	...	...	...
28 Parish Church	51	49	44	43	48	49	29	33	39	...	11	...	...	...	...	...
29 St. Andrew's	26	44	15	34	37	44	14	23	1	5	...	...	2	...	...	...
30 St. Joseph's	17	17	14	16	12	21	6	8	11	13	5	7	7	12	2	5
31 St. Mark's	17	20	16	17	3	16	3	11	...	6	...	6	...	...	...	...
32 St. Mary's	26	16	19	6	44	24	11	8	14	16	5	1	...	10	...	6
33 St. Michael's	...	...	...	...	...	...	...	...	...	24	...	12	...	...	...	...
34 St. Saviour's	37	45	28	37	11	31	9	23	...	...	...	...	...	...	...	...
35 Arch Tenison's	...	...	...	...	17	5	10	3	16	44	10	24	...	...	...	...
36 St. Peter's	39	35	29	26	12	19	9	15	...	...	...	...	...	...	...	...
37 Shirley ...	12	13	9	9	10	8	5	3	2	12	...	4	1	3	...	1
38 Addington	5	8	3	8	7	10	3	7	1	...	1	...	...	...	...	...
39 Waddon ...	55	70	41	56	88	78	56	55	...	...	...	...	...	...	...	...
	1510	1469	1260	1219	1439	1441	1009	1033	1360	1106	460	602	34	67	19	42
	2979		2479		2880		2042		2466		1062		101		61	
			83% 83%				70% 71.6%				34% 54%				56% 63%	
			83%				71%				43%				60%	

FINDINGS AT ROUTINE MEDICAL INSPECTIONS.

Uncleanliness.

Special inspections are made by the school nurses from time to time, into the cleanliness of scholars and the figures obtained by them are naturally less satisfactory than those in Table XIII.

The cleanliness figures at routine medical inspections are surprisingly good, inasmuch as only 0.3 per cent. of boys and 0.9 per cent. of girls inspected showed unsatisfactory head conditions, and 0.5 per cent. of both boys and girls unsatisfactory body conditions. These results are considerably better than last year's percentages.

The health visitors at their uncleanliness surveys made 357 inspections and at the primary inspections found vermin in 249, and nits alone, in 2,256 children. On these inspections, as contrasted with the routine medical inspections, 4.1 per cent. of the children showed evidence of infestation as against 4.3 per cent. in 1929, 4.6 per cent. in 1928, and 4.9 per cent. in 1927. 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. Uncleanliness is practically limited to certain families, who become well known to the teachers and health visitors.

Clothing and Footgear.

At routine medical inspections 99.0 per cent. boys and 98.8 per cent. girls were clothed and shod properly. Closer scrutiny has been exerted by the medical inspectors and the findings are satisfactory.

Nutrition.

In the entrants 16.0 per cent. of the boys and 18.9 per cent. of the girls were below average nutrition. In the intermediate 18.3 per cent. of the boys and 20.7 per cent. of the girls were under average; in the leavers 10.9 per cent. boys and 12.4 per cent. girls, giving in the whole school groups examined 16.3 per cent. of the children as under average nutrition. The 8-9 year age group once again showed the worst figures, a finding not uncommon but rather difficult of adequate explanation.

The figures are higher than in 1929. These findings should be taken in conjunction with the more elaborate analysis contained in Table IV.

The subject of child nutrition is a complex one and is dependent on other factors than definite ill-health. A considerable amount of malnutrition is due rather to improper food than too little food. Proteins and fats are relatively expensive, carbohydrates relatively cheap. In times of financial stringency there is a natural inclination to purchase the cheapest foods and consequently the 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.

The scheme of the National Milk Publicity Council, whereby for the cost of a penny per day, any child whose parents desire it, may obtain a third of a pint of milk, in a sealed bottle, was continued. This is delivered at the school and is drunk in the middle of the morning through a sterilised straw, thus ensuring that it is taken slowly. The empty bottles are collected by the milkman.

During 1930, with very few exceptions, all schools adopted this scheme and 8,723 bottles of milk were supplied to the children. The scheme came into force in September, 1929.

This scheme has one defect inasmuch as, owing to financial reasons, children who would benefit most do not get the milk. 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.

Although the Daylight Saving Act has undoubtedly benefited the adult portion of the community, its effects on young school children do not seem quite so beneficial. It requires a strong parent to persuade a child to go to bed when his playmates are still out of doors and he can both see and hear them. Not a few children, consequently, get to bed far too late and do not have the hours of sleep that are necessary for the proper development of a growing body and mind. A state of nervous tension is induced and this in turn reacts upon the defensive mechanism of the child's body rendering him more liable to chance infection and less able to cope

with illness when it comes. It is more particularly the highly strung, nervous bright and energetic child who is adversely affected, as he, in the ordinary course of things, draws more prodigally on his reserves than does the phlegmatic child. It is also the former type of child who shines most in scholastic work and is anxious to progress. This again means calling on his reserves of energy which, rather than being dissipated by shortened hours of sleep, should be conserved by giving him longer hours than are required by the latter type of child.

A child's state of nutrition also has an effect on his later physical progress. Severe malnutrition in childhood is never really made good in after life. Childhood is the great growing period. A badly nurtured seedling never becomes a really satisfactory plant and the same holds good with the human race. This matter of nutrition is of fundamental importance and must always be of concern to parents, doctors and teachers. There is much ignorance among parents on the subject of economical and valuable catering, and it is submitted that good would be done by a course of theoretical and practical instruction to all scholars in their final year, on this subject of vital importance.

Table IV. gives the results of an enquiry made to ascertain the average heights and weights of all children examined at routine inspection in 1930. 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 IV.
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.
1926	101	40.1	38	41.9	41.2	38.3	34.2	93	39.7	36.2	42.1	40.3	38.1	34.2
1925	788	42.6	41.4	46.5	49.8	38.6	33.5	682	42.3	40.3	46.1	50.6	37.5	32.6
1924	539	43.8	43.4	47.4	51.8	39.9	35.6	582	43.3	41.9	47.6	52.5	39.2	34.1
1923	124	45.9	48.1	47.6	52.8	43.3	41.6	140	45.1	45.7	47.5	51.7	43.1	40.9
1922	1114	47.9	52.6	52.9	65.9	43.1	40.9	1072	48.4	50.4	53.2	65.7	43.3	40.6
1921	221	49.6	56.9	53.4	64.5	47.6	50.3	217	49.8	54.9	53.5	64.1	47.8	49.7
1920	63	51.2	62.1	53.2	68.5	49.7	57.6	88	52.1	62.1	55	71.9	49.9	55.8
1919	33	53.5	68.7	55.2	72.8	53.3	66.6	49	53.1	65.2	55	72	51.8	59.9
1918	599	56.1	75.6	64.6	98.9	51.3	58.6	515	56.1	76.6	62.6	103.2	50.9	58.3
1917	100	57.2	81.3	61.7	94.6	54.7	72	96	58	83.2	61.2	99.5	55.7	72.9
1916	17	57.1	85.3	59	92.9	55.6	79.4	47	58.3	88.2	60.6	94.6	58.8	85.1
1915	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1914	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Children Born in 1925.—The boys are 0.3 inches taller and 1.1 lbs. heavier on the average than the girls. The average minimum weight of the boys is 1.1 lbs. more and their average minimum height 0.9 inches taller than the corresponding figures for the girls. The average maximum weight of the boys is 0.4 lbs. more and their average maximum height 0.8 inches smaller than for the girls. Boys at this age are accordingly as a group heavier and taller than girls, and exhibit a smaller range between the extremes. This finding is much the same as for 1929, dealing with children born in 1924.

Children Born in 1924.—The boys are 0.5 inches taller and 1.5 lbs. heavier on the average than the girls. The average minimum weight of the boys is 1.5 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 0.7 lbs. less and their average maximum height 0.2 inches shorter than for the girls. Although heavier, the boys show a general retardation in the rate of increase in stature. These children belong to the same group as were dealt with in last year's report.

Children Born in 1922.—The boys are 0.5 inches shorter and 2.2 lbs. heavier on the average than the girls. The average minimum weight of the boys is 0.2 lbs. more and their average minimum height 0.2 inches shorter than the corresponding figures for the girls. The average maximum weight of the boys is 0.2 lbs. more and their average maximum height 0.3 ins. shorter than for the girls. This group of children are similar in their relationships to the 1924 group.

Children Born in 1918.—The boys are now on the average the same height but 1.0 lbs. lighter on the average than the girls. The average minimum weight of the boys is 0.3 lbs. greater and their average minimum height 0.4 ins. taller than the girls. The average maximum weight of the boys is, however, 4.3 lbs. lighter and their average maximum height 2.0 ins. taller than for the girls. In this group as a whole the girls are taller and heavier than the boys, but the latter 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 11.2 lbs. in weight and 5.3 inches in height. The girls gained 10.1 lbs. in weight and 6.1 inches in height. From 8 years to 12 years the corresponding gains are 23.0 lbs. gain in weight for boys and 26.2 lbs. for girls; 8.2 inches gain in height for boys and 7.7 inches for girls.

During the period of growth from 5 years until 13 years the boys increased by 14.6 inches in height and 39.9 lbs. in weight; the girls increased 15.7 inches in height and 42.9 lbs. in weight.

These findings are very similar to last year's figures, except that the total weight increase in both sexes is less, to the extent of 2.1 lbs. in boys and 1.1 lbs. in girls.

Heart and Circulatory System.

The following table summarises the findings. The percentage of organic defects is rather higher than for the whole of England and Wales. As might be expected the figure rises steadily during school life and this emphasises the importance of strict ascertainment, supervision and facilities for the necessary treatment of rheumatism. The etiology of acute rheumatism is not yet known, but there is no doubt about the lasting damage it does to cardiac tissue, more especially if it is not discovered early and adequately treated. The Rheumatism Clinic is doing valuable work in this direction. The figures are rather lower for 1930 than for 1929:—

TABLE V.

	Entrants.		Intermediates		Leavers.		Other Ages.		Percentage
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys	Girls.	
Organic Disease ...	14	9	15	29	42	24	1	4	1.6
Functional Disease ...	26	26	46	51	26	33	...	2	2.5
Anæmia ...	44	42	78	72	17	38	...	1	3.5
Other defects ...	...	...	...	...	...	...	...	...	...
Totals ...	84	77	139	152	85	95	1	7	7.6

Chest Complaints (Other than Tuberculosis).

In all groups 2.2 per cent. of the boys and 1.5 per cent. of the girls had some minor affection of the lungs. The entrant group showed the worst figures: 3.4 per cent. boys and 2.5 per cent. girls.

As growth proceeds lung resistance to minor invasion appears to increase. Deaths from pneumonia are relatively higher in the show that in the early and the later years of life lung resistance is at its lowest. Mild Bronchitis is the usual condition found at routine medical inspections.

TABLE VI.

TUBERCULOSIS.

Children Referred to the Tuberculosis Officer.

	Boys.	Girls.	Total.	Percentage of all Children examined
Positive (Definite) ... ..	...	1	1	0.01
Negative (Non-T.B.)	13	10	23	0.27
Doubtfully T.B.	3	...	3	0.03
Bone or Joint Tubercle ... ..	...	2	2	0.02
Glands or Skin Tubercle	1	1	2	0.02
Totals	17	14	31	0.37

Rather less than 0.4 per cent. of the total number of children examined were referred for further examination on account of suspected Tuberculosis. Active Pulmonary Tuberculosis in children of school age is a rare disease.

The accurate diagnosis of Pulmonary Tuberculosis in children during routine medical inspection is an impossibility. The primary object of routine medical inspection is to sort out children with gross and obvious defects for immediate treatment, and to refer for more detailed investigation those who exhibit indefinite physical or mental aberrations. Children referred to the Tuberculosis Officer are re-inspected by the school medical inspector at each of his subsequent visits to the school department which the child attends. In this way suspected children are kept under close supervision.

In all instances contacts of known cases of Tuberculosis are also kept under supervision and re-examined at each school medical inspection, by this means if a child who is a contact of a case of Tuberculosis shows evidence of also contracting the disease the appropriate measures can be put into operation without delay and the progress of the complaint checked and finally arrested.

Contacts among School Children Examined in 1930.

No. of cases under observation beginning of 1930	...	15
No. of cases added during the year	... ..	165
No. of cases discharged from observation during the year		169
No. of cases under observation end of 1930	... ..	11

Notifications of and Deaths from Tuberculosis in Children of School Age.

No. of Primary Notifications.				No. of Deaths.			
Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
M	F	M	F	M	F	M	F
6	5	11	4	2	2	4	...

The ages at death of the fatal cases were:—Pulmonary 10-15 years, 2 boys and 2 girls; Non-pulmonary, 3 boys in the 5-10 years age period and 1 boy in the 10-15 years period.

Taking the total school population as 25,235 the mortality rate from Pulmonary Tuberculosis in school children was 16 per 100,000, and the incidence rate 43 per 100,000. For non-pulmonary Tuberculosis the respective figures were 16 and 59. For the whole population the figures are: Pulmonary mortality rate, 69; pulmonary incidence rate, 118; non-pulmonary mortality rate, 9; non-pulmonary incidence rate, 24.

Nose and Throat.

Table VII. summarises the findings; in all the groups 649 boys and 630 girls had enlarged tonsils; 92 boys and 78 girls had adenoids only; 277 boys and 247 girls had adenoids and enlarged tonsils; 109 boys and 65 girls were mouth breathers; 564 boys and 409 girls exhibited enlarged glands in the neck.

Taking the cases of adenoids, enlarged tonsils with adenoids and mouth breathers, as requiring operative measures, it is seen that 10.3 per cent. of all school children examined in the three groups were in need of surgical attention to the throat and nose. In 1929, dealing with another group of children, the figure was 8 per cent.

Although the term enlarged tonsils and adenoids is always used, the relative importance on the health of the child is the other way round. Adenoids exert a much more pernicious influence, in as much as they impede the proper performance of nasal breathing. Enlarged tonsils, provided they are healthy in other respects, do not necessarily cause trouble, except that, if the child should unfortunately contract one of the acute infectious diseases which gain their foothold through the portals of the nose and throat, e.g., Scarlet Fever or Diphtheria, the attack is liable to be of greater severity and to cause more physical discomfort, than if the tonsils were not enlarged. Children with enlarged tonsils or an unhealthy pharynx are also more liable to develop complications, by far the most serious of which is inflammation of the middle ear. When it is remembered that the throat and ear are in direct communication through the eustachian tube, the path of spread is readily understood. The indiscriminate removal of healthy, though enlarged tonsils, is unnecessary and the medical officers do not refer for treatment by operation, children whose tonsils are healthy, even though they are enlarged.

The operation of choice for enlarged septic tonsils is enucleation. Resection does not get rid of all the infected tonsillar tissue, and the remains may at a later date, cause a renewal of the trouble.

The importance of education in correct breathing after the removal of adenoids cannot be too strongly emphasised. All cases after operation are invited to attend the Breathing Exercises classes held at St. Andrew's Hall, but unfortunately only some 392 of the parents appear to consider it necessary. However, the success or otherwise of the operative procedure depends on the nose being used for its natural purpose. If the old, incorrect habits are persisted in, the lymphoid tissue around the posterior nares lacks the normal stimulus of the air currents passing over it, and once more grows into the flabby hypertrophied masses which are known as adenoids.

TABLE VII.
NOSE AND THROAT.

	Entrants.		Intermediates		Leavers.		Other Ages.		Totals.
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys & Girls
Enlarged Tonsils	298	268	185	222	158	128	8	12	1279
Adenoids ...	46	39	33	25	13	14	...	...	170
Enlarged Tonsils with Adenoids	129	110	115	109	29	27	4	1	524
Mouth Breathers	53	33	52	27	4	5	...	...	174
Nose (Deflected Septum) ...	1	...	1	...	5	2	...	...	9
Other Diseases of the Nose and Throat... ..	32	19	8	10	3	9	...	1	92
Enlarged Submaxillary and Cervical Glands ...	161	128	223	194	173	75	7	12	973

Table VIII. shows that the percentage of nose and throat defects steadily diminishes as age advances, and as a general rule it is higher in boys at all ages than in girls. Enlarged glands were most commonly found in the intermediate group (aged 8-9 years). Enlarged tonsils and adenoids in the entrant group. The leaver group showed the best findings, a result probably of treatment received, and of a tendency for masses of lymphoid tissue to contract as age advances.

TABLE VIII.
PERCENTAGES FROM ABOVE TABLE.

	Entrants.	Intermediates.	Leavers.	Other Ages
Enlarged Tonsils	19	14.1	11.6	19.8
Adenoids	2.9	2	1.1	...
Enlarged Tonsils with Adenoids	8	7.8	2.3	5
Mouth Breathers	2.9	2.7	0.4	...
Nose Deflected Septum ... ..	...	...	0.3	...
Other Diseases of the Nose and Throat	1.7	0.6	0.5	1
Enlarged Glands	9.7	14.5	10.1	18.8

Group.	*Nose and Throat Defects.		Enlarged Glands.	
	Boys.	Girls.	Boys.	Girls.
Entrants	33.5	29.7	10.7	8.7
Intermediates	23.8	25.4	15.5	13.5
Leavers	15.3	16.3	12.7	6.8
Other Ages	35.3	20.9	35.3	20.6

*Does not include mouth breathers, but includes other defects of nose and throat.

Defective Hearing.

The commonest cause of deafness in children is the result of chronic inflammation of the middle ear. This may have been caused by an attack of one of the acute infectious fevers, usually measles, or scarlet fever, or it may arise after an attack of septic tonsillitis. Ear discharge may or may not be present, though there has always been a discharge at some stage of the process. Adenoids are another cause which makes itself most prominent if the child is suffering from catarrh.

Syringing the ears in cases of ear discharge is a risky procedure if carried out in an inexperienced or careless manner. Permanent damage to the delicate mechanism may be inflicted in this way, owing to the infection being forced into the innermost parts of the ear. Discharging ears, especially of long standing, should be treated seriously.

A report of the work of the Ionization Clinic is given on page 53.

The routine medical inspection figures showed that 0.4 per cent. entrants, 1.6 per cent. intermediates, and 1.6 per cent. leavers had defective hearing. The figure for entrants is an improvement on 1929; the others percentages are practically unchanged.

Speech Defects.

The findings show that 0.2 per cent. entrants and 0.3 per cent. intermediates showed speech defects. These figures are lower than usually found.

Skin Diseases.

The findings only show 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. These conditions vary greatly from time to time. Entrants gave 2.4 per cent. incidence in boys and 2.3 per cent. in girls; intermediate boys 1.9 per cent. and girls 1.8 per cent.; leavers 1.0 per cent. boys, and 0.5 per cent. girls, a total in all groups of 1.7 per cent. boys and 2.1 per cent. girls.

TABLE IX.
DEFORMITIES.

	Entrants.		Intermediates.		Leavers.		Totals.		Percentages.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Evidence of Rickets ...	16	8	22	6	3	1	41	15	1.0	0.4
Spinal Curvature ...	61	43	94	109	73	80	228	232	5.3	5.8
Other Deformities ...	35	28	39	35	22	37	96	100	2.2	2.2
Total ...	112	79	155	150	98	118	365	347	8.5	8.4

In the section of the report dealing with treatment, the subject of deformities is dealt with more fully.

THE EYE: EXTERNAL EYE DISEASES: PERCENTAGES.

TABLE X.

	Entrants.		Intermediates		Leavers.		Percentage defects all groups
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	
Squint ...	1.3	2.2	1.2	0.9	0.4	0.9	1.2
Blepharitis ...	0.7	0.5	1.0	1.1	0.4	0.6	0.8
Conjunctivitis ...	0.1	...	0.1	...	0.2	...	0.1
Corneal Opacity ...	...	...	...	0.1	...	0.1	...
Other Defects ...	0.2	0.3	0.2	0.1	0.2	0.1	0.2
Total ...	2.3	3.0	2.5	2.2	1.2	1.7	2.3
Group percentages		2.6	2.4		1.5		

The defects found under the above headings show a lower percentage throughout than for last year. The group percentages for 1929 being entrants 4.6 per cent., intermediates 4.0 per cent., and leavers 2.2 per cent.

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.

In the intermediate group 5.7 per cent. of the boys and 6.8 per cent. of the girls had defective vision, and in the leaver group 7.3 per cent. of the boys and 9.3 per cent. of the girls. The leaver group of girls invariably gives the worst figures for vision. These figures are practically the same as for 1929.

In my 1928 report I devoted a paragraph to the effects of poor lighting, incorrect position of desks and glare from brightly polished surfaces, on eyesight. There are indications of a gradual increase in the number of cases of defective vision in school children. This may be more apparent than real, as vision is a subject of greater importance than in the earlier years of school medical inspection; and the correction of small defects is obtained in more children than formerly.

TABLE XI.

Extent of Defect.	Intermediates.				Leavers.				Total.	
	Boys.		Girls.		Boys.		Girls.		Boys.	Girls.
	No.	%	No.	%	No.	%	No.	%	%	%
Normal	R 1355	94.6	1337	93.3	1265	93.0	1001	91.1	93.8	92.3
6/6ths. or 6/9ths.	L 1348	94.1	1332	93.0	1256	92.4	991	90.2	93.2	91.8
6/12ths or 6/24ths	R 69	4.8	92	6.4	78	5.7	87	7.9	5.3	7.1
	L 75	5.2	93	6.4	83	6.1	98	8.9	5.7	7.5
6/36ths. or worse	R 9	0.6	4	0.3	17	1.3	11	1.0	0.9	0.6
	L 10	0.7	8	0.6	21	1.5	10	0.9	1.1	0.7

TABLE XII.
TEETH.

	Entrants.				Intermediates				Leavers.			
	Boys		Girls		Boys.		Girls.		Boys.		Girls.	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Perfect set of Teeth...	671	44.4	646	44.0	647	45.0	651	45.2	832	61.2	684	61.8
One to four decayed	571	37.8	586	39.9	567	39.4	580	40.2	442	32.5	363	33.3
Four or more decayed	268	17.8	237	16.1	225	15.6	210	14.6	86	6.3	54	4.9
Total	1510		1469		1439		1441		1360		1106	

The above table gives the findings of the medical inspectors and has no relation to the findings of the school dentist at his visits; these are dealt with in another section of the report. Owing to the greater minuteness of the dentist's examination his findings differ a little from the above.

The figures indicate that some 49 per cent. of children entering school have perfect sets of teeth. This is an improvement on 1929, when the percentage was 41. The importance of the pre-school period which at present is relatively neglected from this aspect, but is a time of especial importance in connection with the care of the teeth is emphasised. The leaver group gave by far the best findings, a result reflecting credit on the school dental service.

It is interesting to note that 4,131 children, or 49.6 per cent., were found to have sound teeth at medical inspection. The need for systematic instruction, on the lines of "tooth brush drills" seems to be indicated.

TABLE XIII.
SUMMARY OF THE FINDINGS AT ROUTINE
EXAMINATIONS.
(Percentages.)

Condition.	Entrants.		Inter-mediates.		Leavers.		Other Ages		All Groups	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Uncleanliness—										
(Percentage clean)										
Head	99.8	99.1	99.5	99.0	99.5	99.4	100.0	97.0	99.7	99.1
Body	99.7	99.3	99.2	99.3	99.8	99.7	100.0	97.0	99.6	99.4
Clothing (satisfactory)	99.5	99.1	99.0	98.7	98.6	97.9	100.0	97.0	99.1	98.6
Footgear do.	99.5	99.3	98.8	99.0	98.7	98.6	100.0	97.0	99.0	99.0
Nutrition (normal)	84.0	81.1	81.7	79.3	89.1	87.6	97.1	92.5	85.0	82.4
Circulatory System (defects) ...	5.6	5.2	9.7	10.5	6.3	8.6	2.9	10.4	7.1	8.1
Pulmonary System (defects not I.B.)	3.4	2.5	2.3	1.2	0.5	0.6	5.8	...	2.2	1.5
Defects of Nose and Throat ...	37.0	31.9	27.4	27.3	15.6	16.7	35.3	20.9	23.2	26.0
Enlarged Cervical Glands ...	10.7	8.7	15.5	13.7	12.7	6.8	20.6	18.0	13.0	10.0
External Eye Disease	1.1	0.7	1.4	1.3	0.8	0.8	...	4.5	1.2	1.0
Defective Vision	0.4	0.2	6.5	8.3	7.6	11.4	11.8	9.0	5.2	6.2
Defective Hearing	0.4	0.4	1.8	1.5	1.4	1.9	...	1.5	1.2	1.2
Speech Defects	0.5	...	0.5	0.1	...	...	...	...	0.3	...
Dental Disease (more than four decayed)	17.7	16.1	15.6	14.6	6.3	4.9	5.9	10.4	13.4	12.4
Dull and Backward	0.7	0.6	1.3	1.4	1.1	2.7	...	...	1.0	1.4
Skin Disease	2.4	2.3	1.9	1.8	1.0	0.5	...	1.5	1.7	2.1
Total excluding Uncleanliness, Clothing, Footgear & Nutrition	79.9	68.6	73.9	81.7	53.3	54.9	...	...	69.5	69.9

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, but the percentage is lower for all groups than in 1929. The entrant group is the worst and the leaver the best. Undernutrition is found in about 16 per cent. of all children examined and the interesting finding is once more noted that the Intermediate group (8-9 years) give the worst figures. The reasons for this are difficult to find, but perhaps a slackening of parental control, consequent upon the need for looking after younger members of the family, combined with the, not as yet fully developed, capacity of the child to look after himself, may have some relation to the matter. Girls showed a rather higher proportion of undernourished children than boys. A slightly greater percentage of children showed defective nutrition in 1930 as compared with 1929. The findings for Dental Defects is what might be expected in view of the present rather casual supervision of children of pre-school age. It must be noted that, although facilities exist for the detection and treatment of dental disease before school age, parents do not avail themselves of them to any very great extent. Throughout the girls show rather better findings than the boys. A slight increase in the total of dental defects is seen over 1929. Enlarged cervical glands, which have a relation both to dental defects and to undernutrition were commonest in the intermediate group, and were more often found in boys than girls. There is a big drop in the percentages as compared with 1929. 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. The girls suffered more than the boys—the usual finding—but as a whole there were fewer cases of defective vision than in 1929. As children who are wearing spectacles which correct vision are included as having normal vision, the more common practice of wearing spectacles may mask the actual amount of defective vision.

It is a recognised finding that vision is more defective in secondary than in elementary schools, but in the latter there does not appear to be any one prominent factor. It was, unfortunately, not possible, owing to pressure of routine duties, for the medical officers to conduct an investigation into the relationship, if any, between lighting, position of desks, etc., and the amount of visual subnormality.

The following Table has not been included in previous reports, and was compiled from the findings at Routine Medical Inspections, in order to ascertain the comparative amount of

visual defect in the various schools. It relates only to those children who were referred for treatment and who were consequently thought to be in need of corrective glasses. Some of the children with normal vision were wearing glasses, but these are not included. The Table therefore does not give the actual amount of visual defect, but the amount of uncorrected visual defect.

**Percentage of Children Examined at Routine Medical Inspection
Showing Visual Defect.**

School.	Inter-mediates.		Leavers.		Total Boys and Girls	School.	Inter-mediates.		Leavers.		Total Boys and Girls
	Boys	Girls	Boys	Girls			Boys	Girls	Boys	Girls	
Beulah ...	1.9	3.2	...	...	5.1	Lady Edridge ...	...	...	...	4.0	4.0
West Thornton ...	0.6	0.4	...	1.1	2.1	Ashburton ...	0.2	0.9	...	...	1.1
Purley Oaks ...	0.6	0.6	1.5	1.3	4.0	Heath Clark ...	...	...	3.0	4.7	7.7
Davidson ...	1.1	0.6	1.5	1.1	4.3	All Saints' ...	...	0.9	...	...	0.9
Howard ...	0.6	0.2	0.4	0.4	1.7	Christ Church ...	0.4	0.4	...	...	0.8
Ecclesbourne ...	1.1	3.8	0.2	1.9	7.0	Holy Trinity ...	...	0.2	...	...	0.2
Ingram ...	0.2	0.2	0.2	0.2	0.8	Parish Church ...	1.5	1.5	0.2	...	3.2
Rectory Manor ...	0.4	0.4	0.4	0.4	1.6	St. Andrew's ...	0.2	0.4	...	0.2	0.8
Oval ...	1.1	0.6	1.3	1.1	4.1	St. Joseph's ...	...	...	0.4	...	0.4
Portland ...	3.6	2.8	1.9	0.4	8.7	St. Mark's ...	...	0.6	...	...	0.6
Elmwood ...	...	...	0.2	0.4	0.6	St. Mary's ...	0.4	...	0.6	0.2	1.2
North Park ...	...	...	...	...	...	St. Michael's ...	...	...	...	0.6	0.6
South Norwood ...	0.2	1.7	0.6	1.5	4.0	St. Saviour's ...	0.2	0.6	...	...	0.8
Norbury Manor ...	0.6	0.2	...	...	0.8	Arch. Tenison's ...	0.6	...	0.2	2.6	3.4
Sydenham ...	0.6	...	0.2	...	0.8	St. Peter's ...	...	0.4	...	...	0.4
Croydon British ...	...	0.2	...	1.1	1.3	Shirley ...	0.2	0.2	...	...	0.4
Tavistock ...	0.9	0.4	2.5	1.1	4.9	Addington ...	...	...	...	0.2	0.2
Rockmount ...	0.2	1.1	0.6	0.2	2.1	Waddon ...	0.4	0.9	...	...	1.3
Whitehorse Manor ...	0.9	1.3	0.9	...	3.1						
Winterbourne ...	1.1	0.6	...	0.9	2.6						
Woodside ...	...	...	0.9	0.6	1.5						
John Ruskin ...	...	...	7.9	...	7.9						
							0.76	0.92	1.2	1.14	2.57

From this Table the school with the highest percentage of scholars in two of the groups examined, who had uncorrected defective vision was Portland (8.7%). Next came two secondary schools, John Ruskin (7.9%), Heath Clark (7.7%), and Ecclesbourne (7.0%). Schools showing a higher percentage than the average for all schools were Beulah, Oval, Davidson, South Norwood, Archbishop Tenison's, Parish, Whitehorse Manor, and Winterbourne.

Showing number of children in each school, examined in two of the Routine Medical Inspection Groups, who were referred for treatment or observation on account of defective vision.

	Intermediate.				Leavers.			
	Treatment.		Observation		Treatment.		Observation.	
	M.	F.	M.	F.	M.	F.	M.	F.
Beulah	9	15	...	...	...	...	...	...
West Thoraton	3	2	...	...	...	5	...	...
Purley Oaks	3	1	...	2	6	6	1	...
Davidson	4	2	1	1	7	5	...	...
Howard	3	1	...	...	...	2	2	...
Ecclesbourne	4	11	1	7	1	7	...	2
Ingram	1	1	...	...	1	1	...	...
Rectory Manor	2	1	...	1	1	2	...	1
Oval	4	1	1	2	5	5	...	1
Portland	16	11	1	2	6	3	3	1
Elmwood ... ..	...	...	...	...	1	...	...	2
North Park ... ..	...	...	...	...	...	...	...	...
South Norwood ... ..	...	8	1	...	3	6	...	1
Norbury Manor	3	1	...	...	...	...	...	...
Sydenham	3	...	...	...	1	...	...	...
Croydon British ... ..	...	1	...	...	...	5	...	...
Tavistock	4	2	...	...	12	4	...	1
Rockmount	1	5	...	...	3	1	...	...
Whitehorse Manor	4	6	...	...	4	...	...	...
Winterbourne	5	3	...	...	...	4	...	...
Woodside ... ..	...	...	...	...	4	3	...	...
John Ruskin ... ..	...	...	...	...	31	...	6	...
Lady Edridge ... ..	...	...	...	...	...	18	...	1
Ashburton	1	4	...	...	...	...	...	...
Heath Clark ... ..	...	...	...	...	14	17	...	5
All Saints' ... ..	...	4	...	...	...	...	...	...
Christ Church	2	2	...	...	...	...	...	...
Holy Trinity ... ..	...	1	...	...	...	...	...	...
Parish Church	7	7	...	...	1	...	...	...
St. Andrew's ... ..	...	1	1	1	...	...	...	1
St. Joseph's ... ..	...	...	...	...	2	...	...	...
St. Mark's ... ..	...	2	...	1	...	...	...	...
St. Mary's	2	...	...	...	2	1	1	...
St. Michael's ... ..	...	...	...	...	...	3	...	...
St. Saviour's	1	2	...	1	...	...	...	...
Archbishop Tenison's	2	...	1	...	1	9	...	3
St. Peter's ... ..	...	1	...	1	...	...	...	...
Shirley	1	1	...	...	...	...	...	...
Addington ... ..	...	...	...	...	1	...	...	...
Waddon	2	4	...	...	...	...	...	...
	87	101	7	19	107	107	13	19
	188				214			

TABLE XIV.

Return of Defects Found in the Course of Medical Inspection 1930.

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	33	20	1.22	32	28	1.47
UNCLEANLINESS—						
Head	3	4	0.16	2	2	0.10
Body	—	—	—	—	—	—
SKIN DISEASE	7	10	0.39	5	9	0.34
EYE DISEASES—						
Defective Vision	185	15	4.61	215	40	6.25
Squint	14	6	0.46	25	4	0.71
External Eye Trouble... ..	3	6	0.21	—	9	0.22
EAR DISEASES—						
Deafness	3	6	0.21	6	4	0.24
Otitis Media	9	3	0.28	5	5	0.24
Other Diseases	1	3	0.09	3	1	0.10
NOSE AND THROAT—						
Enlarged Tonsils only	142	140	6.49	148	121	6.59
Adenoids only	34	28	1.43	37	26	1.54
Enlarged Tonsils & Adenoids	159	50	4.81	135	47	4.48
Other Conditions	28	7	0.81	22	7	0.71
Enlarged Cervical Glands (not T.B.)... ..	4	35	0.90	—	37	0.91
DENTAL DEFECTS	320	12	7.64	281	25	7.49
SPEECH DEFECTS	1	5	0.14	—	—	—
HEART AND CIRCULATION—						
Organic... ..	2	55	1.31	4	51	1.35
Functional	—	17	0.39	—	40	0.98
Anæmia	8	24	0.74	15	32	1.15
BRONCHITIS	1	30	0.71	4	16	0.49
OTHER NON-T.B.	3	5	0.18	1	4	0.12
PULMONARY TUBERCULOSIS	—	5	0.12	1	5	0.15
OTHER TUBERCULOSIS... ..	3	7	0.23	2	2	0.10
NERVOUS SYSTEM DISORDERS (including Epilepsy, Chorea, etc.)	2	16	0.41	1	29	0.73
DEFORMITIES—						
Rickets	1	—	0.02	1	2	0.07
Spinal Curvature	57	85	2.12	92	46	3.38
Others	45	10	1.27	43	15	1.42
OTHER DEFECTS AND DISEASES	12	34	1.06	8	57	1.59
Totals	1080	588	38.41	1088	664	42.92
Total Children Examined	4343			4083		

TABLE XV.
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 1929
Entrants	2979	553	18.6	21.7
Intermediates	2880	625	21.7	26.3
Leavers	2466	495	20.1	24.0
Other Ages	101	22	21.8	25.6
	8426	1695	20.1	24.0

The fact that 18.6 per cent. of the entrants required treatment of some kind is an adverse commentary upon the comparative neglect of the child between 2 and 5 years. Initial slight effects, if unremedied, often lead to further defects as the child grows. Adenoids are a case in point, so are also decayed and septic teeth. The importance of having what may appear to be trivial childish complaints attended to promptly cannot be too strongly or too often impressed upon parents.

TABLE XVI.
CHIEF CAUSES OF EXCLUSIONS FROM SCHOOL.

Condition.	Exclusions during 1930.	Percentage of total exclusions.	Exclusions during 1929.	Percentage of total exclusions.
Ringworm—Head	10	0.15	12	0.31
" Body	36	0.52	37	0.99
Verminous Conditions	326	4.74	333	8.66
Impetigo	371	5.39	192	5.04
Scabies	19	0.28	18	0.46
Scarlet Fever... ..	358	5.20	315	9.27
Measles	2140	31.11	908	23.83
Diphtheria	236	3.43	204	5.35
Whooping Cough	192	2.79	682	17.90
Chicken Pox	877	12.75	614	16.20
Mumps	1795	26.10	63	1.65
Tuberculosis (all forms)	51	0.74	46	1.20
External Eye Disease	23	0.33	23	0.60
Sore Throat	183	2.66	98	2.57
Other Causes	261	3.80	264	6.93
	6878	...	3809	...

There were 3,069 more children excluded from school on account of various illnesses than in 1929. The chief cause was the infectious diseases, which accounted for 81.3 per cent. of the total, as compared with 74.2 per cent. in 1929. Measles and mumps were the chief individual causes, both being much more prevalent than in 1929. Exclusions for verminous conditions showed a decrease from 8.74 per cent. to 4.74 per cent. Impetigo showed an increase in actual numbers, but remained about the same in relation to total exclusions; Scarlet Fever and Diphtheria also showed a slight increase, and Chicken Pox a rather greater increase; Whooping Cough, on the contrary, declined considerably. Apart from the marked exacerbations of Measles and Mumps, both of which were not troublesome in 1929, the other chief causes of exclusions remained much the same in numbers.

TABLE XVII.
CAUSES OF DEATH IN CHILDREN OF SCHOOL AGE.

	1930.	1929.
Pneumonia	3	3
Measles	8	—
Respiratory Disease (not Pneumonia or Tuberculosis)	2	1
Infectious Disease (not Tubercular)	11	14
Tuberculosis (all forms)	8	7
Diseases of the Digestive System	4	4
*All other causes	29	27
	65	56

In the infectious diseases group Diphtheria 11, was the cause of death.

*Among other causes Violent Deaths (10), Organic Heart Disease (7), and Meningitis (3) were the most prominent.

Taking the school population as 25,235, the death-rate per 1,000 in school children was 2.6. Measles caused 8 deaths as against none in 1928. Among the other causes of death it is instructive and sad to see that violent deaths were doubled in number.

SECTION III.

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 XIX.

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.	
Beulah ...	1192	7	5	1	114	16	12	109	1	15	5	2	...	18	22.0
Croydon British...	563	6	3	...	2	...	...	1	1	1	1	1	...	...	2.0
Davidson ...	716	20	13	...	77	...	11	171	...	16	9	2	1	20	41.0
Ecclesbourne ...	926	13	17	...	119	2	13	59	...	17	6	2	2	11	24.0
Howard ...	389	7	1	...	30	11	15	31	...	3	2	1	...	1	24.0
Ingram ...	1193	18	21	...	101	11	20	34	...	14	19	...	...	4	18.0
North Park ...	1052	16	10	...	58	4	13	45	...	48	...	...	...	25	14.0
Norbury Manor	884	8	3	...	51	...	56	40	...	4	1	1	...	4	18.0
Portland ...	1109	16	1	...	65	...	19	50	...	12	2	...	...	1	14.0
Purley Oaks ...	508	3	7	...	7	3	1	41	...	5	1	1	1	3	13.0
Rectory Manor ...	958	9	35	...	64	6	9	121	3	21	19	1	1	8	26.0
Rockmount ...	503	3	29	2	49	1	...	2	...	3	8	2	2	...	17.0
South Norwood	914	9	4	...	29	1	44	12	1	16	2	4	...	5	11.0
Sydenham ...	736	3	4	...	59	1	27	16	...	18	1	4	...	23	15.0
Tavistock ...	847	10	7	...	80	...	10	76	2	14	4	...	...	37	21.0
West Thornton ...	1447	24	12	...	136	52	88	154	2	18	24	4	...	17	32.0
Whitehorse Manor	1056	8	11	...	114	...	40	6	1	21	1	1	1	11	17.0
Winterbourne ...	1378	39	2	...	153	2	95	46	...	4	7	...	...	4	24.0
Woodside ...	999	12	2	1	88	...	44	103	1	10	4	1	...	13	25.0
John Ruskin ...	401	2	...	...	...	...	...	...	...	...	...	...	...	...	0.5
Lady Edridge ...	300	...	...	...	...	...	...	8	...	...	1	1	...	...	0.3
St. Christopher's	81	...	...	...	1	...	1	2	...	3	1	...	...	...	5.0
St. Giles ...	71	1	1	...	15	...	1	5	...	1	2	...	...	...	32.0
All Saints' ...	305	3	1	...	41	...	1	3	...	5	...	...	...	...	16.0
Arch. Tenison's ...	386	14	...	...	5	...	...	34	1	4	2	...	...	2	14.0
Christ Church ...	541	8	7	...	52	6	56	49	...	1	10	...	...	8	33.0
Holy Trinity ...	288	3	2	...	61	3	2	4	...	4	...	...	...	9	26.0
Parish Church ...	564	14	5	...	39	7	9	87	1	13	15	1	...	9	29.0
Shirley ...	184	...	...	...	3	...	28	15	...	...	2	...	...	...	25.0
St. Andrew's ...	417	5	4	...	44	10	43	105	1	17	...	2	...	5	50.0
St. Joseph's ...	204	...	...	...	...	...	2	...	...	...	...	...	...	...	1.0
St. Mark's ...	164	...	1	...	6	...	12	3	...	5	3	...	...	2	13.0
St. Mary's ...	347	8	4	...	15	...	13	27	2	8	1	...	...	4	19.0
St. Michael's ...	202	4	2	...	1	...	5	2	...	...	2	...	...	1	17.0
St. Peter's ...	187	1	7	...	21	1	3	31	...	2	2	...	1	...	34.0
St. Saviour's ...	409	6	...	...	36	1	4	4	...	2	...	2	...	4	12.0
Waddon ...	760	34	5	...	192	31	97	231	...	37	7	1	1	2	78.0
Ashburton ...	443	6	4	...	103	1	29	2	1	2	1	...	...	...	33.0
Oval ...	638	2	1	1	86	...	43	59	1	7	18	...	...	9	62.0
Heath Clark ...	408	2	3	...	8	...	...	6	...	...	...	2	...	...	5.0
Addington ...	68	2	...	...	15	10	3	...	...	...	...	...	...	...	44.0
Gonville ...	225	2	2	...	...	12	2	1	...	...	...	...	...	1	9.0
Totals ...		348	236	5	2140	192	877	1795	19	371	183	36	10	261	

The percentage incidence is calculated on the average school population over the year at each school.

Waddon showed the highest incidence (78%) of all infectious diseases; this was due to a number of cases of Mumps, Measles, and Chicken Pox. Next came Oval with 62.0%, due to the same causes, then St. Andrew's (50%), Davidson (41%), Christ Church (33%) and Ashburton (33%). The lowest incidence was found in Croydon British, Gonville, St. Saviour's, South Norwood, Purley Oaks, Portland and North Park.

The foregoing table shows that there was a heavy incidence of measles at Waddon (192), Winterbourne (153), West Thornton (136), and Ecclesbourne (119). These schools, as might be expected, differ from those in which the incidence was heaviest in 1929.

There was a somewhat heavy incidence of chicken pox in Waddon (97), Winterbourne (95), and West Thornton (88).

Whooping Cough was conspicuous in West Thornton (52) and Waddon (31).

Scarlet Fever showed its heaviest incidence in Winterbourne (39), Waddon (34), West Thornton (24), and Davidson (20). Diphtheria was heaviest in Rectory Manor (35), Rockmount (29), Ingram (21), and Ecclesbourne (17).

Measles was most prevalent during the first half of the year. Scarlet Fever maintained a uniform incidence throughout the year. Diphtheria showed an average of some 8 cases a week with a small exacerbation during October and the first half of November. Whooping Cough was not very troublesome until December, when the number of cases rose. Chicken Pox was prevalent throughout the first five months of the year, with an increase at the beginning of December. Mumps was prevalent during the first six months of the year, but died away during the second half.

Schick Testing and Immunisation Against Diphtheria.

During 1930 the department has been called upon to carry out this procedure in four residential institutions within the Borough. In a few cases it has also been done at the request of parents anxious to protect their children against Diphtheria. A brief description of the procedure was given in my report for 1929.

The experience of many authorities, both in this and other countries, in which the method has been widely used, seems to prove that a real protection is afforded against the disease. This is also borne out by the experience of the Russell Schools (Ballards) and the St. Olave's Schools of the Bermondsey Guardians, where the method has been put into operation and shown to be a decided protection. No ill effects have arisen in any of the cases who submitted to the test and subsequent immunisation.

Shirley Schools.

The School Medical Report for 1929 contained a full account of the testing, immunisation and subsequent re-testing carried out by the Croydon school medical staff. Under the terms of the Local Government Act, 1929, the schools passed on April 1st, 1930, under the control of the London County Council, and since then Croydon has carried out no further Schick methods. In March, 1930, the last entrants to the schools were tested. In all, 45 were tested, and of these, 17 were negative and 28 positive. The 28 positives were immunised with 3 doses of T.A.M., but during the injecting period 2 children contracted a mild attack of Diphtheria, after their second dose. No re-testing was done for the reason above mentioned.

Russell Schools (Ballards).

Routine testing and immunisation against Diphtheria was continued during the year in these schools. It is instructive to note that no case of Diphtheria has occurred in this community of boys during the past four years. All entrants are tested and immunised. All boys after their immunity treatment are submitted to a confirmatory test; 15 boys immunised in 1929 came up for this test in 1930, 14 were negative, the remaining boy, who was positive, was given a further series of three injections, and on subsequent re-testing was found to be negative. Twenty-eight new boys were tested for the first time; 22 being positive and 6 negative. The positives were immunised, 20 with three doses, one with two doses. 15 are awaiting re-test in 1931; the remaining 7 were re-tested in 1930, and all found to be negative.

St. Monica's.

Diphtheria had been oo continual annoyance in this Home for some months. Most of the girls attended St. Andrew's School

and a considerable loss of school attendance had resulted. Members of the staff of the Home were also attacked. Arising out of the usual investigations several diphtheria carriers were found. It was put to the Church Army Authorities that immunisation would be a useful course of action, and they decided to have the children tested and, if necessary, immunised. Thirty-eight were tested, of whom 21 were negative (some of these had already had an attack of Diphtheria) and 17 were positive. There was one pseudo-positive and one pseudo-negative. Of the positives, 13 were given three doses, 2 were given two doses, and 2 were given one dose. (These latter have now left the school). These children will be ready for re-testing in 1931. No more cases of Diphtheria have occurred as yet.

Gordon Boys' Home.

An invasion of Diphtheria occurred in this institution during the year. At the request of the authorities the boys were all submitted to the Schick test, and those found susceptible given immunising injections. In all, 29 boys were tested, 14 were positive and 15 negative; of these, 3 showed pseudo-negative and 3 pseudo-positive reactions. One boy, found to be positive, was also found to be suffering from Diphtheria and was removed to the Borough Hospital. Eight boys were given 3 doses (of these, 3 have now left); 1 was given two doses and 4 were given one dose. Ten boys came up for re-testing during the year and all were negative. Diphtheria now has ceased in this institution.

Four requests for Schick treatment were received from private individuals during the year. Three children were found positive and given three doses of T.A.M.; one found to be only mildly positive was given one dose only. These children will be re-tested in 1931.

One child was submitted to the Dick test for susceptibility to Scarlet Fever. She gave a history of having had Scarlet Fever twice, and was found to be negative to the test.

SECTION IV. FOLLOWING UP.

There are 19 school nurses, 17 of whom devote 5/11 of their time to school work, and two who are 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 two whole-time dental assistants.

Perhaps the most arduous part of a school nurse's work, and certainly the most important and valuable, is home visiting. This work demands perseverance, tact and good nature if satisfactory results are to be achieved. A small increase in the number of these visits is recorded in 1930 in spite of a heavy incidence of sickness in the Health Visiting Staff.

In addition the nurses assist at routine and special medical inspections in the schools and pay periodical visits to schools for cleanliness surveys.

The results of the cleanliness surveys show a steady improvement in the state of the children. With the helpful co-operation of the Chief School Attendance Officer and his staff, one or two of the recalcitrant offenders have been proceeded against in Court, others have been brought before the Committee and warned. Since these steps were taken, the nurses report a decided change for the better in those schools which previously gave persistently unsatisfactory findings. There are still, however, certain families which play a prominent part in spoiling the figures for some of the schools.

The following table summarises the visits paid, etc., in connection with these duties :—

School Visits.

Visits to Schools re Cleanliness	...	...	...	40
Visits to School Departments re Cleanliness	...	...	...	357
Number of children inspected for cleanliness (first inspection)	...	...	...	60662
Number of children inspected (subsequent inspections)	...	...	...	4263
Number of children found unclean (first inspection)	...	...	...	2505
Number of children found unclean (subsequent inspections)	...	...	...	1123

Home Visits.

Concerning uncleanliness	131
Concerning defects found at routine medical inspections	2080
Subsequent visits re defects found at routine medical inspections	1007
Visits re special cases	977
Visits to dental cases	763
Visits in connection with infectious cases and other visits	18857

These figures show an increase of 3,714 in the number of children inspected for cleanliness; of 2,347 in visits paid in connection with infectious cases and other visits for miscellaneous reasons; of 214 in the following-up visits to Dental cases, and 136 in visits to special cases. A decrease of 763 in the visits made regarding defects found at routine medical inspections; of 251 in subsequent visits relating to the same defects, and of 57 in the home visits regarding uncleanliness.

TREATMENT.**The Work of the School Clinics.**

TABLE XXV.
SUMMARY OF ATTENDANCES.

	1930.	1929.	Increase or Decrease.
Minor Ailments Clinics	9328	4047	+ 5281
Inspection Clinic	1566	1610	— 44
Dental Clinics	13046	9752	+ 3294
Ophthalmic Clinic	2353	2414	— 61
Orthopaedic Clinic	2657	2387	+ 270
Remedial Exercises Clinic	11454	9950	+ 1504
Ear, Nose and Throat Clinic	1811	1544	+ 267
Ionization Clinic	516	460	+ 56
	42731	32164	+ 10567

The greatest increases are seen in the attendances at the Minor Ailments Clinic, the Dental Clinic, and the Remedial Exercises Clinic. The aggregate increase in the attendances at the Clinics emphasises their utility and the appreciation which the parents have of the services rendered. It is doubtful if many of the cases dealt with would have gone to a private medical man on account of the expense thereby incurred. On the other hand, especially with relation to the Nose and Throat and the Ophthalmic Clinics, children are not seldom referred from the private medical attendant for treatment.

The Minor Ailments Clinic.

This Clinic is held each morning at the Lodge Road Clinic. One nurse is in attendance for the whole session and a doctor attends daily to see cases referred to him. He does not spend his whole morning here, however. The scope of the treatment given is clearly shown by the table. Medical cases or cases requiring surgical measures are referred to their private doctors. The aim of this clinic is to render first aid and to treat the minor disabilities peculiar to school children, and to advise should further measures be necessary.

On the other hand, the average number of attendances made before ringworm of the scalp was cured fell very markedly. The fact that X-Ray treatment was once more available contributed towards this.

TABLE XXVI.

Complaint.	1930.			1929.		
	Cases.	Attendances.	Average No. of Attendances per case.	Cases.	Attendances.	Average No. of Attendances per case.
Ringworm of Scalp ...	31	197	6.3	30	666	22.2
„ Body ...	28	413	14.7	46	220	4.8
Scabies ...	37	288	7.8	21	85	4.0
Impetigo ...	276	2284	8.3	176	694	4.0
Other Skin Diseases ...	132	449	3.4	88	150	1.7
Otorrhœa and other Ear defects	231	2854	12.4	179	982	5.5
External Eye Disease ...	132	781	5.9	118	398	3.4
Miscellaneous ...	325	2062	6.4	283	852	3.0
	1192	9328	7.8	941	4047	4.3

From this table it is seen that the average number of attendances per child rose from 4.3 to 7.8; the sectional increase being most noticeable for ringworm of the body. 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 have also shown a small increase.

No attempt has been made to treat ringworm by means of thallium acetate, a drug with the peculiarity when taken by mouth of causing depilation of the scalp. It is not, however, without danger, and should never be given unless the child is kept in hospital and under constant medical supervision.

Adenoids and Enlarged Tonsils.

During 1930, 312 cases of tonsils only, 80 cases of adenoids only, and 340 cases of adenoids and enlarged tonsils, a total of 732 cases, were recommended for treatment. In 608 cases the Local Education Authority was requested to arrange for the operation.

There were 110 operating sessions at the Croydon General Hospital. The work is done by a rota of 8 general medical practitioners working in pairs, as surgeon and anaesthetist, for periods of 3 months, and remunerated by the Education Committee. All other expenses of the clinic are also borne by the Committee.

608 children were examined at the Throat Clinic prior to the operation.

608 children were operated upon. In 117 cases detention in the hospital was necessary; 491 were conveyed home by ambulance a few hours after the operation.

In all there were 227 non-attendances.

In 16 cases the operation was not successful in as much as tonsillar tissue to a greater or less degree was left behind. In 5 of these cases a second operation was successfully performed.

Of the 608 children operated on 390 (64%) attended the Remedial Exercises Clinic for post-operative breathing exercises. This is a very important complement to the operation and is of perhaps equal importance. It is, therefore, gratifying to note that the percentage of children operated on, who attended for exercises, rose from 42 last year to 64 in 1930.

76 cases came to the knowledge of the department where 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.

The Inspection Clinic.

This is held on Wednesday, Friday and Saturday mornings. Friday is reserved for rheumatic cases, and a special report by Dr. O'Connell and Dr. Gavin is given later in this report. 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. 1,566 attendances were made by children during the year.

TREATMENT OF VISUAL DEFECTS.

TABLE XXVIII.

	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 ...	683	22	3	708	539	25	550	21
	683	22	3	708	539	25	550	21

Orthopædic Work.

The orthopædic scheme under the Council comprises a diagnostic and treatment clinic under Mr. Alan H. Todd, which is held at the Croydon General Hospital every Thursday morning. A Remedial Exercises Clinic, is held in St. Andrew's Hall, Pump Pail, daily. Children are referred to this Clinic from the Orthopædic Clinic at the General Hospital and from the School Medical Officers. Each fortnight the children are seen by a doctor in order to observe the effects of treatment and to order any variation that may be thought necessary. There is also St. Giles' School for physically defective children in Winterbourne Road. Massage is carried out at the Croydon General Hospital, St. Andrew's Hall and St. Giles' School, at the two latter the work is shared between the two full time masseuses of the school medical and maternity child welfare departments. Figures relating to the Clinic at the General Hospital are given in the Orthopædic Section of my Annual Health Report, the figures below relate to Clinics held at places other than the Croydon General Hospital.

Spinal and Other Remedial Clinic.

1930.			1929.		
	Attend- ances.	Sessions.	Av. aff.	Attend- ances.	Sessions.
Spinal	4,043	430	9.4	3,258	292
Massage	143	140	1.0	767	239
Other Remedial ...	5,979	440	13.1	5,616	349
	<hr/> 10,165	<hr/> 1,010		<hr/> 9,641	<hr/> 880

St. Giles' School.

Total number of sessions	...	...	...	...	202
Total number of attendances	...	...	...	...	1289
Average attendance at each session	...	...	...	...	6
Total number of female patients	...	...	...	...	17
Total number of male patients	...	...	...	...	16
Total number of patients	...	...	...	...	33

CONDITIONS FOR WHICH REFERRED.

	M.	F.	Total.
Infantile paralysis	6	8	14
Hemiplegia	2	3	5
Kyphosis	1	1	2
Lordosis	—	1	1
Scoliosis	—	2	2
Breathing cases	2	—	2
Cretinism	—	1	1
Muscular dystrophy	1	—	1
Paraplegia	1	—	1
General muscular inco-ordination	2	1	3
Osteo-myelitis	1	—	1
	<hr/> 16	<hr/> 17	<hr/> 33

Cases still under treatment ... 23

The Incidence of some Common Defects compared for Various Schools.

Eight schools were taken and divided into three classes, according to the economic and social status of the majority of the children attending. In this division we had the assistance of the Education Department.

With regard to nutrition, children regarded as definitely sub-normal only are included. For Adenoids and Enlarged Tonsils, children referred for observation or treatment; and for Rickets those showing definite signs of having suffered from this trouble earlier in life. The figures are percentages of the total children examined.

A.—Schools Classified as Good.

	Nutrition.			Nose and Throat defects.			Signs of Rickets			Condition of the Teeth. Percentages sound		
	Entrants	Interned.	Leavers.	Entrants.	Interned.	Leavers.	Entrants.	Interned.	Leavers.	Infants.	Boys.	Girls.
Winterbourne ...	7.1	2.6	17.0	13.7	5.3	2.3	1.0	1.1	0.0	30.1	61.9	45.4
Norbury Manor ...	0.0	7.2	...	5.2	5.0	...	2.6	0.7	...	...	37.0	27.1
Portland ...	1.8	0.7	0.0	28.0	13.6	7.4	...	1.4	...	62.3	39.5	42.1

B.—Schools Classified as Medium.

Ingram ...	7.8	17.6	11.4	9.8	7.2	1.9	1.0	0.0	0.0	26.3	32.0	37.1
Waddon ...	16.0	18.7	...	12.8	7.8	...	1.6	0.6	...	19.8	34.0	21.9

C.—Schools Classified as Poor.

West Thornton ...	22.6	16.1	13.5	16.1	8.5	7.2	3.0	0.0	0.0	26.6	21.3	27.4
Elmwood ...	1.8	4.8	nil	21.0	21.4	5.8	0.0	0.0	0.0	23.6	30.1	31.2
Whitehorse...	21.2	12.8	10.2	21.2	8.5	6.1	0.0	0.0	0.0	21.8	33.1	32.1

Two schools, viz., Elmwood and Portland, were taken by one of the medical officers, whilst the other six were all taken by another medical officer. The influence of the personal equation is seen in the nutrition figures; obviously the first medical officer took a lower standard as his normal than the second. Norbury Manor and Waddon did not furnish "Leaver" groups.

Making allowances for the personal equation, it is seen that the poorer schools furnish a higher number of children who are under-nourished and who have defects of the nose and throat and

teeth. For evidences of rickets, however, the "good" schools give the worst figures. Rickets is as much a disorder brought about by over-feeding and insufficient exercise, as by purely environmental factors. A child, in his early years, who is fed on plain food and gets plenty of exercise in the open air, is less liable to develop rickets than the pampered, over-fed and over-clothed child.

THE SCHOOL DENTAL SERVICE.

Inspection and Treatment of Elementary School Children in 1930.

I am indebted to Mr. W. G. Senior, the senior school dentist, for the particulars in this section.

A third dental surgeon was appointed to the staff during the year and commenced his duties at the beginning of April.

The work of the Dental Clinic consists chiefly in the inspection and treatment of school children, and in addition the treatment of patients referred under Maternity and Child Welfare, Tuberculosis, and Mental Deficiency schemes. During the year the scheme has been extended by the appointment of an additional dental surgeon, and the opening of a new Clinic in the South Norwood district. As the extension was in operation for only nine months of the year the full effect is not likely to be apparent until the work of 1931 is reviewed. The average number of children served by each dentist is now 7,000 as against 10,000 for the whole of England and Wales. Sir George Newman gives 5,000 as a satisfactory number per dentist under present economic conditions, and 2,300 under ideal conditions. So far as school children are concerned the following figures summarise the work done:—

Patients examined ...	20,710	Patients treated ...	8,131
Attendances ...	13,046	Fillings ...	4,501
Extractions ...	14,106	"Gas" cases ...	2,395
Other operations ...	1,461		

Sessions held :—

Inspection ...	151	Treatment ...	1,024
Administration ...	26	Total sessions ...	1,201

In addition 149 sessions were occupied in other than school work. £363 18s. 6d. was received from patients for treatment, and £18 15s. 10d. 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.

Inspection and Treatment.—*Inspection.* 151 sessions were devoted to school inspection, this being an increase of 40 on the total for 1929, due to the re-inclusion of the five-year-old entrants and Central School children.

The age groups dealt with were 6, 7, 8, 9, 10, 11, 12, 13, 14 years for re-inspection, 5 and 6 year-old entrants, and the whole of the children attending Central Schools.

The total number of children examined was 19,076, of whom 12,049 were found to be in need of treatment—63% as in 1929.

The following Table indicates the steady improvement in the state of the teeth since 1924, as shown by the gradual reduction in the number of children requiring treatment. As a result of the extension of the work, referred to above, the next few years should show a still further reduction.

Year.	1924	1925	1926	1927	1928	1929	1930
Percentage of Children Referred for Treatment	82	75	68	61	61	63	63

Summary of all Examinations.

Age.	Sex.	1930.			1929.		
		No. Examined.	No. Referred for Treatment.	% Teeth Sound.	No. Examined.	No. Referred for Treatment.	% Teeth Sound
5 years	B	872	655	25.0	56	42	25.0
	G	786	571	27.0	57	42	25.0
6 "	B	1171	829	30.0	1232	824	33.0
	G	1262	927	26.0	992	740	26.0
7 "	B	1214	823	31.0	1101	754	32.0
	G	1374	937	32.0	1037	696	33.0
8 "	B	1193	795	33.0	997	690	31.0
	G	1061	630	40.0	999	640	36.0
9 "	B	960	597	38.0	1213	821	33.0
	G	1055	640	41.0	1192	767	36.0
10 "	B	1354	828	39.0	718	411	43.0
	G	1368	780	42.0	689	450	35.0
11 "	B	843	524	38.0	508	298	42.0
	G	789	454	42.0	563	322	43.0
12 "	B	649	381	41.0	531	286	47.0
	G	653	390	40.0	588	317	47.0
13 "	B	620	336	46.0	618	358	43.0
	G	644	330	49.0	596	309	49.0
14 "	B	513	348	32.0	89	34	62.0
	G	514	263	49.0	84	49	42.0
15 "	B	123	50	59.0	...	...	...
	G	58	19	66.0	...	...	...
Total Boys	...	9512	6108	35.6	7063	4518	36.0
Total Girls	...	9564	5941	37.8	6797	4332	36.2

The above Table includes all the children examined at routine examinations and therefore comprises (a) children seen for the first time, (b) children treated regularly since 1924, (c) children whose parents had previously refused treatment. A further analysis under these heads has been made and is given below.

The summary indicates a decrease in the number of children requiring treatment as the higher age groups are reached, due to the fact that they have been under treatment for a number of years. It is interesting to note that the sexes show little difference, also the remarkable similarity in the figures for the two years, with the exception of the 14-year group in 1929 and the 15-year group in 1930. Both these groups contain small numbers of children with the result that the percentages do not present an accurate picture.

The condition of the entrant groups—the five and six-year old children—still remains bad, and must be attributed to neglect in pre-school years. The addition of a third dentist has made possible more frequent visits to centres, where special attention is being paid to instruction in oral hygiene in “toddlers.” This work should have the effect of improving the condition of the teeth of future five and six-year old entrants, but it will be necessary for mothers to appreciate the importance of dental care during the pre-school years, before much progress will become evident.

The analysis referred to above, shows the condition of the teeth of (a) all children examined, (b) children who had previously completed treatment, and (c) those whose parents had previously refused or neglected to complete treatment.

	Healthy.	Less than 4 teeth decayed.	More than 4 teeth decayed.
	per cent.	per cent.	per cent.
All Children examined	38.8	44.5	16.6
Children who had previously completed treatment	61.6	33.1	5.3
Children who failed to obtain complete treatment	7.9	67.6	34.5

The above Table requires little comment, save that of the 7.9% children found to be healthy in spite of refusal to obtain treatment when advised, it is possible that parents later did obtain treatment as the result of pain.

Treatment.

The parents of the 12,049 children, found at routine inspections to require treatment, were notified and advised to obtain treatment either privately or at the Dental Clinic. 6,733 consents requesting clinic treatment were returned—55.9% as against 57.1% in 1929, 54.8% in 1928, 52.6% in 1927. Of the above number 6,187 received treatment before the close of the year—91%.

	1928.	1929.	1930.
Number of children requiring treatment	9516	8850	12049
Number of consents to clinic ...	5219—54.8%	4862—57.1%	6733—55.9%
Number of private treatments promised	1401—14.7%	1813—18.4%	2596—21.5%
Number of "no decision," i.e., forms not returned ...	1994—20.9%	1898—21.4%	2368—19.6%
Number of definite refusals ...	902— 9.6%	277— 3.1%	352— 3.0%

The above figures show that the improvement, noted last year, has continued, and that the number of definite refusals and forms not returned has been reduced from 30.5% in 1928 to 22.6% in 1930.

There has been a gradual increase in the number of promises to obtain private treatment, and it may well be that the promise is in some instances an evasion. In order to estimate the value of the promise to obtain private treatment, opportunity was taken of re-inspection to note the condition of children who had been promised private treatment in 1929. There were 1,813 promises of treatment during 1929, and of that number 1,720 were re-inspected during 1930, only 20.7% were found to require no further treatment. When this figure is compared with the 61% healthy children who had completed clinic treatment it is clear that little private treatment had been obtained.

"Special Cases."

1,634 "special" cases were treated in addition to routine children. These comprised (a) cases requiring treatment prior to the operation for the removal of tonsils and adenoids, (b) cases referred by the School Medical Officers, (c) cases referred by the Tuberculosis Officer, (d) "casuals" referred by head teachers as needing treatment for acute conditions; the latter group and many of (a) being chiefly those who had previously refused treatment. A portion of two sessions per week, 9-10 o'clock Mondays, 2-3

o'clock Wednesdays, is set apart for treating head teachers' special cases. There were 199 such sessions and 1,891 cases attended compared with 163 and 1,773 for 1929.

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 purpose of comparison with previous years.

	1926.	1927.	1928.	1929.	1930.
Number of new cases per session ...	8.3	8.7	8.9	9.2	7.9
Attendances per session ...	11.9	13.3	13.8	14.0	12.6
Fillings ...	5.7	5.2	6.1	4.6	4.3
Extractions ...	13.5	14.2	13.1	14.9	13.7
Other operations ...	1.1	1.4	1.8	2.1	1.5
Gas cases during the year ...	1495	1894	1638	1791	2395
<i>Ratio of fillings to extractions—</i>					
	1927.	1928.	1929.	1930.	
Permanent teeth extracted ...	1039	1020	1279	2001	
Permanent teeth filled ...	1653	2406	1926	2763	
Ratio of fillings to extractions ...	1:0.6	1:0.4	1:0.6	1:0.7	
Temporary teeth extracted ...	8013	8101	9081	12105	
Temporary teeth filled ...	1702	1829	1326	1732	
Ratio of fillings to extractions ...	1:4.7	1:4.4	1:6.8	1:6.9	

As noted last year, too much time is devoted to the extraction of teeth rather than to filling, *i.e.*, saving teeth. During the past year this has been due to the inclusion of a large number of children from central schools who have not had the opportunity of treatment for a period of years, and who in consequence have required a large number of permanent extractions. The extension of the scheme will without doubt result in an improvement in the ratios shown above.

Special Treatments.

Partial dentures to replace lost incisors, 4.

Orthodontia.

Regulation or straightening of teeth which have become displaced through nasal obstruction, or maldevelopment of the jaws, is an important branch of dental treatment. Regulation is necessary not merely to improve the appearance but to render teeth functional. During the past year a number of cases have been treated by extraction, and 14 cases have been treated by means of simple regulation apparatus. Cases requiring long and costly treatment have been advised to obtain private advice, and where parents could not afford such advice they have been referred to London Dental Hospitals.

Appointments—

Routine appointments made	...	...	...	15005
Routine appointments kept	...	...	...	9253—61%
Special appointments made	...	...	...	1315
Special appointments kept	...	...	...	902—68%

Following Up.

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 273 such forms were issued.

Preventive and Educative Measures.

Parents are encouraged to attend the Clinic with their children, and opportunity is taken to give "chair side" talks, many points of doubt being made clear as a result. Talks are given to parents in school at the conclusion of inspections of five and six-year olds. Leaflets setting out rules for the prevention of decay are given to all parents attending the talks.

As previously reported a gramophone record of a talk on the care of the teeth, made by the Chairman of the Dental Board, is available for the use of teachers of hygiene. It is also taken to schools when dental inspections are held.

A branch Dental Clinic was opened at 209, Selhurst Road, in April, 1930. Since its inception 3,285 attendances by children have been made, 1,035 fillings and 3,040 extractions carried out; 277 sessions being devoted to treatment and 45 to inspection. The average attendance per session was 11.7 as against 13.0 at the Lodge Road Clinic. The smaller number is due to the fact that the Selhurst Clinic took some time to get known. In addition, dislocation was caused through the illness of the Dental Clinic Nurse.

The figures for this Clinic have been included in the main dental tables, and no comparison of the work as between the two Clinics has been made, as a number of cases would have been counted twice owing to their having been transferred from Lodge Road when the Selhurst Clinic was opened. It will be possible to make such a comparison in 1931.

IONIZATION CLINIC,

This Clinic for the treatment of chronic otorrhœa was opened in July, 1928, and Dr. J. D. MacLaggan, of the London County Council, was appointed the part-time specialist officer. I am indebted to Dr. Watson, the deputy school medical officer, who is in charge of the Clinic, for the particulars given below.

The continuous nature of the treatment and observation of cases makes a report on the work of any one year unsuitable or even impossible. This report, therefore, refers for the most part to the work of the Ionization Clinic since its inception in July, 1928. Sessions have been held weekly in 1930, and there has been no lack of patients. It was hoped that as time went on a dwindling waiting list would allow of regular reinspection of old cases. This hope has been only partially realised. At one time during the year the waiting list was reduced and old cases began to be called up, but with a persistent influx of new cases it is now only possible to see a few old cases at irregular intervals, and it is not possible to see every old case at intervals of six months, as is desirable. At the end of the year there were 31 cases on the waiting list. The continuous flow of fresh cases is somewhat astonishing after the existence of the Clinic for two and a half years. There is certainly a definite improvement as regards duration of the disease (see Table XXVI), but many long-standing cases are still brought to light. It would be almost impossible without a special investigation, involving the examination of all school children, to estimate the incidence of otorrhœa in the school population. Figures obtained at routine inspection are misleading because, if the condition is quiescent or intermittent, interrogation is the only means of ascertainment, and neither children nor parents give reliable information about otorrhœa. Many of the cases coming on the waiting list are intermittent, thus accounting for the continued influx of old chronic cases as activity recurs. Also, otorrhœa is accepted with such unconcern by some parents that treatment is not sought, and it is only the coincidence of a school inspection with activity of the otorrhœa that enables the case to come under treatment.

Before showing statistically the work of the Clinic it is permissible to give a general impression of its value and at the same time refer to the important period between the times when the respective terms "dry at end of treatment" and "cured" can be used; a period which is all-important to the clinician in his assessment of results, but which is difficult to portray statistically. A

scrutiny of the figures might give an observer a false impression of the results of ionization. This impression would be specially likely to occur in a casual observation of Table XXI., where a dwindling percentage of "dry" cases is recorded as time passes. Leaving out the fact that the numbers upon which the percentages are calculated for the two years period are so small as to allow of no firm deductions, it is still reasonable to assume, from the figures, that permanent results are not obtained. This assumption may or may not receive confirmation when, say, 100 cases have been ionized and observed over a period of two years. At present only 14 cases are available for such a report. The impression is that the percentage of cases of all clinical varieties which can be written off as "cured" after two years will not be large, but the percentage of dry at the end of six months will remain high. Six months' freedom from discharge is no small gain. If all those who relapse were to report at once, one or two applications would generally suffice to ensure, at the least, a further period of six months freedom. What must not be assumed is that cases failing to report "no discharge since ionization" are failures. In many cases there has been only a slight recurrence, but even if this relapse is followed by years of freedom the case continues to be omitted from the numbers, shown as dry at all subsequent periods. The cases, often even in spite of aggravating conditions, clear up in a way not seen in treatment by "drops." Very few relapse soon after treatment. A relapse at any time usually quickly clears up with further applications and, in the absence of some other septic focus, such as a buried tonsil, the "cure" tends to become permanent as time goes on. It is noticeable, also, that in relapsing cases the discharge is less noticeable than in untreated cases. Some very unpromising cases have been undertaken, not with any reasonable hope of cure, but because the value of ionization lies in its power as a sterilising and astringent agent and by its means a cleaner ear can be ensured.

Parents are appreciating the treatment and attending well once regular attendance is established; indeed, several have asked for an extension where the child has left school during treatment. It is disappointing, however, to find cases which have relapsed and not reported the fact. These cases attend well once an appointment is given, the obstacle seems to be inertia in establishing connection with the special clinic again. The standard of cure is high and difficult of attainment, for a damaged ear is always liable to resume activity with the advent of fresh infection even in the form of a common cold. A very favourable impression has

been formed of the value of ionization, and if it was possible to adopt a standard for the term "failure" the number so classified would be very small.

	1928.	1929.	1930
No. of sessions held ...	13	38	51
No. of first attendances	48	130	95
No. of re-attendances ...	104	330	475

Cases attending may be divided into three groups:—

I.—Those found to have no evidence of otorrhœa past or present, or deafness of more than a trivial or temporary nature. Cases of wax, furuncle, and otitis externa (simulating otitis media) come into this group. There were 20 such cases.

II.—Cases complaining of deafness only. Some of these were due to old otitis media. Nineteen of these cases attended.

III.—Cases of otorrhœa, active, quiescent, or cured, 203 cases.

Group II.

The diagnosis and disposal of the cases in this group were as follows:—

One was due to wax; cured by its removal.

Three were due to old middle-ear disease and were referred as suitable for a hard of hearing class.

Six were due to Eustachian blockage. Four of these were treated by the Eustachian catheter with great improvement, two being discharged with almost normal hearing.

Two required an operation for tonsils and adenoids for which they were referred.

Two were referred for operation for tonsils and adenoids previously done unsuccessfully. One of these benefited greatly, the other has not yet been reinspected.

One was put under observation pending a definite diagnosis.

Group III.

(a) Found dry and requiring no treatment—82.

(b) Found dry, but recommended for accessory treatment such as tonsillectomy—18.

(c) Active cases—103.

Cases attending and receiving successful treatment of a relapse are not shown again in the table as anything but failures. Were these cases regarded as new cases very convincing figures could be obtained, but they would not be strictly accurate.

One is under treatment with the Eustachian catheter but is possibly an early case of otosclerosis.

Three were cases of nerve deafness, one of them following mumps. One of these was referred for a hard of hearing class.

Table XXIX shews the duration of the otorrhœa in Group III and Table XXX gives the causes assigned by the relatives.

TABLE XXIX.

Duration of Otorrhœa.

Less than 3 months	3—6 months	6 months— 1 year	1—2 years	2—5 years	More than 5 years	Unknown
11 (11)	12 (4)	6 (8)	5 (13)	12 (41)	17 (28)	12 (23)

The figures in this table refer to the year 1930, those in brackets being the figures for 1928-1929. As anticipated, the average duration has fallen, although not markedly. But there is still a large number of very chronic cases turning up. A great many start in infancy or early childhood, but experience with one or two under school age has shown that while early treatment is beneficial it is difficult to obtain the co-operation of the patient in the delicate manipulation required. The maintenance of a healthy throat and nose in early childhood, with consequent prevention of infected ears, is the rational way of tackling the problem.

TABLE XXX.

Causes of Otorrhoea (as obtained in history given by parents).

Scarlet Fever	19	Whooping Cough and ...	1
Measles	14	Pneumonia.	
Scarlet Fever & Measles	2	Retro-pharyngeal Abscess	1
Tons. and Ad. Opn. ...	12	Teething	1
"Colds"	11	Foreign Body	1
Diphtheria	4	Swimming	1
Influenza	3	Unknown	131

Date and cause of onset are rarely given with any precision. Usually the mother is quite ignorant of both. Otorrhoea is certainly one of the diseases the danger of which must be emphasised to parents, for at present its occurrence is treated with astonishing indifference.

Table XXXI summarises the principal work of the Clinic. It deals with those cases falling into Group III. (c).

TABLE XXXI.

Classification.	Total.	Other Treatment required. Not ionized.	Ionized with or without other treatment.	Results in Cases Ionized.							
				Discharged Dry.	Dry at end of 6 months.	Dry at end of Year.	Dry at end of 2 Years.	Still under Treatment.	Lost sight of, or stopping attendance.	Returned with Relapse.	Eventually referred for other treatment.
1 Tympanic conditions—											
(a) Tympanic Sepsis ...	40	7	33	31	20 (77 p.c.)	12 (75 p.c.)	3 (43 p.c.)	2	...	5	...
(b) T. S. + Granulations...	12	4	8	5	3 (100 p.c.)	2 (100 p.c.)	...	...	2	2	1
(c) T. S. + Polypi ...	5	3	2	1	1 (100 p.c.)	1 (100 p.c.)	...	...	...	...	1
(d) T. S. + other conditns.	9	2	6	3	1 (50 p.c.)	— (0 p.c.)	— 0 p.c.)	1	2	2	...
2 Tympanic conditions combined with—											
(a) Tonsils and Adenoids...	26	9	17	15	9 (64 p.c.)	4 (40 p.c.)	1 (25 p.c.)	...	2	3	...
(b) Nose conditions ...	5	2	3	3	2 (66 p.c.)	2 (66 p.c.)	— (0 p.c.)	...	...	...	...
3 Tympanic conditions combined with—											
(a) Attic Disease ...	6	3	3	...	...	...	...	...	...	...	3
Totals ...	103	30	72	*58	36 (72 p.c.)	21 (62 p.c.)	4 (27 p.c.)	3	6	12	5

* Of these, twelve were referred for operation for tonsils and adenoids in addition. Seven had this carried out, three were awaiting treatment and two refused.

Thus 70 per cent. of the active cases were ionized. Of the other 30 per cent. some required only appropriate treatment at the ionization clinic and cleared up successfully; others are due to return after operation treatment. The results of treatment are shown only in those cases subjected to ionization. As already mentioned the number available for reporting on is reduced to 14 at the end of the two years period and therefore the percentages are possibly fallacious. These percentages are, of course, calculated on the number available for reporting on and not on the number discharged as dry.

Sometimes cases referred for tonsillectomy are ionized while awaiting operation and clear up surprisingly. Relapses are, however, common in this group and the table cannot show at what period of attendance the operation was performed. In some cases it did not take place until after a relapse had occurred.

Table XXXII shews the number of applications of ionization required in those eventually discharged as dry.

TABLE XXXII.

Number of Applications.

One.	Two.	Three.	Four.	Five.	Six.	More than Ten.
33	12	6	3	1	1	2

These figures show, perhaps more than any others, the advantage of ionization. Many of the cases responding to one application had previously received prolonged treatment with drops.

TABLE XXXIII.

Treatment Recommended.	Number advised.	Number obtaining Treatment	Number awaiting Treatment	Number refusing.
Removal of Tonsils and Adenoids ...	39	24	4	11
do. Impacted Cerumen ...	3	3	...	...
Treatment of Dermatitis & External Otitis	5	4	...	1
Dental attention ...	3	1	...	2
Mastoid operation ...	7	5	2	...
Totals ...	57	37	6	14

Table XXXIII shows the number of cases recommended for other remedial measures with or without ionization and the number obtaining treatment or refusing. On the whole the figures are satisfactory especially with regard to mastoid operation, for the facilities for which, as well as for its successful accomplishment, the authority is indebted to Dr. McLaggan.

Only three recent post-scarlatinal cases were treated during the year as compared with seven during 1929. The machinery is in existence for the handing on of these cases to the clinic and it is to be hoped that the small number is representative of a reduction in the number of active post-scarlatinal cases and not to indifference on the part of parents or incomplete ascertainment.

Statistical proof of the value of the clinic is difficult, for, as the figures show, it is much more than merely an ionization clinic. The control, thorough investigation, and classification of the cases are invaluable and replace casual empiricism by scientific treatment.

RHEUMATIC CLINIC REPORT.

During 1930 the Rheumatism Clinic has continued its useful work among school children, and this, its third year of existence shows to an even greater degree than former years the usefulness of this branch of the school medical service.

The national importance of Rheumatism is becoming more clearly recognised. Dr. Bach in his Chadwick lecture on Rheumatism stated "Of every 100 school children 10 were suffering from some form of juvenile Rheumatism," and "That 8 out of every 10 cases of organic heart disease recognised in persons under 40 years of age were due to this infection." This last statement is a justification for the Rheumatism Clinic. It is to the reduction of the number of damaged hearts, and the subsequent invalidism from this cause, that the investigations at this clinic aim.

The essential end of all Public Health work is prevention, and although a certain minor degree of treatment is necessarily incorporated, it is by no means a primary object. The Rheumatism Clinic acts only as a sorting and advisory centre, directing specific types of rheumatic infection and disability into the channels of treatment proper to their type, and from which they are likely to derive the greatest benefit. For that large group of cases which are classified as Mild and Potential it acts in a supervisory capacity, limiting their activity at school where necessary, assessing com-

mening rheumatic changes in hearts, joints, or nervous tissues, and where such are present directing the mode of life and dieting to be followed.

Cases referred from school medical inspections, Routine or Special, continue to make up the bulk of the register, but in addition to these, children have been referred from other departments. Of these the Tuberculosis Dispensary has provided the greatest number. As the symptoms found in Tuberculous and Rheumatic children are very similar a constant co-operation must be maintained between these departments. A few Rheumatic children of pre-school age have been noted by Medical Officers from M.C.W. centres and referred for supervision at the clinic.

During the year it was found that the common age group of those referred for the first time to the clinic corresponded more to the first age group. This is what would be expected, for the number of older children in attendance at the schools who show rheumatic symptoms for the first time is relatively small, and as so many examinations and inspections of children in the older age groups have taken place, the time should come when all children with Rheumatism, definite or potential, in the older groups attending elementary schools will have been placed under supervision; new cases for the most part being drawn from the entrant group.

With the reduction in the number of new cases referred to the clinic for the reasons outlined above, it has been found possible to reinspect the active cases on the register, at more frequent intervals. This is an advantage as these are children in whom serious organic involvement might develop, often insidiously.

A general review of cases seen indicates that, while mild and potential types predominated, a number of cases of active disease, some having definite or organic heart involvement, were met with and referred to the appropriate hospital or specialist for treatment.

Dr. Preston at the Croydon General Hospital very kindly co-operated with the Clinic and saw a number of special cases referred to him by the Medical Officers and where necessary he had them admitted to the wards of the hospital. For the Convalescents requiring change of air and surroundings, with rest, the newly opened home at Coombe Cliff has played a most useful part. Quite a number of Cardiac cases were admitted to this home and they all benefited greatly.

Cases Examined at Rheumatism Clinic.

Total cases examined—270 (for the first time).

Total cases examined as re-inspections—214. Total 484.

Rheumatic ... 245—90.74%

Non-Rheumatic ... 25—9.26%

Total 270

Classification of Rheumatic cases—total 245.

Sex—Males ... 102—41.64%

Females ... 143—58.36%

Age when examined recorded in 245 cases:—

TABLE XXXVI.

Ages ...	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16
Numbers ...	19	23	20	31	31	32	22	28	25	7	7

These figures correspond closely with those of former years, but a definite increase in the number of young children referred is to be noticed.

Grouping and Classification.

- 1.—Symptoms referred to the digestive system and intestinal tract, e.g., abdominal pain, constipation and lack of appetite.

90 exhibited these symptoms.

- 2.—Symptoms suggesting the presence of a toxæmia, e.g., aching limbs, lassitude, headache.

204 came within this group.

- 3.—Symptoms relating to disturbance of nervous structure, e.g., irritability, fidgetiness, disturbed sleep, nocturnal enuresis, and nervous unrest generally.

192 cases came under this group.

These 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.

TABLE XXXVII.—Grouping of 245 cases.

Mild and Potential	...	...	...	...	115—46.9%
Definite Active	...	...	...	...	60—24.5%
Definite Quiescent	...	...	...	...	70—28.6%
Total Definite Cases	...	...	...	...	130—53.1%

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. Grouping of Rheumatic cases, in spite of the ever increasing advance in diagnostic methods, still remains a matter of difficulty and one requiring considerable experience in all the diseases of childhood.

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.

Where these signs were present in a case, who also showed some cardiac dilatation accompanied by breathlessness on exertion, the diagnosis became more certain and passed into the definite and quiescent group.

In these cases anaemia was almost constantly present being recorded in 123 cases out of a total of definite cases of 130.

Malnutrition was frequently noted, and an expression of nervous tension completed a clinical picture whose only counterpart may be seen in children the subjects of glandular, mesenteric or other forms of tuberculosis. The mistake of diagnosing some of these rheumatic cases as tuberculous must be constantly guarded against.

The definite and active group comprised cases of frank Rheumatic carditis, as shown 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.

(4) Rheumatic manifestations.

TABLE XXXVIII.—Total 245 Cases.

Rheumatic Pains	204—86.5%
Rheumatic Fever	33—13.4%
Chorea	31—12.6%
Carditis Definite	91—37.2%
Carditis Suspected	89—36.3%
Tonsillitis	98—40.0%

Two children only had had both rheumatic fever and chorea.

Rheumatic Fever Cases.

There were 33 children who gave a definite history of rheumatic fever. Of these 3 had sound hearts, 25 had definite and 5 suspected carditis.

Chorea Cases.

There were 31 cases of chorea. Of these 14 had had definite carditis, 8 suspected and 9 sound hearts.

TABLE XXXIX.

245 Cases classified by ages at onset of initial symptoms, shown in relation to age-grouping of the same cases at the time of examination.

Age Groups	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16
(1)	0	1	17	27	36	31	40	23	28	16	9	4	3	0
(2)	0	0	1	18	23	21	31	31	32	22	28	25	7	6

(1) Grouping according to age at onset of initial symptoms.

(2) Grouping according to ages at time of examination.

In 213 cases (87%) initial symptoms appeared before the age of 11 years. During the age period 3-7 years, 39% of the children showed symptoms.

Family Histories.

In the case of 104 families (42.5%) either the father or the mother had had rheumatic fever or chorea. In 67 other cases (27.2%) a history of rheumatic fever was obtained in near relatives of the parents. In the case of 44 children (18%) their brothers or sisters had had either rheumatic fever or chorea. Only 12% of the cases gave a negative family history.

Skin Conditions.

Recorded in 245 cases.

TABLE XL.

Fair	...	...	...	...	182—74.2%
Dark	...	...	...	...	65—25.8%

Moist skin, history of liability to sweating, etc., was recorded in 33 cases.

A history of flushings in 60 cases and of Rashes in 29 cases.

Nervous Conditions.

Recorded in 245 cases.

TABLE XLI.

Children recorded as highly strung	...	...	...	192—78.4%
History of headaches	...	...	...	137—55.8%
Night terrors, etc.	...	...	...	82—33.4%
Enuresis	...	...	...	24—9.8%
Twitchings	...	...	...	103—42.0%

Catarrhs.

Various, as distinct from tonsillitis, and mainly referred to the period of infancy and early childhood viz 0-5 years.

Reported in 122 cases out of a total of 245—49.9%

Tonsillectomy.

Operation reported in 85 cases—34.7%

TABLE XII.

Heart conditions contrasted, irrespective of type of case or time of performance of operation of tonsillectomy.

	Tonsillectomy cases.			Whole series.	
No organic defect	...	18=21.2%	...	...	65=22.0%
Carditis suspected	...	25=29.4%	...	...	89=36.2%
Carditis definite	...	42=49.9%	...	...	91=37.2%
		<u>85</u>			<u>245</u>

Of the 25 non-rheumatic children, tonsillectomy had been performed on 5; 20 not having been submitted to this treatment.

The influence of tonsillectomy in preventing or curing rheumatism is uncertain. Although in many cases in childhood rheumatic infection may enter the system through the tonsils, it has not been proved that, rheumatic infection does not enter children from whom the tonsils have been removed. The figures for most school medical departments show that the percentages of non-rheumatic and rheumatic children who have had this operation are about equal.

The figures in Table XLII. for 1930, as well as for 1928 and 1929, indicate that tonsillectomised children do not escape the graver complications of rheumatism in any greater proportion than those who have not had this operation.

On the other hand children who have been recommended by the Medical Officers at the Clinic to have tonsils removed, and whose advice has been acted upon, have shown distinct improvement thereafter. In advising tonsillectomy for any child belonging to the Rheumatic group, the state of the child's throat, in relation to the general health must be carefully considered.

Simple hypertrophy of the tonsils is not a sufficient reason to advocate removal; and no case was recommended operation unless the condition of the nose and throat was such as to have a detrimental effect upon the child's general health and so be likely to assist or aggravate the Rheumatic condition.

214 re-inspections were carried out. In 34 of these, the condition had become worse; 44 were thought to be non-rheumatic; and 136 were definitely improved and had become quiescent.

Environment and other Conditions in Rheumatism Clinic Cases.

Wards.—Cases were drawn from all wards in the town to the numbers shown: Woodside, 26; Whitehorse Manor, 20; West Thornton, 22; Upper Norwood, 8; Broad Green, 16; Waddon, 18; Addiscombe, 25; Thornton Heath, 32; East, 15; South Norwood, 10; Bensham Manor, 12; Central, 8; Norbury, 11; and South, 7.

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 two previous years.

Drainage of Subsoil.—137 of the houses were sufficiently drained and 40 were well drained; and in 47 drainage was problematical. 154 of the houses showed no signs of dampness; 31 showed traces; 24 were damp and one was very damp.

Aspect.—The commonest aspects of the houses were S.E., 25; S.W., 37; E., 24; N.E., 44; N.W., 25; S., 11; N., 20; W., 28.

The bulk of houses in which cases occurred were ordinary terrace houses 179; or semi-detached 51; and definite overcrowding was only found in two families.

The *economic status* of the families from whom patients came was:—

Poor in 11; average working class, 122; better working class, 47; clerical work, 27; and professional, 16; the interior home conditions could be classified as: clean 157; moderately clean, 42; superior, 29; 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 Infants' School; the open-air class formerly held at Purley Oaks School was discontinued owing to the small number of children on the register. At Woodside there were 29 children in the class. There was no extension of these classes during 1930.

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.

2 boys and 2 girls are resident at special schools for the blind. The institutions which these children attend are as follows: Royal Normal College for the Blind, 2 boys; Hants and Isle of Wight Blind School, 1 girl; Chorley Wood Blind College, 1 girl; these are residential; 15 children attend the Special Class for Myopic Children; 1 girl attends the Elm Court Blind (Day) School, West Norwood.

Deaf Children.

4 boys and 9 girls are resident at special schools for the deaf; 1 boy and 2 girls attend special day schools. The institutions which

these children attend are Royal School for the Deaf, Margate, 4 boys and 9 girls; this is residential. L.C.C. (Deaf) Schools, 1 boy at the Hearnville School, Balham, and 2 girls, at Oak Lodge Clapham and Old Kent Road Schools.

Epileptic Children.

3 boys and 3 girls are resident at special schools, namely at Lingfield Epileptic Colony, 2 boys and 2 girls; Soss Moss Epileptic School, Cheshire, 1 boy; Chalfont Epileptic Colony, 1 girl.

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 Grangewood, one girl is resident in the Monyhull M.D. School, Birmingham; 2 girls are at Knotty Ash M.D. School, Liverpool, and 1 boy and 1 girl at Sandlebridge, Cheshire.

Physically Defective Children.

The Education Authority have crippled children in the under-mentioned special schools: St. Vincent's Cripple Home and School, 1 girl; Heritage Craft Cripple School, Chailey, 2 boys; Treloar Cripple Hospital, Alton, Hants, 1 boy; St. Nicholas and St. Martin, Pyrford, 1 girl; Oak Bank, Sevenoaks, 1 girl.

At special schools for Cardiac Cripples, the Committee maintained 4 girls at West Wickham Heart Home.

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.

514 boys and girls from the elementary schools went to the Camp during 1930 in parties of 20 or 40, each party going for one week. The following are the departments which sent parties. All the children are medically inspected before proceeding to camp. Woodside, 20 boys; Davidson, 20 boys and 20 girls; Whitehorse

Manor, 40 boys; Oval, 20 girls and 20 boys; Portland, 40 girls and 40 boys; Beulah, 40 boys; Ecclesbourne, 20 boys; Rectory Manor, 40 boys and 40 girls; North Park, 20 boys; West Thornton, 40 girls; Sydenham, 20 boys; St. Mark's, 14 girls; Croydon British, 60 girls.

Juvenile Employment Return.

The following numbers of children were examined by the medical officers during 1930 as to their fitness to follow the part time employment indicated. There has been a decrease of 31, chiefly noticeable in the delivery of milk, and employment in shops.

	1930.	1929.	1928.	1927.
Delivery of Goods for Shopkeepers ...	140	158	237	201
Delivery of Newspapers	328	329	280	184
Delivery of Milk	28	40	56	61
	496	527	573	446

Eleven girls 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 have been on the same lines as in previous years; 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 by the medical officers once every three months in cases referred on medical grounds, when a 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 places of refreshment which supply the children with their midday meals have been inspected regularly; the standard of cleanliness has, on the whole, been satisfactory. In most instances, advice given as to improvement has been accepted and acted upon.

A scheme, suggested originally by the National Milk Publicity Council, and which had been introduced into various schools in other areas, was tried during the year in Croydon. By this scheme a third of a pint of pasteurised milk is delivered in bottles daily for each child in school whose parents are willing to pay a penny per bottle. The scheme is working smoothly in the schools who are trying it and a majority of the head teachers have expressed themselves in favour of it; some state they think it has already had beneficial results although it has only been in operation for a short time. At the end of 1930, some 8,723 penny bottles per day were being delivered at the schools, an increase of 2,457 bottles over 1929. This supply is available for all elementary school children irrespective of any medical recommendation.

In assessing the value of these provisions one must of necessity depend largely on impressions, for statistical demonstration is difficult unless a special investigation into groups of children is made. The beneficial influence of milk on the normal child has been abundantly proved of late years; but when dealing with a malnourished child the problem is not so simple. Malnutrition need not be caused by actual lack of food, it is perhaps more often due to ill-chosen food. In other cases no definite cause can be found for the poor physical condition, and these cases respond poorly to extra diet. Home circumstances also are detrimental in some instances, any good effects of extra meals, milk, malt and oil being counteracted thereby. Milk and malt and oil in school are particularly valuable for the highly strung child who rushes off to school without a proper breakfast, and also for the child from a straitened home.

		1930.	1929.
Number of Children who received Free Dinners	329 ...	273	
„ Free Dinners provided	... ..	24,986 ...	20,641
		pints	pints
No. of Children who received Free Milk	.. 122—11,241	71—7,147	
„ „ Milk (part payment)	37— 2,663	54—3,019	
„ „ Milk (whole payment)	44— 3,145	30—2,203	
		issues	issues
„ „ Free Malt	17— 1,319	15—671	
„ „ Malt (whole payment)	40— 2,990	32—1,406	

SYNOPSIS OF HYGIENE TEACHING IN PUBLIC ELEMENTARY SCHOOLS IN CROYDON.

The teaching of Hygiene is laid down by the Board of Education as a part of the instruction in all elementary schools. The teaching is generally divided into two kinds. Children below the age of 11 years receive informal instruction on the subject such as friendly talks about the matters with which Hygiene deals. For older children the lessons are more definite and in the majority of schools a special time is set apart for a lesson on this subject. The time devoted to this for older children varies from 30 to 45 minutes a week. In the younger children the time spent in the informal talks would amount to about 20 minutes a week. Hygiene does not always appear in the records of the school as a separate subject, but is sometimes included under the head of Science. This latter method is unfortunate as it may result in its importance being lost sight of, but since the issue of the Board of Education's Handbook, "Suggestions for the teaching of Hygiene," more schools are giving the subject a distinct place in the instruction.

All schools have a written syllabus which embodies the actual principles and subject matter to be taught; the actual syllabus varies as between school and school. The responsibility for the teaching is not confined to the Head Teacher, as each class teacher is responsible for the proper inculcation of good habits in the children under his or her immediate care.

The majority of children attending elementary schools depend in after life far more on their physical fitness for their livelihood than on their mental agility, yet they are trained rather in the latter than how to maintain the former. If the average citizen loses his health he loses also his means of sustenance. When once sound habits of physical culture and of the maintenance of health have been assimilated and are being practised, then a child is ready to receive the fuller education which leads outside the humdrum of existence. The ultimate test of man's domination is a physical one.

The following report was presented to the Elementary Education Sub-Committee during the year, and serves to summarise the arguments in favour of an extension of the arrangements for the teaching of Hygiene in the Public Elementary Schools. The

report was referred by the Committee to the Head Teachers, who kindly invited the School Medical Officer to address them on the subject. It was then referred to the Head Teachers' Association, whose Committee are at the time of writing deliberating their decision.

" Under modern conditions of living in crowded towns, the importance of inculcating a sense of personal and communal health cannot be too strongly urged. The greater number of persons are dependent for their livelihood upon their physical fitness, and any adverse conditions of environment or of incorrect modes of living react upon the individual, leading ultimately to a reduction or total abolition of earning capacity. In times of particular industrial stress and of keen commercial competition, that country leads whose population is the fittest mentally and physically to bear the strain. The greatest commercial nation in the world at the present time—the United States of America—realises this fundamental issue, consequently to a continually increasing extent are Welfare Schemes being founded not only by large manufacturing firms, but by the great insurance companies, and the systematic teaching of health is taking a definite place in school programmes. The Insurance Companies have found on statistical evidence that funds spent on the propagation of knowledge concerning healthy modes of living brings in high interest in the freedom from sickness and the prolongation of the lives of their clients.

A recent enquiry in certain Croydon schools, conducted on behalf of the Board of Education, showed that although the teaching of hygiene is on the curriculum, there is no systematic course taken, the methods and extent of the teaching varying widely in the different schools. In most of the schools, however, some indirect teaching is given and put into practice whenever possible.

The teachers in the Elementary Schools are keen about the health of the children under their care and very observant of incipient defects. It would appear the systematic teaching of hygiene is not undertaken because the subject does not receive official prominence in the curriculum, though it is only just to state that some head teachers believe indirect teaching to be sufficient and even preferable to a systematic course.

It is submitted that the teaching of health, both personal and communal, is a matter of importance, justifying a special series of lessons given by qualified medical men and women. In putting forward this view there is no desire to minimise the great and beneficial influence the teachers exert, but it is felt that with a specialised subject any lessons given would carry more weight if delivered by persons who have had the prolonged training necessary to become qualified medical practitioners. It is recognised this training does not necessarily make a doctor a good teacher, but it does give an authoritative bias to any statements he makes on the subject of the care of the human mechanism either particular or conglomerate.

The chief objects aimed at in such specialised instruction would be the following:—

- (a) The inculcation of a high standard of domestic and civic cleanliness.
- (b) The counteraction of ignorance and carelessness in matters of health, more especially regarding the spread of communicable diseases.
- (c) To give instruction in the broad principles of healthy living and to instruct in the cardinal signs of a departure from that condition.
- (d) To instruct in the chief social causes of illness and to indicate the ways in which these causes may be counteracted.
- (e) To extend the knowledge of the work of Public Health departments so as to endeavour to gain the co-operation to a greater extent of the coming generation.

It is felt that if the older children are told about the social services and their aims explained, a greater appreciation of them will become manifest and a greater readiness to take a part in voluntary activities whose concern is with the health of the populace.

If the school leaving age is raised a new syllabus will have to be drawn up for this period, and it would be possible to incorporate hygiene teaching therein without any dislocation of existing arrangements. The object aimed at is for some systematic teaching in this specialised subject to be given to children during

the last year of school life, stress being laid particularly on the civic side of health. It is not suggested that the method indicated should usurp the place of present arrangements.

In 1928 the Board of Education published their Handbook of Suggestions on Health Education, a manual intended to be complementary to the Board's "Handbook of Suggestions for Teachers." The enquiries mentioned previously showed that the handbook was not invariably used. This handbook is divided into two parts. In Part I. is given subject matter for 12 lessons on Health Practice and Health Talks for young children. Part II. gives notes for 15 Health lessons for older children. The subject matter of the lessons for Part I. can be dealt with just as effectively by Head Teachers as by doctors of medicine if the handbook is followed. For the lessons outlined in Part II. it is felt, however, that they would be more pointed if given by doctors and should the Committee approve of the principle put forward the syllabus submitted to them would be based on these lessons. Each lesson would occupy about three quarters of an hour, so that it would be necessary to allocate some 11 hours for this purpose. Adolescents in their last term at school would be probably the best material to instruct.

For the information of the Committee, the headings of the fifteen lessons suggested are (1) the Human Body, (2) Nutrition, (3) Fresh Air and Sunlight, (4) Cleanliness, (5) Exercise and Rest, (6) Warmth and Clothing, (7) Care of the Eyes and Ears, (8) Care of the Teeth, (9) Bodily and Mental Health, (10) Communicable diseases and how to avoid them, (11) First Aid in Emergencies and Sickness of Childhood, (12) Elementary Science and Health Education, (13) Other Subjects in the School Curriculum and Health Education, (14) Events in the History of Preventive Medicine as illustrated by lives of great Pioneers in Health, (15) Work of the Public Health and School Medical Services.

These subjects would be dealt with as far as possible by lady doctors for the girls' schools and by men for the boys' schools. Each lesson would be supplemented by typed notes which the scholars would retain. If it was felt that in order to complete the course an examination should be held, the medical staff of the School Medical Service would be glad to give all the assistance demanded. As a preliminary until the scheme had justified itself the full series of lessons need not be given, a commencement being made with say some half a dozen.

It is fully recognised that for such a scheme to be successful the active sympathy and co-operation of the Head Teachers is necessary and the suggestion is made that Head Teachers of Senior Schools be handed a copy of this report and be asked to give their opinions on the proposals contained therein, and that following thereon a conference be arranged with their representatives and the School Medical Officer, and the deliberations of such conference be placed before the appropriate Sub-Committee of the Education Committee.

Yours faithfully,

(Signed) OSCAR M. HOLDEN."

NURSERY SCHOOLS.

No nursery schols have been yet established in the borough.

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 précis of these reports.

Boys.

The Inspector of Physical Training states that the arrangements for the lessons continue to be satisfactory. The full benefit of the work is obtained in those schools where a daily lesson is in vogue, and these schools constitute the large majority.

The ordinary daily lesson is of 20 minutes' duration, but it is hoped to have lessons of not less than 30 minutes in the reorganised Senior Schools. The importance of physical training being taken in the mornings is pointed out, and the physiological fact that mental fatigue detracts from the value of co-ordinated physical exercises is emphasised.

The reorganisation of the schools will have the advantage of placing the boys together in age groups for gymnastic work, and it is hoped the size of the classes in Senior Boys' Schools will enable, in future, a good deal of individual work in this branch of physical culture to be carried on. In classes of more than 40 boys individual work is very difficult.

The Inspector lays stress, quite properly, on the advantage of suitable dress for all physical training work. He considers that, in suitable weather, collars, coats and waistcoats should be removed, belts substituted for braces, and shoes worn which permit of free movement of the feet and ankles.

For growing boys it can be laid down that, for habitual wear, proper belts are preferable to braces, the weight of the nether garments thereby being taken by the hips, rather than by the shoulders, and so relieving a certain amount of strain on the rapidly developing and, at this age, relatively elastic spinal column.

It is unfortunate that many open-air lessons are lost in winter and inclement weather, and to counteract this, as well as to allow of ordinary play periods being taken in the open-air, the provision of large but simple sheds in all the playgrounds would be an advantage. However, in the near future every Senior Boys' School will have a School Hall, a facility which will assist in overcoming the disabilities of our variable climate.

Team work continues to be a valuable part of all the Physical Training activities. In its inculcation of the doctrine that the welfare of the whole is of more importance than that of the unit, such training has a very direct bearing on the future attitude of these potential citizens.

In connection with organised games in the school playground the Inspector remarks that there has been a marked increase in the number and types of games taken during the school physical training period, and there is some danger of overlapping, some games being played too often, whilst others are comparatively neglected. He considers the allocation of various games into groups suitable for the respective age groups of the boys would ensure an even variety of game activities as well as a better progression in point of difficulty.

Six masters attended the Refresher Course of Physical Training held at Scarborough, five being assisted by grants made by the Education Committee, the other going at his own expense. This course was of a month's duration, and at the end an examination was held, in which all the Croydon masters obtained certificates for attendance and proficiency.

Girls.

The Organiser of Physical Training in reporting on Teachers' Classes, says that one of the most important activities of an organiser should be the arrangement and conduct of teachers' classes whereby those attending are afforded the opportunity of keeping their work up-to-date. Three such classes were held during the year, and the response from the teachers concerned was most encouraging.

The first course, consisting of 10 lessons, was for teachers in Junior Schools, for which over 70 applications were received, and the attendance throughout exceptionally good. The second course consisted of 3 lessons on the class teaching of life-saving. Two of the lessons were in "land exercises" and one "water demonstration." Twenty-eight teachers attended this course.

The third course of ten lessons was for teachers in Senior Schools; twenty-seven teachers attended this course.

Three teachers attended a four weeks' Intensive Course at the Scarborough Summer School, each receiving a grant from the Education Committee towards their expenses.

The Organiser points out that the time-tables are in a state of transition owing to the reorganisation under the Hadow Scheme, but it is hoped that in all Infants' and Junior departments a daily lesson of 20 minutes will be continued. In Junior departments three lessons a week will be devoted to physical exercises, one to team games, and one to folk dancing when possible.

In the Senior departments the younger children will have a daily lesson, as in the Junior departments, but the older children a minimum of two half-hour gymnastic lessons, and one games lesson of 40 minutes weekly. When unable to attend a playing field a country dancing lesson will be substituted. Swimming in both Junior and Senior departments will have to be additional to these times owing to the difficulties of the organisation of this subject.

Most of the playgrounds are now well marked for the various activities and games, and all newly-made playgrounds have been marked permanently.

When the scheme of reorganisation of the Elementary Schools in Croydon is completed, as it is anticipated it will be by the Autumn of 1931, Centres for Domestic Subjects will cease to exist as such. Instead, special rooms will be available for each Senior Girls' School whereby the older girls in such schools will be able to receive the necessary instruction in Domestic Subjects as part of the normal school curriculum and, generally speaking, on the school premises.

In addition to the Centres and rooms enumerated above, additional rooms are foreshadowed in connection with the new Senior Schools now in process of erection.

SECONDARY SCHOOLS.

The usual arrangements for the medical examination of secondary school children were continued in 1930; 762 children were examined, 500 of whom were boys and 262 girls. Table XXXV gives the detailed findings. Fifty-nine boys (11.8 per cent.) and 52 girls (19.8 per cent.) were found to require treatment, the most usual defect in the boys being dental defects and in the girls defective vision.

Treatment is not provided at the Council's School Clinics for these children except under special circumstances of financial need.

Although the figures are small, a similar table as for elementary school children relating to nutrition has been included below.

I.—ELEMENTARY SCHOOLS.

TABLE I.—RETURN OF MEDICAL INSPECTIONS.

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Inspections—

							Year 1929.
Entrants ...	...	...	...	...	...	2979	3103
Intermediates ...	...	...	...	...	...	2880	2859
Leavers ...	...	...	...	...	...	2466	2502
Total ...						8325	8464

Number of other Routine Inspections ...	101	234
	<u>8426</u>	<u>8698</u>

B.—OTHER INSPECTIONS.

*Number of Special Inspections ...	...	...	...	737	658
*Number of Re-inspections ...	...	...	...	3140	3930
Total ...				<u>3877</u>	<u>4588</u>

Total visits to Elementary Schools	494	573
--	-----	-----	-----	-----	-----

* Refer to medical inspections only.

TABLE II

A. — RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR
ENDED 31ST DECEMBER, 1930.

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	65	48	18	1
Uncleanliness (See Table IV.—Group V.)	5	6	3	...
SKIN—				
Ringworm :				
Scalp ... ..	...	...	...	...
Body ... ..	...	...	...	...
Scabies	1	...	...	...
Impetigo	11	4	3	...
Other diseases (non-tuberculous)	...	15	4	3
EYE—				
Blepharitis ... ..	...	11	2	...
Conjunctivitis	2	...	1	2
Keratitis ... ..	...	...	...	...
Corneal ulcer ... ..	...	1	...	...
Defective vision (excluding squint)	419	63	110	6
Squint	39	10	11	1
Other conditions	1	3	...	...
EAR—				
Defective hearing	9	10	14	1
Otitis media	14	8	8	...
Other ear diseases	4	4	5	1
NOSE & THROAT—				
Enlarged tonsils only	290	261	22	8
Adenoids only	71	54	9	3
Enlarged tonsils & adenoids	294	97	46	3
Other conditions	50	14	9	1
ENLARGED CERVICAL GLANDS—				
(Non-tuberculous)	4	72	2	6
DEFECTIVE SPEECH... ..	1	5	1	2
TEETH—DENTAL DISEASES (See Table IV.—Group IV.)	601	37	43	1
HEART & CIRCULATION—				
Heart disease :				
Organic... ..	6	106	1	11
Functional ... ..	...	57	1	4
Anæmia	23	56	6	4
LUNGS—				
Bronchitis	5	46	2	3
Other non-tuberculous diseases ..	4	9	1	1
TUBERCULOSIS—				
Pulmonary—Definite .. ...	...	1	...	...
„ Suspected	1	9	1	1
Non-pulmonary—Glands	3	8	3	1
„ Spine ... ..	...	...	...	...
„ Hip ... ..	...	...	...	...
„ Other Bones & Joints ..	1	...	...	...
„ Skin ... ..	...	1	...	...
„ Other Forms	1	...	...	...
NERVOUS SYSTEM -				
Epilepsy	1	3	...	6
Chorea	1	18	2	5
Other conditions	1	24	2	3
DEFORMITIES—				
Rickets	2	2	...	...
Spinal curvature	149	81	13	1
Other forms	88	25	8	2
OTHER DEFECTS & DISEASES	20	91	8	14

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 1929.
	Inspected.	Found to require treatment.		
(1)	(2)	(3)	(4)	(5)
Code Groups—				
Entrants ...	2979	553	18·6	21·7
Intermediates ...	2880	625	21·7	26·3
Leavers ...	2466	495	20·1	24·0
Total (Code Groups)...	8325	1673	20·1	23·9
Other Routine Inspections ...	101	22	21·8	25·6

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

			Year 1929.					
			Boys.	Girls.	Total.	Boys.	Girls.	Total.
BLIND (including partially blind.)	(i) Suitable for training in a school or class for the <i>totally</i> blind.	Attending Certified Schools or Classes for the Blind...	2	2	4	3	3	6
		Attending Public Elementary Schools	...	...	...	...	...	...
		At other Institutions	1	...	1	...	...	...
		At no School or Institution	...	1	1	...	...	...
	(ii) Suitable for training in a school or class for the <i>partially</i> blinded.	Attending Certified Schools or Classes for the Blind...	9	5	14	9	5	14
		Attending Public Elementary Schools	6	1	7	5	1	6
		At other Institutions	...	...	...	...	...	...
		At no School or Institution	...	...	...	...	1	1
	Total ...		18	9	27	17	10	27
DEAF (including deaf and dumb, and partially deaf).	(i) Suitable for training in a school or class for the <i>totally</i> deaf or deaf and dumb.	Attending Certified Schools or Classes for the Deaf ...	4	9	13	4	8	12
		Attending Public Elementary Schools	...	...	...	...	...	...
		At other Institutions	...	...	...	...	...	...
		At no School or Institution	...	...	...	...	...	...
	(ii) Suitable for training in a school or class for the <i>partially</i> deaf.	Attending Certified Schools or Classes for the Deaf ...	1	1	2	2	2	4
		Attending Public Elementary Schools	1	2	3	...	2	2
		At other Institutions	...	...	...	...	...	...
		At no School or Institution	...	...	...	...	...	...
	Total ...		6	12	18	6	12	18
MENTALLY DEFECTIVE.	FEEBLE-MINDED (cases not notifiable to the Local Control Authority).	Attending Certified Schools for Mentally Defective Children	43	44	87	43	43	86
		Attending Public Elementary Schools	8	6	14	5	9	14
		At other Institutions	...	...	...	...	1	1
		At no School or Institution	7	5	12	3	5	8
		Attending Private Schools	3	3	6	3	3	6
	Notified to the Local Control Authority during the year.	Feeble-minded ...	7	9	16	4	4	8
		Imbeciles ...	4	...	4	3	5	8
		Idiots ...	...	1	1	1	...	1
		Total ...	72	68	140	62	70	132
EPILEPTICS.	Suffering from severe Epilepsy.	Attending Certified Special Schools for Epileptics	4	3	7	3	3	6
		In Institutions other than Certified Special Schools	1	...	1	1	...	1
		Attending Public Elementary Schools	...	...	...	2	...	2
		At no School or Institution	...	1	1	...	1	1
	Suffering from Epilepsy which is not severe.	Attending Public Elementary Schools	11	9	20	8	6	14
		At no School or Institution	1	...	1	1	...	1
		Total ...	17	13	30	15	10	25

TABLE III.—Continued.

			Year 1929.					
			Boys.	Girls.	Total.	Boys.	Girls.	Total.
PHYSICALLY DEFECTIVE.	INFECTIOUS PULMONARY AND GLANDULAR TUBERCULOSIS	At Sanatorium or Sanatorium Schools approved by the Ministry of Health or the Board...	...	...	...	...	1	1
		At other Institutions ...	...	...	...	...	...	...
		At no School or Institution ...	...	1	1	1	...	1
		Total ...	...	1	1	1	1	2
	NON-INFECTIOUS BUT ACTIVE PULMONARY AND GLANDULAR TUBERCULOSIS.	At Sanatorium or Sanatorium Schools approved by the Ministry of Health or the Board ...	5	3	8	3	4	7
		At Certified Residential Open-Air Schools ...	...	...	...	...	...	...
		At Certified Day Open-Air Schools ...	...	...	...	...	...	...
		At Public Elementary Schools...	10	6	16	37	22	59
		At other Institutions ...	1	1	2	...	...	...
		At no School or Institution ...	1	3	4	...	...	...
		Total ...	17	13	30	40	26	66
	DELICATE CHILDREN <i>e.g.</i> , pre- or latent tuberculosis, malnutrition, debility, anæmia etc.	At Certified Residential Open-Air Schools ...	...	...	...	...	...	...
		At Certified Day Open Air Schools ...	...	...	...	...	...	...
		At Public Elementary Schools...	38	29	67	47	29	76
		At other Institutions ...	...	1	1	...	...	...
		At no School or Institution ...	1	...	1	...	...	...
		Total ...	39	30	69	47	29	76
	ACTIVE NON-PULMONARY TUBERCULOSIS.	At Sanatorium or Hospital Schools approved by the Ministry of Health or the Board...	7	6	13	6	8	14
		At Public Elementary Schools...	6	3	9	9	8	17
		At other Institutions ...	1	...	1	...	...	...
		At no School or Institution ...	...	...	...	...	...	...
		Total ...	14	9	23	15	16	31
	CRIPPLED CHILDREN (other than those with active tuberculous disease), <i>e.g.</i> , children suffering from paralysis, etc., and including those with severe heart disease.	At Certified Hospital Schools...	...	6	6	2	9	11
		At Certified Residential Cripple Schools ...	2	...	2	4	...	4
		At Certified Day Cripple Schools ...	30	42	72	30	38	68
		At Public Elementary Schools ...	29	32	61	23	18	41
		At other Institutions ...	3	...	3	3	2	5
		At no School or Institution ...	1	6	7	...	3	3
		Total ...	65	86	151	62	70	132

TABLE IV.—RETURN OF DEFECTS TREATED DURING THE YEAR
ENDED 31ST DECEMBER, 1930.

Group I.—Minor Ailments (excluding uncleanness, for which see Group V)

Disease or Defect.	NUMBER OF DEFECTS TREATED OR UNDER TREATMENT DURING THE YEAR.			Year 1929.
	Under the Authority's Scheme.	Otherwise.	TOTAL.	
(1)	(2)	(3)	(4)	(5)
SKIN—				
Ringworm, Scalp	31	...	31	30
„ Body	28	...	28	46
Scabies	37	...	37	21
Impetigo	276	...	276	176
Other skin diseases	132	...	132	88
MINOR EYE DEFECTS— (External and other, but ex- cluding cases falling in Group II)	132	..	132	118
MINOR EAR DEFECTS	231	...	231	179
MISCELLANEOUS — (e.g. Minor injuries, bruises, sores, chilblains, etc.)	325	...	325	283
TOTAL	1192	...	1192	941

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 1929.
	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)
Errors of refraction (including squint)	683	22	3	708	744
Other defect or dis- ease of the eyes (excluding those re- corded in Group I)	...	...	...	...	...
TOTAL	683	22	3	708	744

Total number of children for whom spectacles were prescribed—

(a) Under the Authority's scheme	539	Year 1929. 550
(b) Otherwise	25	21

Total number of children who obtained or received spectacles—

(a) Under the Authority's scheme	554	Year 1929. 499
(b) Otherwise	25	21

Group III.—Treatment of Defects of Nose and Throat.

NUMBER OF DEFECTS.				
Received operative treatment.			Received other forms of treatment.	Total number treated.
Under the Authority's scheme in clinic or hospital.	By private practitioner or hospital apart from the Authority's scheme.	TOTAL.		
(1)	(2)	(3)	(4)	(5)
608	76	684	...	684
Year 1929 } 518	57	575	4	579

TABLE IV.
GROUP IV.—DENTAL DEFECTS.

(1) Number of children who were

(a) Inspected by the dentist :—

Routine age groups.	Aged	5—6	165	Year 1929.	113
	"	6—7	243		2224
	"	7—8	2588		2138
	"	8—9	2254		1996
	"	9—10	2015		2405
	"	10—11	2722	Total—19066	1407
	"	11—12	1622		1071
	"	12—13	1302		1120
	"	13—14	1264		1214
	"	14—15	1027		173
	"	15—up	181		...
Specials	1634	1663
Grand total ...								2070	15524

Year 1929.							
(b) Found to require treatment ...	...	...	...	...	18663	10513	
(c) Actually treated ...	...	...	...	...	8131*	6409	
(d) Re-treated during the year as the result of periodical examinations ...	...	...	...	...	3584	2821	
(2) Half-days devoted to inspection ...	...	...	...	151		110	
" " treatment ...	...	...	...	1027		694	
					1178†	804	
(3) Attendance made by children for treatment ...	...	...	...	...	13046	9752	
(4) Fillings—Permanent teeth ...	...	...	...	2769		1926	
Temporary teeth ...	...	...	...	1732		1326	
					4501	3252	
(5) Extractions—Permanent teeth ...	...	...	...	2001		1279	
Temporary teeth ...	...	...	...	12105		9081	
					14106	10360	
(6) Administrations of general anaesthetics for extractions ...	...	...	...	...	2395	1791	
(7) Other operations—Permanent teeth ...	...	...	...	675		371	
Temporary teeth ...	...	...	...	959		1117	
					1634	1488	

*546 children awaiting treatment at December 31st.

†26 sessions in addition devoted to administration.

In addition 59 special secondary school cases were seen and recommended for treatment, 32 of which were treated at the dental clinic; 56 attendances were made; 27 extractions and 10 fillings were carried out: 14 gas administrations, 1 local anaesthesia and 1 dressing.

GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

		Year 1929.
(1) Average number of visits per School made during the year by the School Nurses	9.0	10.5
(2) Total number of examinations of children in the schools by the School Nurses	60662	56948
(3) Number of children found unclean (on first examination)	2505	2458
(4) Number of children cleansed under arrangements made by the Local Education Authority	—	—
(5) Number of cases in which legal proceedings were taken—		
(a) Under the Education Acts, 1921	—	—
(b) Under School Attendance Bye-laws	3	2

II.—SECONDARY SCHOOLS.

TABLE I.—RETURN OF MEDICAL INSPECTIONS.

A.—ROUTINE MEDICAL INSPECTIONS.

		Year 1929.
11 and under	183	130
12	127	107
13	105	56
14	124	106
15	142	89
16	64	25
17	13	5
18 and over	4	2
	<u>762</u>	<u>520</u>

B.—OTHER INSPECTIONS.

Number of Special Inspections	8	7
Number of Re-inspections	191	196
Total	<u>199</u>	<u>203</u>
Visits to Secondary Schools	44	33

TABLE II.—A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31ST DECEMBER, 1930.

DEFECT OR DISEASE	ROUTINE INSPECTIONS. Number of defects.		SPECIAL INSPECTIONS. Number of defects.	
(1)	Requiring treatment. (2)	Requiring to be kept under observation but not requiring treatment. (3)	Requiring treatment. (4)	Requiring to be kept under observation but not requiring treatment. (5)
Malnutrition ... ..	...	2	...	...
Uncleanliness. ... ..	...	...	...	...
(See Table IV.—Group V.)				
SKIN—				
Ringworm				
Scalp ... ..	...	...	...	...
Body ... ..	...	...	...	...
Scabies ... ..	...	...	...	...
Impetigo ... ..	...	...	...	...
Other diseases (non tuberculous)	...	1	...	...
EYE—				
Blepharitis ... ..	...	3	...	1
Conjunctivitis ... ..	...	...	...	...
Keratitis ... ..	...	...	...	...
Corneal opacities ... ..	...	...	...	...
Defective vision (excluding squint).	35	7	...	...
Squint ... ..	...	...	...	...
Other conditions ... ..	...	...	...	...
EAR—				
Defective hearing	1	1	...	...
Otitis media ... ..	...	...	...	...
Other ear diseases	1	...	...	...
NOSE AND THROAT				
Enlarged tonsils only	7	30	1	...
Adenoids only	2	7	...	...
Enlarged tonsils and adenoids	1	2	...	...
Other conditions ... ..	...	1	...	...
ENLARGED CERVICAL GLANDS (Non Tuberculous)	...	8	...	...
DEFECTIVE SPEECH	1	1	...	...
TEETH—DENTAL DISEASE... ..	48	4	3	...
(See Table IV.—Group IV).				
HEART AND CIRCULATION—				
Heart Disease—				
Organic	1	17	...	2
Functional ... ..	...	11	...	...
Anæmia ... ..	...	10	...	...
LUNGS—				
Bronchitis ... ..	...	...	...	...
Other non-tuberculous diseases	...	...	...	...
TUBERCULOSIS—				
Pulmonary—				
Definite ... ..	...	...	...	...
Susptory ... ..	...	...	...	...
Non-pulmonary—				
Glands... ..	...	1	...	...
Spine ... ..	...	...	...	...
Hip ... ..	...	...	...	...
Other bones & joints... ..	...	...	...	...
Skin ... ..	...	...	...	...
Other forms ... ..	...	...	...	...
NERVOUS SYSTEM—				
Epilepsy ... ..	...	1	...	...
Chorea ... ..	...	1	...	...
Other conditions	2	1	...	...
DEFORMITIES—				
Rickets ... ..	...	...	...	...
Spinal curvature	5	24	...	...
Other forms	7	7	1	...
OTHER DEFECTS AND DISEASES	2	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	183	24	13.1
12	127	16	12.6
13	105	9	8.6
14	124	14	11.3
15	142	11	7.7
16	64	2	3.1
17	13	...	...
18 and over	4	...	...
	762	76	10.0
Year -1929.	520	77	14.8

TABLE III.—RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31ST DECEMBER, 1930.

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) ... ..	...	...	...
Ringworm (body) ... ..	...	...	...
Scabies ... ..	...	...	...
Impetigo ... ..	...	...	...
Other skin disease ... ..	...	...	...
MINOR EYE DEFECTS—			
(External and other, but excluding cases falling in Group II) ... ..	...	...	...
MINOR EAR DEFECTS—	1	...	1
MISCELLANEOUS—			
(e.g. minor injuries, bruises, sores, chilblains, etc.) ... ..	...	...	...
TOTAL.	1	...	1

Group II.—Defective Vision and Squint (excluding minor eye defects treated as minor ailments.—Group I.)

Defect or Diseases	NUMBER OF DEFECTS DEALT WITH.				
	Under Authority's Scheme.	Submitted to refraction by private practitioners or at hospital apart from the Authority's scheme.	Otherwise.	TOTAL.	Year 1929
(1)	(2)	(3)	(4)	(5)	
Errors of refraction (including squint)	24	5	2	31	27
Other defects or disease of the eyes (excluding those recorded in Group I.) ...	...	...	...	...	...
TOTAL	24	5	2	31	27

Year
1929

Total number of children for whom spectacles were prescribed:—

(a) Under the Authority's scheme	16	4
(b) Otherwise	7	21

Total number of children who obtained or received spectacles:—

(a) Under the Authority's scheme	13	4
(b) Otherwise	7	21

Group III.—Treatment of Defects of Nose and Throat.

NUMBER OF DEFECTS.					
Received operative treatment.			Received other forms of treatment.	Total number treated.	Year 1929
Under the Authority's scheme in clinic or hospital.	By private practitioner or hospital apart from the Authority's scheme.	TOTAL.			
(1)	(2)	(3)	(4)	(5)	
3	1	4	...	4	8

TABLE IV.—GROUP IV.

For Dental Treatment provided in respect of Secondary Schools see note at foot of Table IV. Group IV. (Elementary Schools).

GROUP V.

No Uncleanliness Surveys in Secondary Schools.

