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COUNTY COUNCIL OF THE WEST RIDING  
OF YORKSHIRE.

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FORTY-NINTH

ANNUAL REPORT


OF THE

County Medical Officer,

FOR THE YEAR, 1937.

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*Printed by order of the Public Health and Housing  
Committee, 20th June, 1938.*



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# WEST RIDING PUBLIC HEALTH AND HOUSING COMMITTEE.

## CHAIRMAN

County Alderman G. Probert.

## VICE-CHAIRMAN

County Councillor J. Wilkinson.

## COUNTY ALDERMEN

Bambridge, H. J.	Newton, J.
Cartwright, W. B. <i>(Vice-Chairman of the County Council.)</i>	Siddall, J.
Dawson, Major J. M.	Tomlinson, T.
Dean, W.	Turner, Sir Ben, K.B., C.B.E.
Eddy, H., M.B.E.	York, Col. E., D.L.
Lomas-Walker, Sir Bernard, K.B.E. <i>(Chairman of the County Council.)</i>	

## COUNTY COUNCILLORS

Allan, J. T.	Inglis, E. P.
Archer, Rev. F.	Jackson, F.
Atkinson, Mrs. E. M. E.	Johns, W. J.
Bailey, A. R.	Jones, W. E.
Blackburn, A.	Kilner, A.
Blewitt, W. T.	Mellor, J. W.
Bradley, B.	Moorhouse, G.
Corfield, A.	Palmer, G. E.
Crabtree, E.	Radcliffe, R. J. P. J.
Dawson, H. M., M.B.E.	Richardson, J.
Drake, H. S.	Roberts, B.
Fielding, T. G.	Simpson, J. W.
Fletcher, A.	Tack, A. W.
Fouchard, A.	Waddilove, V.
Goodall, N.	Whittock, M.
Heald, Mrs. M.	Wood, A.
Hibbert, W.	Wood, F. S.
Hill, W.	Wragg, Mrs. E., M.B.E.
Houldsworth, Mrs. H. F.	.

TO THE CHAIRMAN AND MEMBERS OF THE PUBLIC HEALTH AND  
HOUSING COMMITTEE OF THE COUNTY COUNCIL OF THE  
WEST RIDING OF YORKSHIRE.

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present the Annual Report on the health conditions in the County during the year 1937.

*Issue of "County" and "School" Reports.*

The Report is being submitted to the County Council along with the Annual Report of the School Medical Officer, as much of the subject matter of these two reports is complementary the one to the other.

Apart from one or two exceptions referred to below, the vital statistics for the Administrative County show no outstanding variation from those of the previous year, although they compare favourably with the statistics of other large industrial counties and county boroughs.

*Birth Rate.*

The Birth Rate remains steady at the figure of 15.2 per thousand of the population (15.1 in 1936), and compares favourably with the rate of 14.9 for England and Wales.

*General Death Rate.*

The General Death Rate showed a slight rise to 12.7 deaths from all causes per thousand of the population (12.3 in 1936). The rate for England and Wales was 12.4.

The Death Rate from heart and circulatory diseases was almost stationary at the figure 3.94.

*Cancer.*

Evidence of a further advance in the incidence of cancer was shown by another slight increase in the death rate to 1.6 deaths per thousand population (1.51 in 1936). The Death Rate from this disease in 1933 was 1.42 and there has been a slight rise in each of the succeeding years.

*Tuberculosis.*

The Death Rate from pulmonary tuberculosis showed a slight rise representing .02 deaths per thousand of the population; this, however, was offset by an almost equal decline in the rate from non-pulmonary tuberculosis.

*Infantile and Maternal Mortality.*

A brighter aspect of the statistical picture is to be found upon an examination of the Infantile and Maternal Mortality Rates. In the case of the former the deaths of infants under one year of age per thousand live births was 60 in 1937 compared with 63 in 1936; while in the case of the Maternal Mortality Rate a further reduction is recorded compared with preceding years.

*Further reduction in Maternal Mortality.*

In 1933 the Maternal Mortality Rate for the Administrative County was 6.24; in 1934, 5.81; 1935, 4.55; 1936, 4.35; and in 1937, 3.92. The Maternal Mortality Rate represents the number of deaths of mothers per thousand live births, therefore it will be seen that in comparison with the year 1933 there are 2.32 mothers per thousand live births who were "confined" in 1937, and who are living to-day but who would have died if the high rate for 1933 had been maintained. On this assumption, out of approximately 23,000 births in the Administrative County during 1937, the actual increase in the number of mothers who survived confinements during 1937 was 53, and the total number of mothers during the four years since 1933 who are living to-day, but who would not have survived their confinement if the Maternal Mortality Rate for 1933 had applied, was 145.

In the "Ministry of Health Report upon an Investigation into Maternal Mortality" dated 1937, the West Riding of Yorkshire was listed as one of the areas in which the average puerperal mortality rate had been consistently in excess of the arbitrary figure of five per thousand live births. This reflection upon conditions associated with pregnancy, labour, and the puerperium in the West Riding has now been definitely removed, and I consider there can be little doubt that the reason for the decline in the number of deaths of mothers has been the increased attention given to matters associated with maternity and child welfare work by the County Council, in particular the ante-natal measures which have brought to light in good time defects or deformities which were calculated to jeopardise the life of the mother or the child.

*Ante-Natal Services.*

During the last five years the County Council increased the number of ante-natal clinics from 34 in 1932 to 102 in 1937, and it was one of the first (if not the first) County Authority to bring the general medical practitioner into the field of its ante-natal and post-natal service, offering the prospective mother the choice of the public clinic or the private doctor.

*The part of General Medical Practitioners.*

The introduction of the medical practitioner into the scheme had the result of increasing considerably the number of women who presented themselves for ante-natal examination and I am satisfied that the County Council and the medical practitioners practising in the Administrative County have reason to congratulate themselves upon the success of their attack during recent years upon the Maternal Death Rate.

*Finance and Maternal Mortality.*

There are people who attempt to assess the value of health and disease or, in fact, life itself in terms of finance, but it must be admitted that any such computation is bound to be highly speculative. Nevertheless, for those who are accustomed to such speculative mental processes it is interesting to make a comparison between the cost to the County Council of its varied maternity services during the period 1933 to 1936 inclusive, and a hypothetical figure representing the value to the nation of the lives of 145 mothers. The estimated net expenditure on maternity schemes for the period 1933 to 1936 was £149,000, and according to Statisticians, the value of a person of 20 years of age is £800 and at 30, £820. Taking the average age of the 145 women referred to as 30, the approximate value to the nation on this basis would be £119,000. After consulting fertility tables it is estimated that 250 children have been or will be born to these 145 mothers. A child's life at five years of age is estimated to be worth £200 and the value increases with age, hence the total value of these 250 children is £50,000 which, together with the value of the mothers, namely £119,000, gives a sum total of £169,000. Personally I prefer to take this process of reasoning no further and to let the reader draw his own conclusions, if any, from the statistics enumerated, bearing in mind, however, that the saving in the lives of mothers in confinement entails a big reduction in suffering and indicates also a big reduction generally in post-natal morbidity in midwifery practice, while as regards child-life and the present national call for an increased birth rate there is here a very substantial contribution.

The County Council's new midwifery service (under the Midwives Act, 1936) *Midwifery Service.* came into operation on the 1st July, 1937. By the provisions of this Act there were appointed to the establishment of the County Council 192 whole-time midwives, while in addition, the services were retained of 158 district nurse-midwives attached to 119 nursing associations, and six relief nurse-midwives attached to the West Riding County Nursing Association. The estimated net annual cost of this scheme to the County Council is £48,696. I am pleased to be able to report that the scheme is working highly successfully. The usual number of difficulties to be found associated with new legislation has been encountered and certain necessary adjustments have been made, but as the result of the general goodwill on the part of the midwives themselves and to no less an extent on the part of district nursing associations, obstacles which have presented themselves have been easily surmounted. I feel confident that the new service is having the effect of raising appreciably the standard of midwifery practice and this in turn should be reflected in a still further reduction in the maternal mortality rate and in the illness which hitherto has so often supervened upon child-birth.

Although at the time of writing nearly a year has elapsed since the Midwives Act first came into operation it is not yet possible to say what the effect of the new midwifery service is going to be upon the demand for maternity hospital accommodation. This demand varies in different parts of the County and the variation existed prior to the establishment of the new whole-time service. In the Sedburgh Rural District in the north, where the County Council appointed health visiting midwives, I am informed that the tendency is for pregnant women to remain at home and to engage the doctor and midwife. In areas around Huddersfield in the west, the tendency is for patients to gravitate to a maternity home. This is probably due to the fact that the majority of the women are employed in mills and household assistance is difficult to obtain. In this connection it is anticipated that the scheme of "home helps" recently sanctioned by the County Council will have a beneficial effect in this area. In the Doncaster area in the south, the new midwifery scheme has had little or no effect as 90% of cases treated in maternity homes are admitted on account of emergencies. *Effect of Midwifery Service upon demand for Maternity Home Accommodation.*

During the year a survey was made of the maternity hospital accommodation serving the Administrative County and subsequently recommendations for additional accommodation were presented to and approved by the County Council. In bringing forward these recommendations, due consideration was given to the varying demands for maternity beds in different areas; thus in the south of the County the demand varies between 25% to 33% of the total of confinements, while in the west the demand is much higher, reaching in certain areas nearly 40% of the total confinements. The total increased number of maternity beds agreed to in principle by the County Council was 308, and this new accommodation is proposed to be set up partly at voluntary hospitals, partly as extensions to County Council General Hospitals and partly in the form of new wings at each of two new County General Hospitals, one in the south and one in the north-west of the administrative area (see page 58). *Maternity Hospital Accommodation.*

In my last annual report I referred to the subject of rheumatism and the dire need in connection with this disease for increased scientific research. During the early part of this month (May, 1938), the "Grey Cross" Campaign was launched under the leadership of Lord Harewood. The object of this campaign will be, in the first place, to provide funds for scientific research and institutional treatment of rheumatism. The appeal made by Lord Harewood has already met with a very satisfactory response. *Rheumatism.*

Probably the most outstanding development of the year was in connection with the progress made in formulating the County Council's general hospital policy. In my annual report for 1936 I referred to the appropriation of two County Public Assistance Hospitals, the White Rose Hospital, Wakefield, and the Staincliffe Hospital, Dewsbury, to the control of the West Riding Public Health and Housing Committee. The transfer took place smoothly, and largely as a result of the spirit of co-operation which has obtained between the officers of the respective Committees certain difficulties which might have been expected from such a change in regime have not arisen. *County Hospitals.*

One result of the administration of these two hospitals under the Public Health Acts, as distinct from the Poor Law Acts, has been a decided increase in the number of admissions of acute medical and surgical cases, together with a more rapid turnover of patients.

Following upon the official consultations required by the Local Government Act, 1933, between the County Council and representatives of the voluntary hospitals, Committees of the County Council were able to give careful consideration to the hospital problem, both from the point of view of the County Council and of the voluntary hospitals, and subsequently the Public Health Committee reached the stage where it was able to bring forward considered recommendations as to the number of new beds which should be provided. *Consultations with Voluntary Hospitals.*

It was decided that so far as concerned the provision of new beds for the general run of medical and surgical sick the County Council should set up its own hospitals or extensions to hospitals, but that where new beds were required for special services, co-operation should take place wherever possible with the voluntary hospital authorities, in order to prevent duplication of special departments or duplication of expensive equipment at institutions in the County situated close together.

The recommendations, which were approved by the County Council at its meeting in January, 1938, were that 1,250 new general hospital beds should be set up, 640 at a new general hospital in South Yorkshire, 400 at a new general hospital in *Provision of new General Hospital Beds.*

North-west Yorkshire, 150 as extensions to the White Rose County Hospital, Wakefield, and 60 as extensions to the Staincliffe County Hospital, Dewsbury; while at each of these four hospitals it was advised that beds, in addition to the foregoing, should be set apart for tuberculosis cases (observation and advanced), maternity and orthopaedic cases.

At the time of writing (May, 1938), a special Sub-Committee has under consideration the plans for the extension of the two hospitals at Wakefield and Dewsbury, and it is busily engaged in a search for sites for the proposed two new general hospitals. (Further details relating to general hospitals will be found on pages 49 to 60).

*Radium Treatment of Cancer.*

In connection with the treatment of cancer the County Council is negotiating with representatives of the Leeds, Bradford and Sheffield Radium Institutes and with the Corporations of these three cities, and it is hoped that in the near future satisfactory agreements will have been arrived at which will enable the County Council, County Boroughs and voluntary bodies to work amicably together.

*Orthopaedic Scheme.*

Likewise in developing an orthopaedic scheme the County Council, along with the Leeds Corporation, is negotiating with the Yorkshire Association for the Care of Cripples, which has been set up under the Chairmanship of His Honour Judge Frankland. The first likely development in this connection will be the provision of new orthopaedic accommodation at the Marguerite Home, Thorp Arch, near Leeds.

*Prevention of Blindness.*

In August, 1937, the Ministry of Health issued a circular letter (No. 1621) drawing the attention of local authorities to the importance of taking all practicable steps to prevent blindness and impaired eyesight. The County Council decided to adopt the majority of the recommendations contained in the model scheme which was issued with the Ministry's circular letter. Details of the County Council's proposals relating to this matter will be found on page 49.

*Children under School Age.*

In my report for 1936 I referred to the Ministry of Health Circular 1550 concerning the health of children under school age, and in this connection attention was drawn to the large increase in the volume of work which has devolved upon the County Council's nursing staff as the result of the steady issue of recommendations made by the Ministry of Health and the Board of Education during the last 10 to 15 years. The Public Health and Education Committees gave careful consideration to the proposals contained in my report on this subject and subsequently the County Council agreed to the appointment of 27 additional health visitors and to the appointment of six orthopaedic nurses.

*Shortage of Nurses.*

As the result of the present acute shortage of nurses it has not been possible to secure the necessary staff for this extension of the child welfare service but as each new recruit is obtained, additional clinics are provided and it becomes possible to arrange for an increased number of home visits to the "toddler."

*Transfer of Veterinary Staff.*

The transfer of the West Riding County Council Veterinary Staff to the Ministry of Agriculture has thrown added responsibilities upon the County Council's staff of sanitary inspectors. It is a requirement of the Milk and Dairies (Amendment) Order, 1938, that the Veterinary Officer (now the officer of the Ministry of Agriculture) shall report to the County Medical Officer in cases of disease in the udder of a cow which is likely to be infectious or to produce illness, and in such cases the Veterinary Officer issues a written notice to the farmer that the milk of the cow in question must be excluded from milk sold for human consumption for a period of not exceeding five days, the cow being inspected at the conclusion of this period and where necessary a further notice being issued. During the years when the Veterinary Staff were officers of the County Council they were responsible for this re-inspection of cattle following upon the service of the initial notice. It was admitted however that on account of the large number of cattle which at all times show suspicious signs, the re-inspections as required by the Act were quite impracticable and in consequence they fell into desuetude; whilst the farmer, his attention having been drawn to the offending cow was merely asked to co-operate with the Veterinary Officer by keeping the contaminated milk separate so long as the cow showed signs of disease.

*Veterinary Inspection of diseased cattle.*

This impracticability to follow up the initial notice of the Veterinary Officer and to make re-inspections every five days has not been lessened since the transfer of the veterinary service, and therefore action under this section of the Act is of necessity limited to cases known to be serious and to herds which are known to be producing milk which is being supplied to school children under the "Milk in Schools" Scheme.

*The late Miss Annie Brooke.*

It is with regret that I record the death of Miss Annie Brooke, the first inspectress of nurses and midwives ever to be appointed by the County Council. Miss Brooke entered the County Council's service in 1915, and upon the introduction of the Maternity and Child Welfare Act, 1918, she was immediately engaged in the organisation of maternity and child welfare centres, the formation of nursing associations and kindred matters which at that time formed the nucleus of the present comprehensive scheme. Her devotion to her work, her energies in the service, and her pleasing personality will be long remembered by a very large section of the population in the West Riding.

I have the honour to be,

Your obedient servant,

T. N. V. POTTS,

County Medical Officer.

County Hall, Wakefield.

May, 1938.



## SCHOOL DENTISTS—(continued).

G. H. Bulcock, L.D.S.  
 F. W. Buzza, L.D.S.  
 R. K. Cole, L.D.S.  
 M. M. Gibson, L.D.S.  
 M. Hattan, L.D.S.  
 J. Jackson, L.D.S.  
 H. F. Jones, L.D.S.  
 W. P. Jones, L.D.S.  
 G. Kilvington, L.D.S.  
 O. A. Long, L.D.S.  
 J. H. N. Macdonald, L.D.S.  
 J. M. Macdonald, L.D.S.  
 J. Mackay, L.D.S.

R. E. Morgan, L.D.S.  
 D. M. Phillips, L.D.S.  
 J. G. Richardson, L.D.S.  
 W. Rodger, L.D.S.  
 R. Selare, L.D.S.  
 B. Sleight, B.Ch.D.  
 F. W. Sturgess, L.D.S.  
 M. M. Thom, L.D.S.  
 J. Todd, L.D.S.  
 F. C. Shenton, L.D.S.  
 E. Thornton, L.D.S.  
 J. R. Wishart, L.D.S.  
 G. O. Wood, L.D.S.

## Blind Persons Act, 1920.

24 Part-time Ophthalmic Surgeons.

## County Analyst.

F. W. Richardson, F.I.C., F.C.S. (part-time).

## Bio-Chemist.

D. W. Auchinachie, M.A., B.Sc. (Hons.), Ph.D.

## Consultant Obstetricians, Gynaecologists and Physicians (48).

The following is a list of consultant obstetricians, gynaecologists and physicians as approved by the County Council:—

Name.	Address.	Telephone Number and District.
		<b>BARNSELY.</b>
G. R. Potter.	10, Victoria Street, Barnsley.	779.
		<b>BRADFORD.</b>
Basil Hughes.	1, Mornington Villas, Bradford.	1119.
W. Foster Rawson.	9, Park Drive, Bradford.	3786.
		<b>DONCASTER.</b>
W. Moir Shepherd.	Arendal House, Thorne Road, Doncaster.	2742.
J. P. Semple.	65, Thorne Road, Doncaster.	2302.
L. D. Callander.	Danum House, South Parade, Doncaster.	2342.
P. Milligan.	149, Thorne Road, Doncaster.	3539.
J. B. Hogarth.	Rosslyn, Thorne Road, Doncaster.	2591.
		<b>HARROGATE.</b>
C. D'Oyley Grange.	2, Lancaster Road, Harrogate.	4548.
T. V. Pearce.	2, Brunswick Drive, Harrogate.	2898.
E. G. Campbell.	2, Ripon Road, Harrogate.	4404.
W. O. Greenwood.	10, Ripon Road, Harrogate.	2712.
Gladys Kay.	Norfolk Lodge, Norfolk Road, Harrogate.	6238.
		<b>HUDDERSFIELD.</b>
W. D. Galloway.	Sunnybank, Holmfirth.	74.
W. S. Dickson.	Wentworth House, Huddersfield.	2335.
H. S. Brander.	Farfield House, Keighley.	<b>KEIGHLEY.</b> 2083.
		<b>LEEDS.</b>
Mrs. R. H. B. Adamson.	24, Park Square, Leeds.	22848.
Prof. A. M. Claye.	26, Park Square, Leeds.	27625.
Alfred Gough.	42, Park Square, Leeds.	22723.
Prof. Wm. Gough.	31, Park Square, Leeds.	22161.
B. L. Jeaffreson.	32, Park Square, Leeds.	22733.
Prof. Carlton Oldfield.	25a, Park Square, Leeds.	22312.
Wm. McGregor Young.	14, Eldon Terrace, Leeds.	22026.
D. W. Currie.	24, Park Square, Leeds.	23590.
		<b>MANCHESTER.</b>
W. R. Addis.	2, St. John Street, Manchester.	0435 (Blackfriars)
Kenneth V. Bailey.	2, St. John Street, Manchester.	8416 (City)
Chas. P. Brentnall.	Riversdale, Mersey Road, West Didsbury.	3762 (Didsbury)
J. Webster Bride.	74, Palatine Road, Withington, Manchester.	8963 (Blackfriars)
A. Callam.	1, Ormerod Road, Burnley.	2867 (Burnley)
Prof. Archibald Donald.	2, St. Peters Square, Manchester.	2195 (Alderley Edge)
Prof. Daniel Dougal.	Southernhay, Mersey Road, West Didsbury.	1434 (Didsbury)
G. W. Fitzgerald.	Albert Square, Manchester.	6458 (Blackfriars)
Wm. George.	2, Fenton Street, Lancaster.	86 (Lancaster)
Eric Gerrard.	4, Rowsley Avenue, West Didsbury.	2681 (Didsbury)
J. W. A. Hunter.	2, St. John Street, Manchester.	3287 (Blackfriars)
F. H. Lacey.	16, St. John Street, Manchester.	1500 (Blackfriars)
Prof. W. F. Shaw.	5, Park Crescent, Victoria Park, Manchester.	7727 (Blackfriars)
Robert Newton.	11, St. John Street, Manchester.	2198 (Blackfriars)

## LIST OF APPROVED OBSTETRICIANS.—Continued.

SHEFFIELD.		
John Chisholm.	430, Glossop Road, Sheffield.	61980 (Broomhill)
G. A. Davies.	432, Glossop Road, Sheffield.	62726 (Broomhill)
N. L. Edwards.	64, Friar Gate, Derby.	1551.
H. J. Malkin.	10, The Ropewalk, Nottingham.	43635.
F. J. Milward.	7, Abercrombie Street, Chesterfield.	2967.
Prof. M. H. Phillips.	420, Glossop Road, Sheffield.	62302 (Broomhill)
J. Eric Stacey.	2, Durham Road, Sheffield.	60837 (Broomhill)
L. B. Patrick.	80, Upper Hanover Street, Sheffield 3.	20320.
YORK.		
A. R. Lister.	57, Bootham, York.	3106.
Gerald S. Hughes.	6, St. Leonards, York.	3155.

## Child Welfare Centre and Ante-Natal Medical Officers.—Total Number 114, as follows:—

Whole-time Medical Officers of Health	4
School Medical Inspectors	12
Part-time Medical Practitioners in general practice	59
Part-time Medical Women in general practice	24
Part-time Medical Women not in general practice	15

## School Nurses and Health Visitors, etc.

4 Inspectresses of Nurses and Midwives.	
2 Non-Medical Supervisors of Midwives.	
117 Child Welfare and School Nurses.	
5 School Nurses.	
9 Dental Nurses.	
21 Dental Attendants.	
22 Tuberculosis Nurses.	
66 Part-time Child Welfare and School Nurses.	
7 Part-time School Nurses.	
184 Salaried Midwives (directly employed by County Council).	
164 Part-time Midwives (District Nurses subsidised by County Council).	

## Listerdale Maternity Home.

Matron—Miss D. D. McLean.	
Staff Nurse Midwives	2.
Midwives	6.

## Technical Staff.

## CHIEF COUNTY SANITARY INSPECTOR:

A. Brook.

## COUNTY SANITARY INSPECTORS:

L. Butterworth.	H. Tayler.
F. C. Brookes.	R. D. Irving.

## Laboratory Staff:

## CHIEF LABORATORY ASSISTANT:

J. W. Gooderidge.

## SENIOR LABORATORY ASSISTANTS:

I. W. Harris.	R. Hodgson.
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7 Junior Assistants, 8 Attendants.

## COUNTY RADIOGRAPHER:

Miss A. M. Byass, B.Sc., M.S.R.

FOOD AND DRUGS SAMPLING OFFICERS:  
(Also act as Inspectors of Weights and Measures)

1 Chief Inspector, 9 Sampling Officers.

## Clerical Staff.

## CHIEF CLERK:

J. Colman.

## SENIOR CLERK:

J. C. Bennett.

## SECTIONAL SENIOR CLERKS:

R. L. Rea.	<i>Treatment of Tuberculosis.</i>	J. W. Beaumont.	<i>Statistics, General Public Health.</i>
B. E. Allenby.	<i>Maternity and Child Welfare.</i>	H. V. Stott.	<i>Cashier, V.D., Propaganda.</i>
W. A. Ryder.	<i>School Medical Services.</i>	J. W. Bray.	<i>General, Local Government Act.</i>
J. H. Gloyne.	<i>Milk Supply, Food and Drugs.</i>	A. B. Harrison.	<i>Laboratory.</i>
H. Moorhouse.	<i>Hospitals, etc.</i>		

46 Clerks, 25 Typists.

## Medical Officers of Health.

There are 15 whole-time and 65 part-time Medical Officers of Health of County Districts.  
(June, 1938).

## District Medical Officers (Public Assistance) and Public Vaccinators.

Name	Qualifications.	District	Area (acres)	Population (approx.)
<b>No. 1.—Ewecross Area.</b>				
J. T. Bleasdel	M.R.C.S., L.R.C.P.	Gisburn	30302	2974
T. G. S. Harkness	L.R.C.P., L.R.C.S.	Slaidburn	51369	1975
C. A. Allan	M.B., Ch.B.	Great Mitton	1727	181
T. W. Rothwell	M.B., Ch.B.	Dent	20895	925
B. S. Hyslop	M.B., Ch.B.	Sedburgh, Garsdale	31779	2644
G. J. Marks	M.B., Ch.B.	Horton and Settle	35775	5045
T. L. Dowell	M.B., Ch.B.	Ingletton	26548	2785
T. Lovett	M.B., Ch.B.	Bentham	7718	2552
H. M. Clegg	M.R.C.S., L.R.C.P.	Clapham	25345	1120
H. Wales	M.B., B.Ch.	Long Preston	16295	2070
G. D. G. Cameron	M.R.C.S., L.R.C.P.	Kirkby Malham	22328	535
		Arnccliffe	17998	260
<b>No. 2.—Staincliffe Area.</b>				
†H. Sheard	M.D., Ch.B., M.R.C.S., L.R.C.P.	Kildwick	11327	6586
*J. Renwick	M.B., Ch.B.	Addingham	20785	2761
W. L. Crabtree	L.S.A., L.M.S.S.A.	Grassington and Kettlewell	60502	3245
G. D. G. Cameron	M.R.C.S., L.R.C.P.	Skipton	21978	15471
N. A. MacLeod	M.D., Ch.B.	Thornton	10002	6667
A. M. Niven	M.B., Ch.B.	Barnoldswick	6572	12131
J. W. Pickard	M.B., Ch.B.	Silsden	7101	4919
M. Purcell	M.B., Ch.B., B.A.O.	Gargrave	20994	1941
H. Wales	M.B., Ch.B.			
<b>No. 3.—Claro Area.</b>				
†C. A. Flintoff	M.R.C.S., L.R.C.P.	Pateley Bridge	49939	5264
E. G. Campbell	M.B., Ch.B., D.P.H.	Birstwith	25132	1270
P. A. Steven	M.B., Ch.B.	Ripon	18394	10613
*S. Hey	M.R.C.S., L.R.C.P.	Sharow	7391	890
†R. W. H. Anning	M.B., B.S., M.R.C.S., L.R.C.P.	Kirkby Malzeard	25817	2151
R. G. M. Harvey	L.R.C.P.I. & L.M., L.R.C.S.I.	Harrogate	10795	38935
S. Foskett	M.D., B.S.	Killinghall	15624	3132
†D. F. Dobson	M.B., B.S., D.P.H.	Knaresbro'	12141	8626
†W. J. Forbes	M.B., Ch.B., B.A.O.	Knaresbro'	2688	4818
S. C. Wilkinson	M.B., Ch.B., L.S.A.	Starbeck	7633	1444
J. S. Dudgeon	M.D., B.Ch., B.A.O., D.P.H.	Acomb	16981	2553
K. H. Martin	M.B., Ch.B.	Green Hammerton	10201	1298
†J. M. Benson	M.B., Ch.B.	Gt. Ouseburn	9926	2401
F. P. Rust	M.B., B.S., L.R.C.P., L.R.C.S.	Boro'bridge		
<b>No. 4.—Barkston Ash Area.</b>				
T. H. Barton	M.B., B.S.	Bishopthorpe	5438	2363
J. B. Young	M.B., Ch.B.	Aberford	17300	10095
†C. C. Hargreaves	M.B., Ch.B., D.P.H.	Kippax	10122	12468
Wm. Murphy	M.B., Ch.B., M.R.C.S., L.R.C.P.	Sherburn	22009	5448
J. P. Scatchard	M.B., B.S., M.R.C.S., L.R.C.P.	Ryther	22902	6184
R. W. Lee	M.B., Ch.B.	Tadcaster	11100	4178
H. B. Cook	M.D., Ch.B.	Boston Spa	19233	3547
O. D. Beetham	M.B., Ch.B.	Harewood	7058	2685
†J. A. Hargreaves	M.B., C.M.	Kirkby Overblow	27247	6366
†E. R. Hargreaves	M.B., B.Ch., D.P.H.	Thorner		
		Tockwith		
		Wetherby		
<b>No. 5.—Skrack Area.</b>				
D. W. E. Burridge	M.B., Ch.B.	Horsforth	5659	17011
†A. J. I. Muschamp	M.B., Ch.B.	Yeadon	3979	13682
†G. E. Macvie	M.D., Ch.B.	Baildon	4984	11691
†E. G. Firth	M.R.C.S., L.R.C.P.			
*T. Browne-Header	M.B., C.M.	Ilkley	11646	10226
†A. W. Gott	M.B., B.S., M.R.C.S., L.R.C.P.	Otley	37068	22238
*W. H. Galloway	M.R.C.S., L.R.C.P.			
†H. Wolfe	M.D., B.S., D.P.H.			
<b>No. 6.—Worth Valley Area.</b>				
†H. C. Ling	M.R.C.S., L.R.C.P. & L.M.	North Keighley	11663	44411
†W. Lambert	M.R.C.S., L.R.C.P.	South Keighley		
*F. Villy	M.D.			
W. A. Lochhead	M.B., Ch.B.	Bingley	9522	18780
J. E. Baird	M.B., Ch.B., B.A.O.	Cullingworth	1215	1790
†H. Sheard	M.D., Ch.B., M.R.C.S., L.R.C.P.	Haworth	9991	10716
*J. Renwick	M.B., Ch.B.	Sutton	4414	5179
T. M. S. Findlater	M.B., Ch.B.	Wilsden	2638	3000
<b>No. 7.—East Morley Area.</b>				
†E. T. Hyland	M.B., B.Ch., B.A.O.	Pudsey	2397	14762
H. D. Merrington	M.B., Ch.B.	Drighlington	1135	4115
A. L. Mitchell	M.B., Ch.B.	Hunsworth (part of)	1381	879
J. A. Hope	M.B., C.M.	Hunsworth (part of)	—	439
*J. G. Craig	M.D., B.Ch., B.A.O.	Shipley	2175	30628
†H. Gibson	M.R.C.S., L.R.C.P.	Denholme	2536	2547
A. H. Stewart	M.D., C.M.	Calverley	2106	4020
N. A. A. Hughes	M.R.C.S., L.R.C.P.	Farsley	821	6566
T. H. Elmer	M.B., Ch.B.			

\* Public Vaccinator only.

† District Medical Officer only.

‡ Medical Officer of Health (part time)

\* Assistant District Medical Officer.

## DISTRICT MEDICAL OFFICERS (PUBLIC ASSISTANCE) AND PUBLIC VACCINATORS—continued.

Name.	Qualifications.	District.	Area (acres.)	Population (approx.)
<i>No. 8.—Calder Area.</i>				
†J. J. Murphy ...	M.B., B.Ch., B.A.O. ...	Shelf ...	1303	2883
†A. J. W. Stephen ...	M.B., Ch.B., D.P.H. ...	Ripponden ...	13240	5292
†H. W. Morck ...	M.R.C.S., L.R.C.P. ...	Sowerby and Sowerby Bridge	4140	15628
V. C. Meyer ...	M.B., Ch.B. ...	Luddenden Foot ...	2948	4546
C. S. Ogilvy ...	L.R.C.P., L.R.C.S., L.R.F.P.S. ...	Brighouse ...	9082	31616
†H. N. Middleton ...	M.B., B.Ch., B.A.O. ...	Hipperholme ...		
†R. Lawson ...	M.D., Ch.B. ...	Rastrick ...		
C. M. Stallard ...	M.D., Ch.B. ...	Elland ...	8431	15150
A. G. Gamble ...	L.M.S.S.A. ...	Stainland ...	2262	4097
W. J. L. Francis ...	M.B., F.R.C.S. ...	Queensbury ...	1492	5780
G. C. Sharp ...	M.B., Ch.B. ...	Todmorden ...	12770	21210
H. Thorp ...	M.B., Ch.B., D.P.H. ...	Hebden Bridge ...	20977	11007
†F. J. Dowdall ...	M.B., B.Ch., B.A.O. ...	Mytholmroyd ...	6608	4476
S. T. Henderson ...	M.B., Ch.B. ...			
<i>No. 9.—Spenn Valley Area.</i>				
*H. Keighley ...	M.R.C.S., L.R.C.P. ...	Batley ...	3026	29030
†J. Walker ...	M.B., Ch.B. ...	Birstall ...	1435	11631
A. Dick ...	M.B., Ch.B., D.P.H. ...	Cleckheaton ...	1756	12500
A. L. Mitchell ...	M.B., Ch.B. ...	Gildersome ...	992	3178
H. D. Merrington ...	M.B., Ch.B. ...	Gomersal ...	2024	6586
E. M. Whitehead ...	M.B., Ch.B. ...	Heckmondwike ...	606	8948
H. W. Laing ...	M.B., Ch.B. ...	Liversedge ...	2136	14692
*R. M. Beatty ...	M.B., Ch.B. ...	Mirfield ...	3394	11770
†R. Dick ...	M.B., Ch.B., F.R.C.S. ...	Morley ...	3385	22430
J. E. H. West ...	M.B., Ch.B. ...	Ossett ...	3333	14080
*W. S. Sykes ...	M.B., B.Ch., D.P.H. ...			
†W. T. McCutcheon ...	M.B., Ch.B. ...			
S. B. Stoker ...	F.R.C.S., L.R.C.P., L.R.C.S., L.R.F.P.S. ...			
<i>No. 10.—Lower Agbrigg Area.</i>				
†T. Stephens ...	B.Sc. M.R.C.S., L.R.C.P. ...	Kirkhamgate ...	5471	12050
		Ardsley, E. and W. Thorpe ...		
K. S. Macdonald-Smith ...	M.B., B.Ch., F.R.C.S. ...	Crigglestone ...	5261	5079
†D. Bell ...	M.B., Ch.B., D.P.H. ...	Emley ...	8076	5974
C. H. Smith ...	M.B., Ch.B. ...	Flockton ...	1280	7825
J. N. U. Russell ...	M.B., B.Ch., B.A.O. ...	Horbury ...	6239	19706
†M. Melvin ...	M.B., Ch.B. ...	Lofthouse and Stanley ...		
J. D. Bottomley ...	M.B., Ch.B. ...	Walton ...	2662	1773
†F. J. G. Tocher ...	M.B., Ch.B. ...	Altofts ...	3068	19824
D. Downie ...	M.B., Ch.B. ...	Normanton ...	4612	6611
†H. Schofield ...	M.B., Ch.B. ...	Sharlston and Crofton ...		
N. S. Twist ...	M.B., Ch.B. ...	Oulton ...	1178	4219
†J. G. Munro ...	M.B., Ch.B. ...	Rothwell ...	3500	9322
*T. E. Lister ...	M.B., Ch.B. ...			
C. H. Seville ...	M.B., Ch.B. ...			
†H. Stevenson ...	M.B., C.M. ...			
<i>No. 11.—Osgoldcross Area.</i>				
G. Burnett ...	M.B., Ch.B., F.R.C.S. ...	Pontefract ...	9039	21165
†J. Kehelly ...	M.B., B.Ch., B.A.O. ...	Knottingley ...	14411	9341
F. G. Creaser ...	M.B., Ch.B. ...	Hensall ...	5678	885
B. H. Gillbanks ...	M.B., Ch.B. ...	Ferry Fryston ...	12423	10715
*J. J. W. Campbell ...	L.R.C.P., L.R.C.S., L.R.F.P.S. ...			
†M. I. Prangnell ...	M.B., Ch.B. ...	Castleford ...	3728	36632
†G. T. W. Sloan ...	M.B., B.Ch., B.A.O. ...			
*W. Steven ...	M.B., C.M. ...	Featherstone ...	4431	14440
†J. Duncan ...	M.B., Ch.B. ...	Methley ...	3493	4482
E. W. L. White ...	M.B., Ch.B. ...	Hemsworth ...	4103	13070
†M. B. Taylor ...	M.R.C.S., L.R.C.P. ...	Ackworth ...	8030	5809
T. C. A. Sweetnam ...	M.D., B.Ch. ...	Smeaton ...	5504	872
W. L. Gardner ...	M.B., B.S. ...			
J. Malloch ...	M.B., Ch.B. ...			
†F. W. P. Sullivan ...	M.D., B.Ch., B.A.O. ...	Sth. Kirkby ...	7019	23935
*E. J. H. Sullivan ...	M.D., M.Ch., L.M. ...			
*H. J. Hacker ...	M.R.C.S., L.R.C.P. ...	Ryhill ...	4297	6259
S. Hodgkinson ...	M.B., Ch.B., D.T.M. ...	Brierley ...	3413	8260
†W. R. Gardner ...	M.B., Ch.B. ...	Houghton ...	2318	3295
†J. W. Whitworth ...	M.B., Ch.B. ...			
<i>No. 12.—Goole and Selby Area.</i>				
†A. M. Erskine ...	M.D., B.Ch., D.P.H. ...	Goole ...	10123	21841
†J. Crawford ...	M.B., B.Ch., B.A.O. ...	Snaith ...	13553	4600
F. G. Creaser ...	M.B., Ch.B. ...	Carlton ...	11902	1999
*W. Eardley ...	M.B., B.Ch. ...	Swinefleet ...	8942	2083
†P. Eardley ...	M.B., Ch.B. ...			
*J. C. T. Crowden ...	M.B., Ch.B. ...	Adlingfleet ...	5425	344
†P. Eardley ...	M.B., Ch.B. ...	Selby and Cawood ...	26354	14176
O. L. Scarborough ...	M.R.C.S., L.R.C.P. ...			
<i>No. 13.—Don Valley Area.</i>				
†J. M. Hain ...	M.B., Ch.B. ...	Doncaster West ...	7983	19597
†W. L. Walker ...	M.B., Ch.B. ...	(Arksley, etc.) ...		
*W. E. L. Lawson ...	M.B., Ch.B. ...			
*B. Lyons ...	M.D., B.Ch., D.P.H. ...			

\* Public Vaccinator only.

† District Medical Officer only.

‡ Medical Officer of Health (part-time).

\* Assistant District Medical Officer.

## DISTRICT MEDICAL OFFICERS (PUBLIC ASSISTANCE) AND PUBLIC VACCINATORS—continued.

Name	Qualifications.	District.	Area. (acres)	Population (approx.)
<i>No. 13.—Don Valley</i>				
<i>Area—(contd.).</i>				
H. F. Renton ...	M.D., B.S., M.R.C.S.	Armthorpe ...	15190	12130
†B. Hart ...	L.M.S.S.A.	...	...	...
J. Malloch ...	M.B., Ch.B.	Askern ...	18035	9834
*W. F. Ward ...	L.R.C.P., M.R.C.S.	...	...	...
†P. Mullins ...	M.B., B.Ch.	Bawtry ...	7939	14650
*P. Kane ...	M.B., B.Ch., B.A.O.	...	...	...
†G. B. Kelly ...	M.B., Ch.B., B.A.O.	...	...	...
*J. K. T. Mills ...	M.B., Ch.B.	Bolton-on-Dearne ...	2325	13670
†F. J. Boyle ...	M.B., B.Ch., B.A.O.	Thurnscoe ...	1254	10740
W. J. Maclure ...	M.B., Ch.B.	...	...	...
*J. O'Donnell ...	L.R.C.P.I., L.M., L.R.C.S.I. & L.M.	Conisbrough ...	13117	27592
J. Wylie ...	M.B., Ch.B.	Hooton Pagnell ...	11915	1769
D. Malloch ...	M.B., Ch.B.	...	...	...
*A. M. McArthur ...	M.B., Ch.B.	Adwick-le-Street ...	3605	19650
†J. J. Huey ...	L.S.A., L.M.S.S.A.	...	...	...
†S. P. Bhatia ...	M.B., B.S., M.R.C.S., L.R.C.P.	Mexborough ...	4511	17423
†A. C. Lindsay ...	M.B., Ch.B.	...	...	...
C. D. Walker ...	M.B., Ch.B.	Tickhill ...	12768	3176
R. M. L. Anderson ...	M.B., Ch.B.	Hatfield ...	16188	7624
*†J. M. Taylor ...	M.B., Ch.B., D.P.H.	Stainforth ...	8806	9303
†W. Henry ...	M.B., Ch.B.	Thorne ...	13425	15456
<i>No. 14.—Staincross</i>				
<i>Area.</i>				
J. Leishman ...	M.D., Ch.B.	Dodworth ...	5075	8197
†H. R. L. Allott ...	L.M.S.S.A.	Hoyland ...	1961	11860
P. Lewis ...	M.R.C.S., L.R.C.P.	Hoyland Common ...	2909	10095
*H. A. L. Banham ...	L.R.C.P., L.R.C.S.	...	...	...
†J. K. A. Beverley ...	M.B., Ch.B.	Worsborough ...	3084	7610
†R. Millar ...	M.B., Ch.B., D.P.H.	Darton ...	8968	8783
†J. C. Pickup ...	M.B., Ch.B., D.P.H.	Wombwell ...	8567	18117
†H. B. Pare ...	M.B., Ch.B.	Royston ...	4027	6207
T. F. Quigley ...	L.R.C.P.I., L.M., L.R.C.S.I. & L.M.	Cudworth ...	1746	9301
†J. W. Whitworth ...	M.B., Ch.B.	Darfield ...	2881	5411
J. Smail ...	M.B., Ch.B.	Grenoside ...	8537	6468
*H. Sands ...	M.B., Ch.B., B.A.O.	...	...	...
†H. N. Skelton ...	M.R.C.S., L.R.C.P.	Ecclesfield ...	2800	8950
J. A. R. Thomson ...	M.D., Ch.B., D.P.H.	Westnall ...	10573	4328
N. McPhail ...	M.B., Ch.B.	Bradfield ...	21727	4578
T. A. H. Smith ...	M.B., Ch.B.	Southey ...	700	600
A. E. Goldie ...	M.B., Ch.B.	Stocksbridge ...	5938	10235
†T. H. Easton ...	M.D., Ch.B.	Wortley ...	7839	2320
A. A. Masser ...	M.B., Ch.B.	Penistone ...	17182	6755
E. L. Mommen ...	L.R.C.P., L.R.C.S., L.R.F.P.S.	Clayton West ...	6927	4298
F. L. Whincup ...	M.B., Ch.B.	Cawthorne ...	8778	4815
<i>No. 15.—Upper Agbrigg</i>				
<i>Area.</i>				
†J. A. Stephens ...	M.R.C.S., L.R.C.P.	Kirkburton ...	6964	8414
†D. Bell ...	M.B., Ch.B., D.P.H.	Skelmanthorpe ...	4158	6685
†M. M. Dey ...	M.B., Ch.B.	Shepley ...	7936	7645
W. D. Galloway ...	M.R.C.S., L.R.C.P.	Holmfirth ...	8993	5246
*E. Trotter ...	M.B., Ch.B.	...	...	...
†T. S. Davy ...	M.B., Ch.B.	Holmfirth ...	4641	7084
†W. H. Smailes ...	M.D., Ch.B., D.P.H.	Honley ...	1977	4745
P. MacGirr ...	M.B., Ch.B.	Meltham ...	5901	5624
R. N. Kirk ...	M.B., Ch.B.	Slaitwaite ...	5439	9252
S. Hall ...	M.B., Ch.B., B.A.O.	Golcar ...	1980	9525
G. R. Aspinwall ...	M.R.C.S., L.R.C.P.	Marsden ...	8633	5407
*S. Prior ...	M.B., C.M.	...	...	...
†J. E. Taylor ...	L.M.S.S.A.	Kirkheaton ...	1580	2331
†E. A. Ramsden ...	M.R.C.S., L.R.C.P., D.P.H.	The whole of the area covered by the former Saddleworth Union	18485	17224
J. Loftus ...	M.B., Ch.B.	...	...	...
J. G. Oliver ...	M.B., Ch.B.	...	...	...
†P. B. Wood ...	M.B., Ch.B.	...	...	...
<i>No. 16.—Rother Valley</i>				
<i>Area.</i>				
H. M. Mills ...	M.B., Ch.B.	Wentworth ...	2328	1811
C. J. H. Aitken ...	M.D., C.M.	Swinton ...	1730	13610
†T. Crowley ...	L.R.C.P., L.R.C.S.	Wath-upon-Dearne ...	4954	15143
D. P. K. Jockel ...	M.B., Ch.B.	Rawmarsh ...	2602	18939
G. H. Sedgwick ...	M.R.C.S., L.R.C.P.	Dalton ...	4351	10195
†W. L. Dibb ...	M.B., Ch.B., D.P.H.	Maltby ...	9259	17054
G. S. L. Kemp ...	M.R.C.S., L.R.C.P.	Thurcroft ...	8945	11040
†J. S. Shirlaw ...	M.B., Ch.B.	...	...	...
†T. B. Johnstone ...	L.R.C.P., L.R.C.S.	...	...	...
†K. Mackenzie ...	M.B., Ch.B.	Kiveton Park ...	20070	16570
J. N. Clark ...	L.R.C.P., L.R.C.S.	...	...	...
*R. G. Selby ...	M.B., C.M.	...	...	...
†G. R. Carruth ...	M.B., B.Ch., B.A.O.	Brinsworth and Catcliffe ...	6904	8260
†J. K. Sen ...	L.R.C.P., L.R.C.S., L.R.F.P.S.	...	...	...

\* Public Vaccinator only.

† District Medical Officer only.

‡ Medical Officer of Health (part time).

\* Assistant District Medical Officer.

## List of Vaccination Officers Serving Administrative County Area.

Name of Officer.	District Served	Area in Acres.	Population. (approx.)
<i>Area No. 1.—Ewecross.</i>			
W. Roberts	Bowland Rural	83398	5130
G. Kayley	Garsdale	11068	410
W. Battre	Dent and Sedbergh	41606	3159
W. Slinger	Bentham	59611	6457
C. Parker	Settle and Long Preston	92396	7910
<i>Area No. 2.—Staincliffe.</i>			
G. J. Harker	Grassington	27355	2555
S. H. Day	Kettlewell	33147	690
G. D. Hunt	Gargrave	17757	1819
D. Slater	Addingham	20785	2761
D. Slater	Kildwick	20379	12096
D. Slater	Skipton	19112	14765
D. Slater	Barnoldswick	20726	19035
<i>Area No. 3.—Claro.</i>			
T. C. Crawhall	Great Ouseburn	44741	7406
J. Clark	Knarborough	18838	9655
Mrs. M. E. Bowes	Harrogate	22410	45866
G. E. Wilkinson	Pateley Bridge	75071	6534
F. S. Metcalfe	Ripon	51602	13654
<i>Area No. 4.—Barkston Ash.</i>			
W. Bortoft	Tadcaster	44911	11585
W. Wormald	Aberford	27422	22610
S. C. Mellor	Wetherby	64614	16776
R. A. Wilkinson	Bishopthorpe	5438	2363
<i>Area No. 5.—Skrack.</i>			
G. C. Clarke	Guisley	8963	25373
H. Wood	Horsforth	5659	18218
	Ilkley	48714	34704
<i>Area No. 6.—Worth Valley.</i>			
J. A. Sharp	Keighley	15472	49024
Miss A. Hartley	Bingley	12773	24054
W. H. Ogden	Haworth	8560	7788
L. M. Greenwood	Wilsden	2638	3000
<i>Area No. 7.—East Morley.</i>			
C. W. Calverley	Farsley	2927	10586
H. Darnborough	Drighlington	1135	4115
L. M. Greenwood	Denholme	2536	2547
A. Hotchin	Pudsey	2397	15340
L. Clough	Shipley	2175	30628
F. Higginson	Hunsworth	1381	1318
<i>Area No. 8.—Calder.</i>			
J. H. Hindle	Todmorden	40355	36693
F. Madders	Brighouse	11877	40279
A. Sutcliffe	Sowerby	26021	44532
<i>Area No. 9.—Spenn Valley.</i>			
W. H. Holt	Batley	6485	47240
Miss G. Wormald	Gildersome	992	3178
H. Jackson	Heckmondwike	2832	23638
E. R. Brearley	Mirfield	3394	11770
Miss E. W. Haigh	Morley	3385	22430
J. Terry Smith	Ossett	3333	14080
F. Higginson	Cleckheaton	1756	12500
<i>Area No. 10.—Lower Agbrigg.</i>			
W. Town	Horbury and Normanton	41345	92088
<i>Area No. 11.—Osgoldcross.</i>			
Mrs. L. I. Dodsworth	Hemsworth East	34750	31329
I. Scott	Hemsworth West		30231
W. Town	Pontefract	54103	97660
<i>Area No. 12.—Goole and Selby.</i>			
H. S. Miller	Goole	38043	28,868
W. B. Weaver	Selby	38256	16175
<i>Area No. 13.—Don Valley.</i>			
F. Grisedale	Bolton-on-Deane	21587	28722
F. Grisedale	Mexborough	7906	35635
A. J. Thorsby	Tickhill	42973	39396
J. Thurgood	Adwick-le-Street	26176	46478
H. E. Newton	Thorne	38419	32383
<i>Area No. 14.—Staincross.</i>			
E. Hammerton	Darton and Darfield	19997	66873
W. Taylor	Worsborough	7046	16999
B. J. B. Marsden	Stocksbridge	38238	19141
F. Bailey	Wortley	8082	2729
H. Dowson	Ecclesfield	7037	16018
H. Redfearn	Penistone	35109	17828

## LIST OF VACCINATION OFFICERS SERVING ADMINISTRATIVE COUNTY AREA—continued.

Name of Officer.	District Served	Area in Acres	Population. (approx.)
<i>Area No. 15.—Upper Agbrigg.</i>			
E. Firth ... ..	Colne and Holme ... ..	58202	71958
A. Smith ... ..	Saddleworth ... ..	16930	12484
Miss J. Lees ... ..	Springhead ... ..	1556	4740
<i>Area No. 16.—Rother Valley.</i>			
F. S. Butcher ... ..	Rotherham Rural ... ..	8880	14280
W. J. Blyth ... ..	Rawmarsh ... ..	2602	18039
G. C. Hearn ... ..	Maltby ... ..	20579	32260
T. H. Harrison ... ..	Wath-on-Deerne ... ..	9012	30564
C. F. Airey ... ..	Kiveton Park ... ..	20070	16570

County Public Assistance Institutions.  
Medical and Nursing Staffs.

Name of Hospital or Institution.	Telephone No.	Medical Officer (part-time)	Qualifications.	No. of beds.	Number of Nursing Staff.
Settle	Settle 15	B. S. Hyslop	M.B., CH.B.	60	4
Skipton	Skipton 364	W. H. Robinson	M.B., CH.B.	94	10
Knaresborough	Knaresborough 3135	H. Steinbach	M.R.C.S., L.R.C.P.	69	16*
Ripon	Ripon 238	R. W. H. Anning	M.B., B.S., M.R.C.S., L.R.C.P.	45	4
Tadcaster	Tadcaster 13	J. P. Scatchard	M.B., B.CH., D.P.H.	34	4
Wetherby	Wetherby 5	E. R. Hargreaves	M.B., C.M.	22	3
Otley	Otley 93	J. T. Rhodes	M.B., CH.B.	78	7
Keighley	Keighley 2609	T. L. Walker	M.B., CH.B.	241	43*
		Consultants—part time, called by M.O. as required:—			
		H. C. Ling	M.R.C.S., L.R.C.P.		
Clayton, Bradf'd	Queensbury 2120	W. H. G. M. Ling	F.R.C.S., L.R.C.P.		
Todmorden	Todmorden 120	J. B. Stewart	L.R.C.P., L.R.C.S.	310	35*
Batley	Dewsbury 28	H. Thorp	M.B., CH.B., D.P.H.	79	8*
Wakefield	Wakefield 2188	J. J. O'Reilly (Medical Supt. of adjoining appropriated hospital)	M.B., F.R.C.S., D.P.H.	—	—
		J. B. Lyle (Visiting Physician to adjoining appropriated hospital)	M.D., CH.B., B.A.O.	—	—
Hemsworth	Hemsworth 13	T. C. A. Sweetnam	M.D., B.CH., B.A.O.	79	12
Pontefract	Pontefract 42	G. Burnett	M.B., CH.B., F.R.C.S.	226	25*
Goole	Goole 16	J. Crawford	M.B., B.CH.	58	6
Selby	Selby 15	O. L. Scarborough	M.R.C.S., L.R.C.P.	48	6
Penistone	Penistone 10	A. A. Masser	M.B., CH.B.	37	4
Grenoside	Ecclesfield 40113	T. D. Norton	L.M.S.S.A.	96	11
†Deanhouse	Holmfirth 10	W. H. Smailes	M.D., CH.B., D.P.H.	140	21*

\* Includes Male Attendants.

† This Institution is leased from Huddersfield Corporation.

Puerperal Sepsis	...	...	...	...	1.59	2.07	1.70	0.92
Other Causes	...	...	...	...	3.12	3.38	2.65	3.00
Total	...	...	...	...	4.71	5.45	4.35	3.92

### Area.

As a result of the operation of the County of York, West Riding Review Order, 1937, changes took place on the 1st April, 1937, which affected the boundaries of the Administrative County, certain West Riding County Boroughs, and a large number of County Districts.

The position after the changes is summarised below:—

	Acreage.
10 County Boroughs ... ..	165,783
11 Non-County Boroughs ... ..	58,395
80 Urban Districts ... ..	318,373
24 Rural Districts ... ..	1,236,802
West Riding Administrative County ... ..	1,613,570

Since the above, further changes have been brought about by the County of York, West Riding Review Order, 1938.

### Live Births.

During the year under review, 22,978 live births (11,714 males and 11,264 females) were registered as belonging to the Administrative County, corresponding to a birth-rate of 15·2 per 1,000 of the estimated population, compared with 14·9 for England and Wales. The birth-rate for the Administrative County has been between 15·0 and 15·2 for the last five years, and that for England and Wales between 14·7 and 14·9.

The graph on page 15 shows the fluctuations which have occurred in the birth-rate of the Administrative County during the past thirty-seven years and on page 21 will be found statistics showing the birth-rates for each of the last ten years and for quinquennial periods commencing with the year 1917. A perusal of these statistics will show how the birth-rate has fallen during the past twenty years.

Table IV, folded in at page 18, shows the birth-rate for 1937 for each County District, and the districts for which the highest and lowest rates were recorded are enumerated below:—

#### COUNTY DISTRICTS WITH HIGHEST BIRTH-RATES.

Bolton-upon-Deane U.D. ... ..	20·0	Maltby U.D. ... ..	23·2
Conisbrough U.D. ... ..	20·0	Pontefract M.B. ... ..	19·7
Cudworth U.D. ... ..	22·3	Wath-upon-Deane U.D. ... ..	20·3
Darton U.D. ... ..	19·1	Worsborough U.D. ... ..	20·6
Deane U.D. ... ..	18·8	Barnsley R.D. ... ..	20·4
Dodworth U.D. ... ..	27·8	Hemsworth R.D. ... ..	20·9
Hemsworth U.D. ... ..	20·1	Rotherham R.D. ... ..	20·1
Knottingley U.D. ... ..	21·7	Thorne R.D. ... ..	19·7

#### COUNTY DISTRICTS WITH LOWEST BIRTH-RATES.

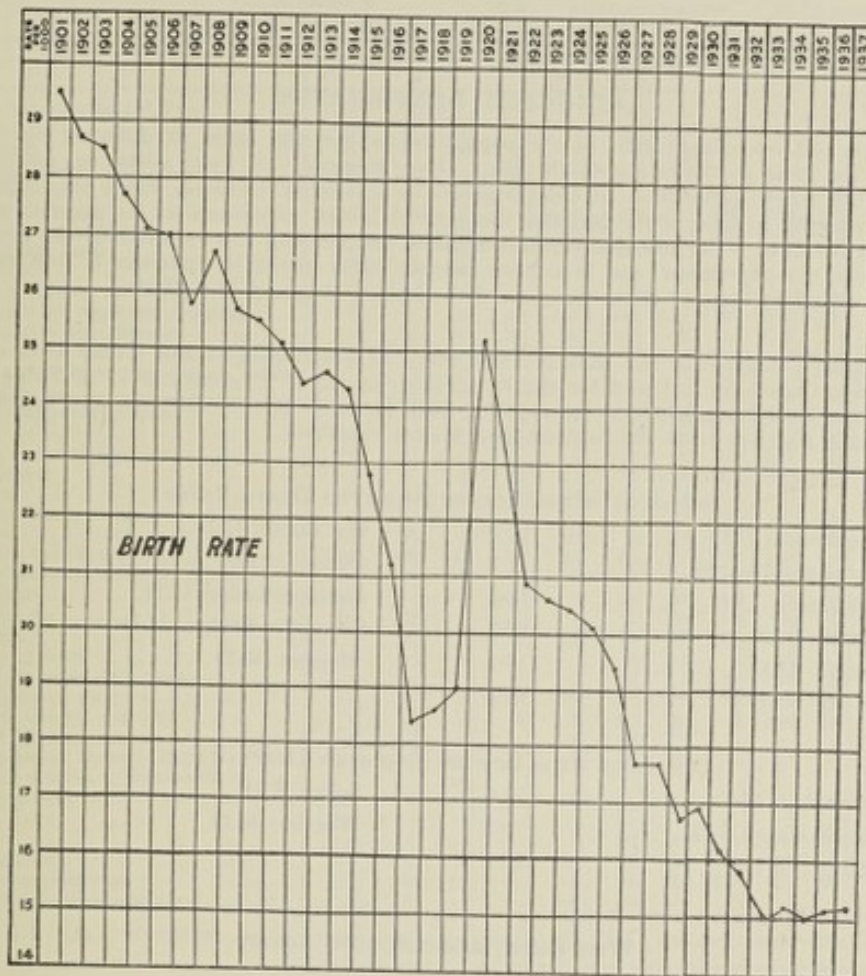
Barnoldswick U.D. ... ..	9·9	Skelmanthorpe U.D. ... ..	9·8
Earby U.D. ... ..	8·3	Todmorden M.B. ... ..	10·8
Hebden Royd U.D. ... ..	11·0	Sedbergh R.D. ... ..	10·2
Ilkley U.D. ... ..	10·8	Todmorden R.D. ... ..	10·3
Penistone U.D. ... ..	10·9		

### Still Births.

During the year 1937, 1,081 stillbirths were registered in the Administrative County, representing a rate of 0·72 per 1,000 estimated population compared with 0·60 for England and Wales.

# West Riding Administrative County.

Birth Rate for the 37 years 1901—1936.



## Deaths.

The deaths which were registered during 1937 as belonging to the Administrative County numbered 19,226 after correction for transfers to the place of residence of deceased. Of these, 9,791 were males and 9,435 females. This number gives a crude death-rate of 12.7 per 1,000 of the estimated population, an increase of 0.4 on the rate for 1936. The rate for England and Wales for 1937 was 12.4, and for 1936, 12.1. The graph on page 16 shows the fluctuations which have taken place during the past thirty-seven years in the death-rate in the Administrative County, and Tables I and II on pages 17 and 18 give statistics as to the ages at death and the various causes of death over a period of years.

Table IV folded in at page 18 shows the death-rates for the year under review for each County District.

Those districts with a crude death-rate for 1937 of 16.0 or over or 10.5 or under are shown below:—

### COUNTY DISTRICTS WITH HIGHEST CRUDE DEATH-RATES.

Garforth U.D.	...	...	17.2	Queensbury and Shelf U.D.	16.3
Haworth U.D.	...	...	17.6	Ripon City	16.0
Hebden Royd U.D.	...	...	16.5	Sowerby Bridge U.D.	16.4
Meltham U.D.	...	...	16.3	Thurstonland and	
New Mill U.D.	...	...	16.2	Farnley Tyas U.D.	33.4
Oakworth U.D.	...	...	16.7	Skipton R.D.	17.4
Ossett M.B.	...	...	16.0		

## COUNTY DISTRICTS WITH LOWEST CRUDE DEATH-RATES.

Adwick-le-Street U.D. ...	8.9	Barnsley R.D. ...	9.8
Darfield U.D. ...	9.8	Doncaster R.D. ...	8.7
Dearne U.D. ...	9.0	Hemsworth R.D. ...	9.8
Maltby U.D. ...	10.5	Kiveton Park R.D. ...	10.3
Royston U.D. ...	9.9	Thorne R.D. ...	9.3
Worsborough U.D. ...	10.1	Wortley R.D. ...	10.4

## ADJUSTED DEATH-RATES.

The age and sex constitution of the population is not the same in different districts, and this affects the level of the crude death rate. For instance, of two areas or districts, that containing the larger proportion of elderly people will almost certainly have the higher crude death-rate, and this in spite of the fact that the general health conditions of its population may be the better of the two. The adjusted death-rate takes into account the variation in the age and sex constitution of the population, and is a more reliable index for a comparison of the death-rates of different districts, and of those districts with that of England and Wales.

The adjusted death-rate for 1937 for the whole of the Boroughs and Urban Districts of the Administrative County is 14.1 and for the Rural Districts 12.4. In column 11 of Table folded in at page 18 is given the adjusted death-rate for 1937 for each County District, and below are lists showing those districts with the highest and lowest rates:—

## DISTRICTS WITH HIGHEST ADJUSTED DEATH-RATES.

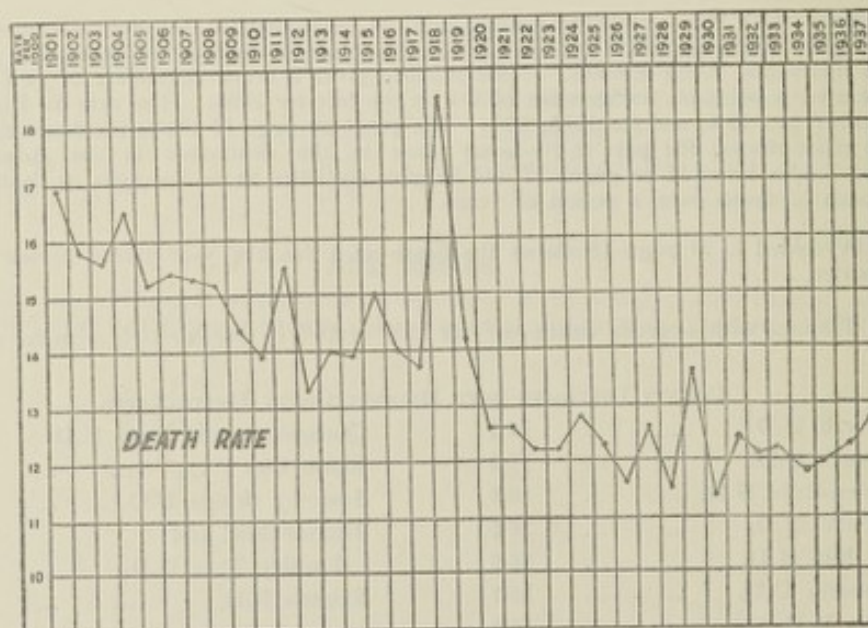
Barnoldswick U.D. ...	16.0	Oakworth U.D. ...	16.4
Bolton-upon-Deane U.D. ...	17.7	Ossett M.B. ...	17.3
Featherstone U.D. ...	16.0	Skelmanthorpe U.D. ...	16.7
Garforth U.D. ...	17.7	Sowerby Bridge U.D. ...	16.2
Haworth U.D. ...	16.2	Skipton R.D. ...	16.0
New Mill U.D. ...	18.4		

## DISTRICTS WITH LOWEST ADJUSTED DEATH-RATES.

Aireborough U.D. ...	9.8	Selby R.D. ...	10.3
Knaresborough R.D. ...	9.5	Wortley R.D. ...	10.2
Sedburgh R.D. ...	10.9		

## West Riding Administrative County.

## Death Rate for the 37 years 1901—1936.



## Mortality at Different Ages from the Various Causes.

The following table shows the mortality, in age groups, from the various causes in the West Riding Administrative County during 1937.

TABLE I.

CAUSES OF DEATH	AGE AT DEATH												Total (net deaths)
	Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 35	35 and under 45	45 and under 55	55 and under 65	65 and under 75	75 and up- wards		
1. Typhoid and paratyphoid fevers ...	—	—	—	1	—	3	—	1	—	—	—	5	
2. Measles ...	7	9	8	4	—	—	—	—	—	—	—	28	
3. Scarlet fever ...	—	2	6	5	1	—	2	—	—	1	—	17	
4. Whooping Cough ...	26	21	13	4	1	—	—	—	—	—	—	65	
5. Diphtheria ...	5	6	43	69	5	2	1	1	4	2	—	138	
6. Influenza ...	12	10	7	16	17	37	75	109	180	168	154	785	
7. Encephalitis Lethargica ...	—	—	—	—	2	5	4	4	6	4	—	25	
8. Cerebro-spinal fever ...	9	1	5	4	2	—	—	1	—	—	—	22	
9. Poliomyelitis ...	—	—	—	1	—	—	—	—	—	—	—	1	
10. Polio-encephalitis ...	—	—	—	1	—	—	—	—	—	—	—	1	
11. Tuberculosis of respiratory system ...	1	1	5	10	135	164	132	98	118	27	4	695	
12. Other Tuberculous diseases ...	14	10	26	24	24	22	13	14	7	5	4	163	
13. Syphilis ...	8	—	—	—	3	—	6	7	9	2	—	35	
14. General paralysis of the insane, tabes dorsalis ...	—	—	—	—	—	5	9	19	26	11	3	73	
15. Cancer, malignant disease ...	4	1	1	1	9	45	119	347	718	764	408	2417	
16. Diabetes ...	—	1	1	5	7	5	10	29	83	131	54	326	
17. Cerebral hæmorrhage, etc. ...	—	—	—	1	1	4	16	85	247	455	457	1266	
18. Heart disease ...	—	—	2	22	57	77	135	363	892	1667	1599	4814	
19. Aneurysm ...	—	1	—	1	2	1	2	8	11	9	4	39	
20. Other circulatory diseases ...	—	—	—	—	—	1	7	31	167	410	479	1095	
21. Bronchitis ...	55	8	3	2	10	8	13	41	106	175	244	665	
22. Pneumonia (all forms) ...	222	89	52	25	30	42	76	126	139	139	104	1044	
23. Other respiratory diseases ...	—	1	3	2	6	8	9	24	37	28	36	154	
24. Peptic ulcer ...	—	—	—	—	2	8	18	34	52	26	11	151	
25. Diarrhoea, etc. ...	58	12	4	2	1	3	10	2	8	15	9	124	
26. Appendicitis ...	—	1	7	16	21	10	11	20	8	10	2	106	
27. Cirrhosis of liver ...	—	—	—	—	—	1	1	4	7	8	1	22	
28. Other diseases of liver, etc. ...	—	—	—	—	2	2	7	14	40	34	34	133	
29. Other digestive diseases ...	21	9	8	14	13	11	27	37	59	62	47	308	
30. Acute and chronic nephritis ...	1	4	1	4	17	29	39	73	164	213	120	665	
31. Puerperal Sepsis ...	—	—	—	—	8	8	5	—	—	—	—	21	
32. Other puerperal causes ...	—	—	—	—	7	35	27	—	—	—	—	69	
33. Congenital debility, premature birth, malformations, etc. ...	799	4	—	4	5	1	—	—	—	—	—	813	
34. Senility ...	—	—	—	—	—	—	—	—	2	69	509	580	
35. Suicide ...	—	—	—	—	6	30	19	34	38	34	6	167	
36. Other violence ...	18	17	40	52	102	82	56	66	102	84	91	710	
37. Other defined diseases ...	107	16	23	61	74	91	125	173	258	331	211	1470	
38. Causes ill defined or unknown ...	1	2	—	—	—	—	—	3	1	2	5	14	
ALL CAUSES ...	1368	226	258	351	570	740	974	1768	3489	4886	4596	19226	
AGE AND SEX DISTRIBUTION OF THE NET DEATHS													
URBAN DISTRICTS:—													
Males ...	537	73	117	125	227	285	352	732	1484	1920	1442	7294	
Females ...	417	68	69	130	181	249	359	634	1225	1865	1941	7138	
Persons ...	954	141	186	255	408	534	711	1366	2709	3785	3383	14432	
RURAL DISTRICTS:—													
Males ...	224	45	40	51	90	106	130	199	411	595	606	2497	
Females ...	190	40	32	45	72	100	133	203	369	506	607	2297	
Persons ...	414	85	72	96	162	206	263	402	780	1101	1213	4794	
WEST RIDING ADMINISTRATIVE COUNTY:—													
Males ...	761	118	157	176	317	391	482	931	1895	2515	2048	9791	
Females ...	607	108	101	175	253	349	492	837	1594	2371	2548	9435	
Persons ...	1368	226	258	351	570	740	974	1768	3489	4886	4596	19226	

The following table shows the proportion of deaths from each cause per thousand deaths from all causes. The various causes are arranged in order of incidence in 1937, but the figures must not be taken to indicate any more than which are the principal killing diseases.

TABLE II.

Cause of Death.	Number of Deaths.				Proportion of Deaths per 1,000 deaths from all causes.			
	Five years 1931-35.		1936	1937	1931-35	1936	1937	1931
	Total.	Average per year						
Diseases of Heart and Circulatory System ...	25,368	5,074	5,954	5,948	274	316	309	249
Cancer, Malignant Disease ...	10,937	2,187	2,303	2,417	118	122	126	107
Bronchitis, Pneumonia, and other Diseases of Respiratory System not including Tuberculosis	10,158	2,032	1,914	1,863	110	102	97	132
Cerebral Haemorrhage, etc. ...	5,796	1,159	1,247	1,266	63	66	66	60
Violent Deaths:—	4,429	886	962	877	48	51	46	48
<i>Suicide</i> ...	941	188	176	167	10	9	9	9
<i>Other Violence</i> ...	3,488	698	786	710	38	42	37	39
Tuberculosis (All Forms):—	4,911	983	854	858	53	45	45	59
<i>Respiratory Tuberculosis</i> ...	3,838	768	669	695	41	35	36	46
<i>Other Tuberculous Diseases</i> ...	1,073	215	185	163	12	10	9	13
Diseases of Digestive System ...	4,795	959	905	844	52	48	44	51
Congenital Debility ...	4,188	838	784	813	45	42	42	47
Influenza ...	2,452	490	235	785	26	17	41	28
Acute and Chronic Nephritis ...	3,477	695	655	665	38	35	34	37
Diabetes ...	1,435	287	309	326	15	16	17	14
Diphtheria ...	862	172	150	138	9	8	7	8
Whooping Cough ...	432	86	84	65	5	4	3	4
Measles ...	571	114	80	28	6	4	1	9
Scarlet Fever ...	192	38	37	17	2	2	1	2
Other Defined Diseases ...	12,506	2,501	2,352	2,302	135	125	120	143
Causes ill defined or unknown ...	85	17	18	14	1	1	1	1
TOTALS ...	92,594	18,518	18,843	19,226	1,000	1,000	1,000	1,097

### Urban and Rural Statistics for 1937.

These are set out below for the aggregate districts, and a comparison is afforded with the figures for England and Wales:—

TABLE III.

	Annual Rates per 1000 of the Estimated Population								Infant Mortality (Deaths under one year per 1000 Live Births)	Maternal Mortality (Deaths of Mothers in Childbirth per 1000 Live and Still-births)		Diarrhoea (Deaths under 2 years of age per 1000 live births)
	Live Birth-rate	Death-rate	Zy-motic Death-rate*	Phthisis Death-rate	Other Tub. Diseases Death-rate	Respira-tory Diseases Death-rate†	Cancer	Heart and Circulatory Diseases		Puerperal Sepsis	Other Causes	
(1) Urban Districts in the West Riding ...	14.7	13.3	0.21	0.48	0.11	1.28	1.67	4.23	60	0.84	2.92	2.87
(2) Rural Districts in the West Riding ...	16.4	11.3	0.23	0.42	0.11	1.11	1.42	3.19	59	0.96	2.74	3.44
(3) WEST RIDING ADMINISTRATIVE COUNTY	15.2	12.7	0.21	0.46	0.11	1.23	1.60	3.94	60	0.87	2.87	3.05
(4) England & Wales ...	14.9	12.4	§	0.58	0.11	§	1.63	§	58	0.94	2.17	5.8

\* Includes deaths from Diarrhoea, etc., under two years of age only.

† Deaths from Pneumonia, Bronchitis and other Respiratory Diseases; does not include Tuberculosis of the Respiratory System.

§ Figures not available at time of going to press.

## Deaths. Deaths. Annual Rates, etc., 1937.

2. The 11th annual meeting of the American Society for Health Economics, held at the University of California at Berkeley, California, U.S.A., 1989. The meeting was held in conjunction with the 11th annual meeting of the American Society for Health Economics, held at the University of California at Berkeley, California, U.S.A., 1989. The meeting was held in conjunction with the 11th annual meeting of the American Society for Health Economics, held at the University of California at Berkeley, California, U.S.A., 1989.



Table V.  
Causes of Death, 1937.

Cause of Death	Number of Deaths											
	1	2	3	4	5	6	7	8	9	10	11	12
I. URBAN.	1	2	3	4	5	6	7	8	9	10	11	12
II. RURAL.	1	2	3	4	5	6	7	8	9	10	11	12

\* A change in the boundary of this area took place on the 1st April, 1937, and was marked by a line of preceding table.  
 † This District has been subdivided, and was marked by a line of preceding table.  
 ‡ This District came into being on the 1st April, 1937, and was marked by a line of preceding table.

Causes of Death 1937.

THE STATE OF

### West Riding Birth and Death Rates for Ten Years.

The following table shows the County Birth and Death Rates for the past 10 years:—

TABLE VI.

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Birth Rate ... ..	17.7	16.7	16.9	16.1	15.8	15.0	15.2	15.0	15.1	15.2
Death-rate ... ..	11.5	13.6	11.4	12.4	12.1	12.2	11.7	11.9	12.3	12.7
Infant Mortality* ...	62	89	65	74	70	70	58	58	63	60
Zymotic Death-rate ...	0.28	0.54	0.33	0.38	0.39	0.30	0.41	0.28	0.29	0.21
Death rates from:—										
Small-pox ... ..	0.01	0.00	0.00	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Scarlet Fever ... ..	0.02	0.05	0.03	0.02	0.01	0.02	0.05	0.03	0.02	0.01
Diphtheria ... ..	0.06	0.08	0.09	0.10	0.08	0.08	0.17	0.14	0.10	0.09
Enteric Fever ... ..	0.02	0.02	0.02	0.01	0.02	0.01	0.00	0.00	0.00	0.00
Measles ... ..	0.05	0.10	0.06	0.11	0.10	0.03	0.11	0.02	0.05	0.02
Whooping Cough ...	0.04	0.18	0.05	0.05	0.09	0.07	0.03	0.04	0.06	0.04
Diarrhoea, &c.† ...	5.53	6.96	4.59	5.10	6.00	6.07	3.21	3.42	4.00	3.05
Respiratory Diseases	1.46	2.22	1.35	1.64	1.33	1.36	1.16	1.13	1.25	1.23
Phthisis‡ ... ..	0.61	0.66	0.57	0.57	0.52	0.49	0.44	0.48	0.44	0.46
Other Tuberculous Diseases ... ..	0.22	0.21	0.20	0.16	0.17	0.14	0.12	0.10	0.12	0.11

\* Deaths under one year per 1,000 births.

† Deaths under two years of age per 1,000 births.

‡ Tuberculosis of the Respiratory System.

### Average Birth and Death Rates from 1917 to 1936.

The following table gives the average rates for quinquennial periods (compared with the rates for 1937) for the Urban and Rural Districts of the Administrative County, and for the Administrative County as a whole.

TABLE VII.

	Urban Districts					Rural Districts					Administrative County				
	Quinquennial Periods				Year 1937 for comparison	Quinquennial Periods				Year 1937 for comparison	Quinquennial Periods				Year 1937 for comparison
	1917-21	1922-26	1927-31	1932-36		1917-21	1922-26	1927-31	1932-36		1917-21	1922-26	1927-31	1932-36	
Birth Rate ... ..	20.0	19.4	16.0	14.6	14.7	23.4	22.8	19.6	16.8	16.4	20.9	20.3	17.0	15.2	15.2
* Infant Mortality ...	100	81	73	63	60	97	76	75	64	59	99	80	74	64	60
Death Rates:—															
All Causes ... ..	14.5	12.5	12.7	12.6	13.3	13.6	11.5	11.3	10.7	11.3	14.3	12.2	12.3	12.0	12.7
Zymotic Diseases ...	0.91	0.51	0.38	0.32	0.21	0.98	0.54	0.48	0.36	0.23	0.93	0.52	0.41	0.33	0.21
Smallpox ... ..	0.00	0.00	0.00	Nil	Nil	0.00	Nil	0.00	Nil	Nil	0.00	0.00	0.00	Nil	Nil
Scarlet Fever ... ..	0.02	0.03	0.03	0.03	0.01	0.03	0.03	0.03	0.02	0.01	0.02	0.03	0.03	0.03	0.01
Diphtheria ... ..	0.12	0.06	0.07	0.12	0.09	0.12	0.05	0.09	0.09	0.08	0.12	0.05	0.07	0.11	0.09
Enteric Fever ... ..	0.05	0.02	0.02	0.01	0.00	0.04	0.02	0.02	0.01	Nil	0.05	0.02	0.02	0.01	0.00
Measles ... ..	0.29	0.12	0.10	0.06	0.02	0.28	0.11	0.13	0.07	0.02	0.29	0.12	0.11	0.06	0.02
Whooping Cough ...	0.17	0.12	0.08	0.05	0.04	0.17	0.16	0.10	0.07	0.06	0.17	0.13	0.09	0.06	0.04
Respiratory Diseases ...	2.69	2.18	1.80	1.28	1.28	2.47	1.91	1.64	1.17	1.11	2.63	2.11	1.76	1.24	1.23
Respiratory Tuberculosis ...	0.90	0.71	0.64	0.50	0.48	0.71	0.60	0.55	0.42	0.42	0.85	0.68	0.61	0.47	0.46
Other Tuberculous Diseases ...	0.37	0.27	0.20	0.13	0.11	0.31	0.25	0.21	0.13	0.11	0.35	0.26	0.20	0.13	0.11
Cancer ... ..	1.14	1.22	1.37	1.57	1.67	0.94	1.10	1.13	1.21	1.42	1.09	1.19	1.30	1.46	1.60
Heart Disease ... ..	1.45	1.62	2.26	2.98	3.43	1.27	1.38	1.80	2.27	2.57	1.41	1.56	2.13	2.77	3.19
† Diarrhoea (Deaths in children under 2 years of age) ...	12.47	8.22	5.40	3.88	2.87	14.03	7.41	5.90	5.96	3.44	12.92	7.98	5.56	4.55	3.05
‡ Maternal Mortality—															
Puerperal Sepsis ...	1.48	1.72	2.30	1.96	0.88	1.85	1.61	1.87	2.09	1.00	1.59	1.68	2.16	2.00	0.92
Other Causes ... ..	3.27	3.05	3.75	3.60	3.06	3.21	2.56	2.76	2.47	2.87	3.25	2.91	3.42	3.24	3.00
Total ... ..	4.75	4.77	6.05	5.56	3.94	5.06	4.17	4.63	4.56	3.87	4.84	4.59	5.58	5.24	3.92

\* Deaths under one year per 1,000 live births.

† Deaths per 1,000 live births.

### Mortality from Heart Disease.

The table below gives the number of deaths and death rates from diseases of the heart in the years 1927 to 1937:—

TABLE VIII.

Year.	West Riding Administrative County						England and Wales Death Rate.	Proportion of deaths from Heart Disease per 1,000 total deaths from all causes	
	Total No. of Deaths.			Death rate per 1,000 of population.				W. R. Admin. County	England and Wales
	Urban	Rural	County	Urban	Rural	County			
1927	2,102	642	2,744	1.92	1.52	1.81	1.84	143	148
1928	2,231	669	2,900	2.04	1.56	1.90	1.95	165	167
1929	2,661	830	3,491	2.42	1.94	2.28	2.44	168	181
1930	2,542	865	3,407	2.32	1.98	2.22	2.26	195	198
1931	2,841	876	3,717	2.59	1.97	2.41	2.54	195	206
Average for 5 years 1927-31	2,475	776	3,252	2.26	1.80	2.13	2.21	173	180
1932	3,007	915	3,922	2.76	2.05	2.55	2.56	212	212
1933	3,032	925	3,957	2.79	2.06	2.58	2.68	211	218
1934	3,085	997	4,082	2.84	2.22	2.66	2.69	227	228
1935	3,348	1,065	4,413	3.09	2.36	2.87	2.82	242	240
1936	3,678	1,201	4,879	3.41	2.67	3.19	3.11	259	255
Average for 5 years 1932-36	3,230	1,021	4,251	2.98	2.27	2.77	2.77	230	231
1937	3,722	1,092	4,814	3.43	2.57	3.19	*	250	*

\* Figures not available at time of going to press.

### HEART DISEASE.

Mortality per 100,000 living at different ages in the West Riding Administrative County in the years 1911-20, 1921-30, 1931-35, 1936 and 1937.

TABLE IX.

AGES.	URBAN DISTRICTS.					RURAL DISTRICTS.					ADMINISTRATIVE COUNTY.				
	1911-20	1921-30	1931-35	1936	1937	1911-20	1921-30	1931-35	1936	1937	1911-20	1921-30	1931-35	1936	1937
MALES.															
Under 15 years ...	13	9	9	11	5	11	8	9	10	5	12	8	9	11	5
15 and under 25 years ...	30	21	23	19	20	21	18	21	12	26	28	20	22	17	22
25 and under 45 years ...	56	44	41	42	43	46	38	28	30	36	53	42	37	39	41
45 and under 65 years ...	325	279	393	486	457	265	217	298	343	270	310	277	367	445	406
65 and upwards ...	1,446	1,666	2,996	3,533	3,646	1,201	1,585	2,644	3,191	3,184	1,376	1,662	2,898	3,435	3,521
All ages. ...	152	166	281	340	337	127	144	214	259	242	146	165	261	315	309
FEMALES.															
Under 15 years ...	15	11	9	10	6	8	10	10	9	15	13	11	9	10	9
15 and under 25 years ...	26	24	32	22	17	30	27	25	14	39	27	23	30	19	23
25 and under 45 years ...	61	48	51	57	47	49	44	47	38	53	58	48	50	52	48
45 and under 65 years ...	309	265	295	345	338	265	233	255	322	274	299	264	285	339	323
65 and upwards ...	1,406	1,669	2,725	3,304	3,513	1,230	1,574	2,467	3,243	3,236	1,362	1,667	2,663	3,289	3,448
All ages. ...	157	183	282	342	349	132	162	216	276	272	151	182	264	324	328

### Cancer.

The table below gives the number of deaths and death rates from cancer during the years 1927-37. It will be observed that the progressive increase in the County death rate has been shared by that of England and Wales.

TABLE X.

Year.	West Riding Administrative County.						England and Wales Death Rate.	Proportion of deaths from cancer per 1,000 total deaths from all causes.	
	Total No. of Deaths.			Death rate per 1,000 of population.				W. R. Admin. County	England and Wales
	Urban	Rural	County	Urban	Rural	County			
1927	1,466	478	1,944	1.34	1.13	1.28	1.38	101	111
1928	1,476	483	1,959	1.35	1.13	1.29	1.43	112	122
1929	1,495	465	1,960	1.36	1.08	1.28	1.44	95	107
1930	1,522	512	2,034	1.39	1.17	1.33	1.45	116	127
1931	1,538	496	2,034	1.40	1.12	1.32	1.48	107	121
Average for 5 years 1927-31	1,499	487	1,986	1.37	1.13	1.30	1.44	106	117
1932	1,658	587	2,245	1.52	1.32	1.46	1.51	121	125
1933	1,652	526	2,178	1.52	1.17	1.42	1.53	116	124
1934	1,689	518	2,207	1.56	1.15	1.44	1.56	123	132
1935	1,733	540	2,273	1.60	1.20	1.48	1.59	124	135
1936	1,767	536	2,303	1.64	1.19	1.51	1.63	122	134
Average for 5 years 1932-36	1,700	541	2,241	1.57	1.21	1.46	1.56	121	130
1937	1,812	605	2,417	1.67	1.42	1.60	1.63	126	*

\* Figures not available at time of going to press.

### CANCER.

Mortality per 100,000 living at different ages in the West Riding Administrative County in the years 1911-20, 1921-30, 1931-35, 1936 and 1937.

TABLE XI.

AGES.	URBAN DISTRICTS.					RURAL DISTRICTS.					ADMINISTRATIVE COUNTY.				
	1911-20	1921-30	1931-35	1936	1937	1911-20	1921-30	1931-35	1936	1937	1911-20	1921-30	1931-35	1936	1937
MALES.															
Under 15 years ...	2	2	3	2	2	2	4	2	7	5	2	3	3	4	3
15 and under 25 years ...	4	5	4	3	3	4	3	4	2	5	4	4	4	3	4
25 and under 45 years ...	27	24	26	29	29	22	22	20	22	29	26	23	24	27	29
45 and under 65 years ...	256	267	285	311	322	206	230	231	196	248	244	258	270	278	302
65 and upwards ...	832	931	1,205	1,373	1,354	712	891	1,059	1,235	1,330	798	920	1,164	1,333	1,348
All ages. ...	95	115	143	163	163	89	100	110	117	133	91	110	133	149	154
FEMALES.															
Under 15 years ...	2	2	2	3	2	2	2	3	—	—	2	2	2	2	1
15 and under 25 years ...	3	4	3	1	3	2	5	3	3	3	3	5	3	2	3
25 and under 45 years ...	40	45	46	39	42	34	43	43	41	35	39	44	45	40	40
45 and under 65 years ...	326	305	308	300	306	294	286	274	277	332	319	301	300	294	313
65 and upwards ...	862	901	1,050	1,117	1,158	716	867	1,048	857	1,203	826	893	1,050	1,053	1,169
All ages. ...	117	138	160	165	171	98	122	131	122	152	112	134	152	153	166

### Scheme for the Treatment of Cancer.

In June, 1937, the Public Health and Housing Committee approved of the following resolutions:—

(a) That the County Medical Officer be authorised, at his discretion to arrange for the admission to special institutions of persons who are in receipt of or who apply for hospital treatment, and who are certified as suffering from cancer, having regard to the benefits which, in his opinion, are likely to accrue to the patients by such special treatment, and that any additional cost so incurred be defrayed by the County Council.

(b) That an estimate of £200 to cover the expenditure incurred during the current financial year be transmitted to the West Riding Finance Committee.

(c) That the County Medical Officer do prepare and submit to this Committee a scheme for the provision of cancer clinics to serve the outlying parts of the West Riding Administrative Area.

The amount of £200 mentioned in (b) above was increased by a further sum of £150 on the 13th December, 1937.

When considering the above resolutions the Public Health and Housing Committee was informed that in the West Riding Administrative County Area approximately 3,300 patients are diagnosed as suffering from cancer each year. Of this number it is estimated that 1,300 are suffering from cancer in treatable sites and of this number 600 only are receiving treatment, thus there are 700 patients per annum who are left to be provided for by other resources.

One of the first steps taken under the scheme was to arrange financial terms (12/6 per day per patient) with the three special radiation centres established at the Leeds General Infirmary, Bradford Royal Infirmary, and the Sheffield Royal Infirmary for the treatment of patients from the West Riding Administrative County Area who require radiation therapy.

The following table shows the average duration of treatment, estimated cost and number of patients who received treatment at the three radiation centres during the period from June 1937 to the 31st December, 1937.

Name of Centre.	No. of Patients.	Average duration of stay.	Estimated Cost.		
Leeds	35	16 days.	£	s.	d.
Bradford	6		407	7	1
Sheffield	1		84	3	6
			5	8	0
			496	18	7

In each case careful enquiries were made before financial responsibility was accepted to ensure:—

- That each patient is resident in the West Riding Administrative County Area.
- That the clinical condition is one of cancer.
- That the patient is receiving radiation treatment.
- That the hospital gives the County Council the benefit of an off-set in the daily maintenance charges in those instances where the patient is a direct or indirect contributor to the hospital funds.

In addition, particulars of the financial circumstances of all patients are verified and of the 42 patients referred to above, 16 agreed to make a small voluntary contribution towards the cost of treatment.

In view of the rate of expenditure already incurred and bearing in mind the possibilities of further developments in connection with the scheme, the Public Health and Housing Committee has approved of:—

- A further sum of £650 towards the cost of treatment by radiation of West Riding patients suffering from cancer, up to the 31st March, 1938.
- The provision of a sum of £5,000 in the Budget Estimates for 1938/39 to meet the increased facilities for specialised treatment which will be available on the completion of the negotiations now proceeding with the three radiation centres above-mentioned.

In necessitous cases the cost of travelling expenses to enable patients to attend cancer clinics at hospitals and infirmaries may be defrayed out of County funds and during the past year, 18 patients were assisted in this way.

### Treatment of Fractures.

Consideration has been given to the recommendations contained in the interim report of the Inter-Departmental Committee on the rehabilitation of persons injured by accidents. It has been decided that short-term orthopaedic cases of this type resident in the West Riding Administrative County Area who may be admitted to the Leeds General Infirmary for treatment, should be transferred to St. James' Hospital, Leeds (which is under the control of the Leeds County Borough Council). The County Council will accept financial responsibility for the cost of treatment of such cases transferred with the approval of the County Medical Officer.

Arrangements have been made, however, whereby certain special cases will continue to receive treatment at the Leeds General Infirmary.

### Infant Mortality.

The deaths of infants under one year of age numbered 1,368 in 1937, corresponding to an average rate of 60 per 1,000 live births.

These figures show a decrease on those for the previous year when the deaths numbered 1,452, and the rate was 63.

It is not possible to attribute this decrease to a reduction in the deaths from any particular cause.

A decrease occurred in the number of deaths from measles, whooping cough, tuberculosis of the respiratory system, other tuberculous diseases, bronchitis, pneumonia, but an increase in those from diphtheria, influenza, diarrhoea and congenital debility. Table XIII below shows the principal causes of infant deaths in the year under review and the twenty-five preceding years, whilst in Table XII a comparison is afforded between the rates for the Administrative County and those for England and Wales.

TABLE XII.

PERIOD.	West Riding Administrative County.		Infant Mortality Rate (Deaths of infants under one year of age, per 1,000 live births).	
	Number of Live Births.	Number of Deaths of Infants under one year of age.	West Riding Administrative County.	England and Wales.
	Average No. per year	Average No. per year	Average Ten-yearly rate	Average Ten-yearly rate
	Actual numbers	Actual numbers	Yearly rate	Yearly rate
1901-1910	40,440	5,443	135	128
1911-1920	34,326	3,735	109	100
1921-1930	29,491	2,352	80	72
1931	24,900	1,835	74	66
1932	24,319	1,692	70	65
1933	23,084	1,615	70	64
1934	23,393	1,347	58	59
1935	23,077	1,330	58	57
1936	22,995	1,452	63	59
1937	22,978	1,368	60	58

#### West Riding Administrative County.

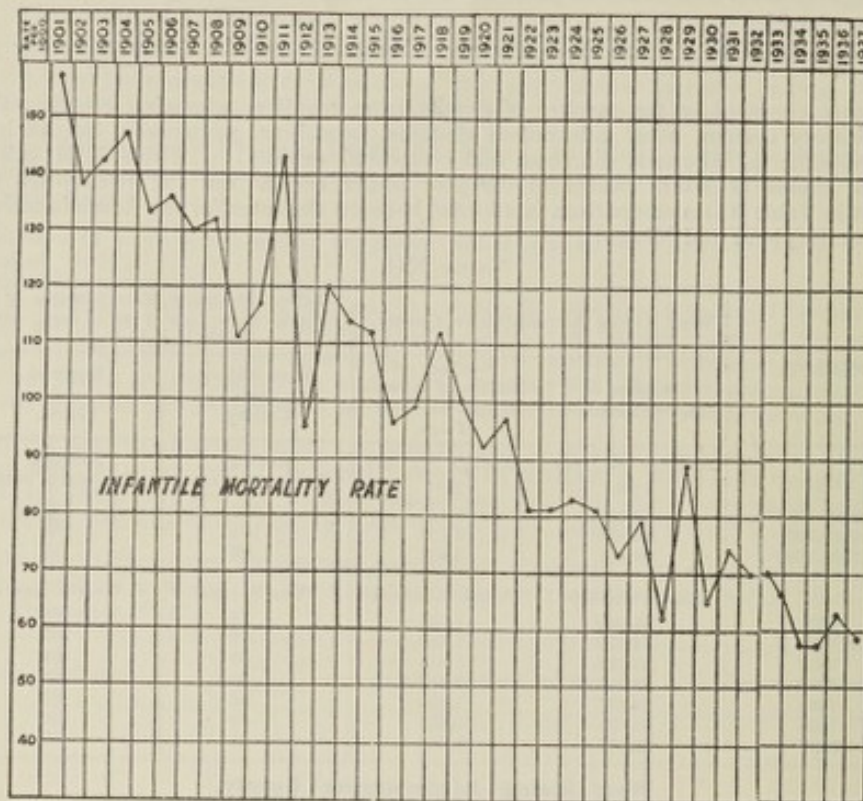
#### Causes of Infant Mortality in the years 1912-37.

TABLE XIII.

Year	Number of Deaths under One Year per 1000 births															Total (All Causes)
	Enteric Fever	Smallpox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Respiratory Tuberculosis	Other Tuberculous Diseases	Bronchitis	Pneumonia	Other Respiratory Diseases	Diarrhoea	Congenital Debility and Malformation Premature Birth	Other Causes	
1912	nil.	nil.	2.67	0.05	3.94	0.18	0.36	0.15	2.87	8.31	8.66	0.61	6.71	40.81	19.61	94.93
1913	nil.	nil.	2.59	0.11	2.35	0.16	0.19	0.19	3.42	10.30	12.94	0.40	20.12	45.41	21.42	119.60
1914	nil.	nil.	2.87	0.05	5.48	0.24	0.24	0.21	3.01	9.36	11.41	0.53	18.19	41.86	20.48	113.93
1915	0.03	nil.	4.20	0.21	4.28	0.21	0.21	0.15	2.80	10.07	12.91	0.35	14.48	41.47	20.65	112.12
1916	nil.	nil.	1.35	0.09	2.68	0.09	0.25	0.31	2.34	9.64	11.05	0.77	10.96	34.45	21.86	95.84
1917	nil.	nil.	2.70	0.04	2.67	0.18	0.25	0.36	2.45	10.17	12.24	0.71	8.11	34.72	23.73	98.33
1918	nil.	nil.	5.05	nil.	7.50	0.07	5.01	0.36	1.53	11.19	14.18	0.57	9.77	36.68	19.87	111.78
1919	nil.	nil.	0.88	nil.	1.62	0.11	2.85	0.35	1.80	12.25	12.39	0.63	8.55	39.14	19.46	100.03
1920	nil.	nil.	2.48	0.05	1.64	0.11	1.14	0.16	2.09	9.88	11.04	0.42	11.92	31.65	19.15	91.73
1921	nil.	nil.	0.17	0.03	4.53	0.03	1.10	0.31	1.76	7.82	13.40	0.37	14.22	36.94	16.52	97.20
Average for 10 years 1912-21	0.00	nil.	2.48	0.06	3.65	0.14	1.05	0.25	2.46	9.80	11.92	0.53	12.54	38.48	20.21	103.57
1922	0.03	0.03	1.69	nil.	2.91	0.10	0.51	0.16	1.95	6.75	11.86	0.38	6.52	33.50	14.51	80.90
1923	nil.	nil.	1.81	0.06	2.16	0.06	0.55	0.36	1.55	6.71	11.00	0.48	7.10	33.52	15.91	81.27
1924	nil.	nil.	1.09	nil.	2.67	nil.	1.48	0.06	1.35	6.14	15.47	0.61	6.72	33.10	13.96	82.65
1925	nil.	nil.	1.88	0.06	2.92	0.29	0.62	0.29	1.46	6.22	13.09	0.45	7.06	33.17	13.41	80.92
1926	nil.	nil.	0.47	0.03	4.02	0.07	0.20	0.17	1.23	5.35	10.97	0.43	6.45	30.87	13.16	73.42
1927	nil.	0.19	2.65	0.08	2.79	0.08	1.04	0.15	1.45	5.33	15.46	0.37	4.73	32.35	12.49	79.16
1928	nil.	nil.	0.56	0.04	1.11	0.07	0.33	0.04	1.67	2.59	9.31	0.30	4.71	30.14	11.49	62.36
1929	nil.	0.04	1.41	nil.	4.97	0.24	2.54	0.24	0.90	6.65	17.44	0.31	6.14	33.75	13.92	88.55
1930	0.04	nil.	0.89	nil.	1.89	0.23	0.08	0.08	1.20	2.47	8.71	0.23	3.86	34.00	11.45	85.13
1931	nil.	nil.	1.12	nil.	1.52	0.08	0.72	0.20	1.28	4.78	13.25	0.28	4.42	35.34	10.72	73.71
Average for 10 years 1922-31	0.01	0.02	1.36	0.03	2.71	0.12	0.79	0.18	1.42	5.38	12.63	0.39	5.86	32.95	13.20	77.05
1932	0.04	nil.	1.15	nil.	2.59	0.21	1.03	0.04	1.23	4.28	10.20	0.16	4.93	34.26	9.46	69.58
1933	nil.	nil.	0.17	nil.	1.82	0.09	1.90	nil.	0.56	3.08	12.09	0.13	5.37	36.35	8.40	69.96
1934	nil.	nil.	1.54	0.17	0.90	0.17	0.21	0.04	0.51	2.48	7.53	0.34	2.91	33.21	7.57	57.58
1935	nil.	nil.	0.56	nil.	1.21	0.13	0.43	0.17	0.61	2.90	8.54	0.17	2.82	33.41	6.68	57.63
1936	nil.	nil.	0.87	nil.	1.91	0.09	0.48	0.22	0.70	2.91	11.04	0.22	3.61	33.41	7.69	63.14
1937	nil.	nil.	0.31	nil.	1.13	0.22	0.52	0.04	0.61	2.39	9.66	nil.	2.53	34.77	7.36	59.54

## West Riding Administrative County.

## Infantile Mortality Rate for the 37 years, 1901 to 1937.



## EPIDEMIOLOGY.

Statistics as to incidence of the principal infectious diseases are given below. The combined death-rate from these diseases was 0.21 per 1,000 of the estimated population, compared with 0.29 for the previous year, and the average rate of 0.39 for the ten years 1926-35.

The decrease in 1937 in the mortality from infectious diseases occurred in connection with all infectious diseases and was not confined to one particular disease.

The table headed "West Riding Birth and Death Rates for Ten Years" on page 21 shows the mortality rates for each disease for each of the ten years 1928 to 1937, and table VII on the same page headed "Average Birth and Death Rates from 1917 to 1936" gives similar information for the quinquennial periods comprised in those years.

TABLE XIV.

Zymotic Disease.	No. of Cases 1937.	No. of Deaths 1937.	Ratio of Deaths.	
			(a) per 1,000 persons attacked.	(b) per 1,000 persons living.
(1) Smallpox ... ..	Nil.	Nil.	Nil.	Nil.
(2) Scarlet Fever ... ..	3,945	17	4.31	0.01
(3) Diphtheria ... ..	2,337	138	59.05	0.09
(4) Enteric Fever ... ..	53	5	94.34	0.00
(5) Measles ... ..	*	28	?	0.02
(6) Whooping Cough ... ..	*	65	?	0.04
(7) Diarrhoea, etc., under two years ... ..	*	70	?	0.05
Total of principal Zymotic Diseases ... ..	?	323	?	0.21

\* The numbers of cases of measles, whooping cough and diarrhoea are not available, as cases of these diseases are not compulsorily notifiable in every district in the Administrative County.



Cases	Age	Sex	Occupation	Date of Onset	Date of Admission	Date of Discharge	Duration of Illness	Mortality	Morbidity	Total	Percentage	Remarks
1	10	M	Farmer	1931	1931	1931	10	100	100	100	100	...
2	12	F	Housewife	1931	1931	1931	12	100	100	100	100	...
3	15	M	Student	1931	1931	1931	15	100	100	100	100	...
4	18	F	Teacher	1931	1931	1931	18	100	100	100	100	...
5	20	M	Engineer	1931	1931	1931	20	100	100	100	100	...
6	22	F	Doctor	1931	1931	1931	22	100	100	100	100	...
7	25	M	Lawyer	1931	1931	1931	25	100	100	100	100	...
8	28	F	Artist	1931	1931	1931	28	100	100	100	100	...
9	30	M	Businessman	1931	1931	1931	30	100	100	100	100	...
10	32	F	Writer	1931	1931	1931	32	100	100	100	100	...
11	35	M	Scientist	1931	1931	1931	35	100	100	100	100	...
12	38	F	Musician	1931	1931	1931	38	100	100	100	100	...
13	40	M	Politician	1931	1931	1931	40	100	100	100	100	...
14	42	F	Journalist	1931	1931	1931	42	100	100	100	100	...
15	45	M	Actor	1931	1931	1931	45	100	100	100	100	...
16	48	F	Designer	1931	1931	1931	48	100	100	100	100	...
17	50	M	Historian	1931	1931	1931	50	100	100	100	100	...
18	52	F	Philosopher	1931	1931	1931	52	100	100	100	100	...
19	55	M	Economist	1931	1931	1931	55	100	100	100	100	...
20	58	F	Biologist	1931	1931	1931	58	100	100	100	100	...
21	60	M	Chemist	1931	1931	1931	60	100	100	100	100	...
22	62	F	Physicist	1931	1931	1931	62	100	100	100	100	...
23	65	M	Mathematician	1931	1931	1931	65	100	100	100	100	...
24	68	F	Psychologist	1931	1931	1931	68	100	100	100	100	...
25	70	M	Sociologist	1931	1931	1931	70	100	100	100	100	...
26	72	F	Anthropologist	1931	1931	1931	72	100	100	100	100	...
27	75	M	Linguist	1931	1931	1931	75	100	100	100	100	...
28	78	F	Geographer	1931	1931	1931	78	100	100	100	100	...
29	80	M	Historian	1931	1931	1931	80	100	100	100	100	...
30	82	F	Philosopher	1931	1931	1931	82	100	100	100	100	...
31	85	M	Economist	1931	1931	1931	85	100	100	100	100	...
32	88	F	Biologist	1931	1931	1931	88	100	100	100	100	...
33	90	M	Chemist	1931	1931	1931	90	100	100	100	100	...
34	92	F	Physicist	1931	1931	1931	92	100	100	100	100	...
35	95	M	Mathematician	1931	1931	1931	95	100	100	100	100	...
36	98	F	Psychologist	1931	1931	1931	98	100	100	100	100	...
37	100	M	Sociologist	1931	1931	1931	100	100	100	100	100	...
38	102	F	Anthropologist	1931	1931	1931	102	100	100	100	100	...
39	105	M	Linguist	1931	1931	1931	105	100	100	100	100	...
40	108	F	Geographer	1931	1931	1931	108	100	100	100	100	...
41	110	M	Historian	1931	1931	1931	110	100	100	100	100	...
42	112	F	Philosopher	1931	1931	1931	112	100	100	100	100	...
43	115	M	Economist	1931	1931	1931	115	100	100	100	100	...
44	118	F	Biologist	1931	1931	1931	118	100	100	100	100	...
45	120	M	Chemist	1931	1931	1931	120	100	100	100	100	...
46	122	F	Physicist	1931	1931	1931	122	100	100	100	100	...
47	125	M	Mathematician	1931	1931	1931	125	100	100	100	100	...
48	128	F	Psychologist	1931	1931	1931	128	100	100	100	100	...
49	130	M	Sociologist	1931	1931	1931	130	100	100	100	100	...
50	132	F	Anthropologist	1931	1931	1931	132	100	100	100	100	...
51	135	M	Linguist	1931	1931	1931	135	100	100	100	100	...
52	138	F	Geographer	1931	1931	1931	138	100	100	100	100	...
53	140	M	Historian	1931	1931	1931	140	100	100	100	100	...
54	142	F	Philosopher	1931	1931	1931	142	100	100	100	100	...
55	145	M	Economist	1931	1931	1931	145	100	100	100	100	...
56	148	F	Biologist	1931	1931	1931	148	100	100	100	100	...
57	150	M	Chemist	1931	1931	1931	150	100	100	100	100	...
58	152	F	Physicist	1931	1931	1931	152	100	100	100	100	...
59	155	M	Mathematician	1931	1931	1931	155	100	100	100	100	...
60	158	F	Psychologist	1931	1931	1931	158	100	100	100	100	...
61	160	M	Sociologist	1931	1931	1931	160	100	100	100	100	...
62	162	F	Anthropologist	1931	1931	1931	162	100	100	100	100	...
63	165	M	Linguist	1931	1931	1931	165	100	100	100	100	...
64	168	F	Geographer	1931	1931	1931	168	100	100	100	100	...
65	170	M	Historian	1931	1931	1931	170	100	100	100	100	...
66	172	F	Philosopher	1931	1931	1931	172	100	100	100	100	...
67	175	M	Economist	1931	1931	1931	175	100	100	100	100	...
68	178	F	Biologist	1931	1931	1931	178	100	100	100	100	...
69	180	M	Chemist	1931	1931	1931	180	100	100	100	100	...
70	182	F	Physicist	1931	1931	1931	182	100	100	100	100	...
71	185	M	Mathematician	1931	1931	1931	185	100	100	100	100	...
72	188	F	Psychologist	1931	1931	1931	188	100	100	100	100	...
73	190	M	Sociologist	1931	1931	1931	190	100	100	100	100	...
74	192	F	Anthropologist	1931	1931	1931	192	100	100	100	100	...
75	195	M	Linguist	1931	1931	1931	195	100	100	100	100	...
76	198	F	Geographer	1931	1931	1931	198	100	100	100	100	...
77	200	M	Historian	1931	1931	1931	200	100	100	100	100	...
78	202	F	Philosopher	1931	1931	1931	202	100	100	100	100	...
79	205	M	Economist	1931	1931	1931	205	100	100	100	100	...
80	208	F	Biologist	1931	1931	1931	208	100	100	100	100	...
81	210	M	Chemist	1931	1931	1931	210	100	100	100	100	...
82	212	F	Physicist	1931	1931	1931	212	100	100	100	100	...
83	215	M	Mathematician	1931	1931	1931	215	100	100	100	100	...
84	218	F	Psychologist	1931	1931	1931	218	100	100	100	100	...
85	220	M	Sociologist	1931	1931	1931	220	100	100	100	100	...
86	222	F	Anthropologist	1931	1931	1931	222	100	100	100	100	...
87	225	M	Linguist	1931	1931	1931	225	100	100	100	100	...
88	228	F	Geographer	1931	1931	1931	228	100	100	100	100	...
89	230	M	Historian	1931	1931	1931	230	100	100	100	100	...
90	232	F	Philosopher	1931	1931	1931	232	100	100	100	100	...
91	235	M	Economist	1931	1931	1931	235	100	100	100	100	...
92	238	F	Biologist	1931	1931	1931	238	100	100	100	100	...
93	240	M	Chemist	1931	1931	1931	240	100	100	100	100	...
94	242	F	Physicist	1931	1931	1931	242	100	100	100	100	...
95	245	M	Mathematician	1931	1931	1931	245	100	100	100	100	...
96	248	F	Psychologist	1931	1931	1931	248	100	100	100	100	...
97	250	M	Sociologist	1931	1931	1931	250	100	100	100	100	...
98	252	F	Anthropologist	1931	1931	1931	252	100	100	100	100	...
99	255	M	Linguist	1931	1931	1931	255	100	100	100	100	...
100	258	F	Geographer	1931	1931	1931	258	100	100	100	100	...
101	260	M	Historian	1931	1931	1931	260	100	100	100	100	...
102	262	F	Philosopher	1931	1931	1931	262	100	100	100	100	...
103	265	M	Economist	1931	1931	1931	265	100	100	100	100	...
104	268	F	Biologist	1931	1931	1931	268	100	100	100	100	...
105	270	M	Chemist	1931	1931	1931	270	100	100	100	100	...
106	272	F	Physicist	1931	1931	1931	272	100	100	100	100	...
107	275	M	Mathematician	1931	1931	1931	275	100	100	100	100	...
108	278	F	Psychologist	1931	1931	1931	278	100	100	100	100	...
109	280	M	Sociologist	1931	1931	1931	280	100	100	100	100	...
110	282	F	Anthropologist	1931	1931	1931	282	100	100	100	100	...
111	285	M	Linguist	1931	1931	1931	285	100	100	100	100	...
112	288	F	Geographer	1931	1931	1931	288	100	100	100	100	...
113	290	M	Historian	1931	1931	1931	290	100	100	100	100	...
114	292	F	Philosopher	1931	1931	1931	292	100	100	100	100	...
115	295	M	Economist	1931	1931	1931						



The notifications received during the last five years were as follows:—

1933.	1934.	1935.	1936.	1937.
1,652	3,062	3,175	2,261	2,337

#### Immunisation.

Immunisation clinics have been continued in all parts of the Administrative County area, and in spite of the facilities for immunisation, which are provided free of cost, the number of children immunised during the year 1937 again shows a decrease on the previous year. Facilities for immunisation are offered in the following ways:—

1. At clinics held in schools.
2. By private medical practitioners.
3. At Child Welfare Centres.

The number of children immunised since 1932 is as follows:—

Year.	1932.	1933.	1934.	1935.	1936.	1937.
Number of children immunised, or undergoing treatment	2,232	4,063	16,524	54,435	14,218	9,923

On comparing this table with the table giving the incidence of diphtheria, it will be seen that the maximum response to offers of immunisation occurred in the year 1935, which was also the peak year for incidence of the disease in recent times.

The conclusion to which I am forced is that in spite of regular appeals and offers, it requires the presence of an epidemic to move a great number of parents to accept the offer of free immunisation for their children.

This is a most unfortunate position, as immunisation to be of greatest benefit should be carried out before the onset of an epidemic.

Of the 9,923 children immunised during the year 1937 under the County Council's Scheme, 1,347 were immunised by private practitioners.

Lectures on the subject of diphtheria immunisation were given in various parts of the County, and these were supplemented by a display of the film "The Empty Bed." The districts visited were Bentley-with-Arksey, Kippax, Kirk Sandall, Micklefield, Outwood, Rossington, Thurnscoe (on three occasions), Wath-upon-Deane (twice), Castleford and Goldthorpe.

#### Diphtheria Carriers.

Towards the end of the year 1936, a Kromayer lamp was purchased, and installed in the County Public Health Buildings at Wakefield, in order to give local applications of ultra-violet-light to the throat or nasal passages of such carriers.

From the date of installation until the end of the year under review, the total number treated at the clinic was six, of which four were nasal and two aural carriers. Treatment consisted of local irradiation with the appropriate applicator for periods of two to ten minutes, usually twice per week.

Swabs were taken for control purposes of the secretions before and after treatment.

Three patients, carriers of the gravis type, were discharged cured after five consecutive swabs, followed by a month's rest without treatment, and a sixth negative swab. Two patients ceased to attend before completion of the tests, and one was referred back to the Aural Clinic with Ozæna.

The average duration of treatment, including the tests for cure in the three successful cases, was about four months.

### ENTERIC FEVER.

There were 53 cases of typhoid or paratyphoid fever notified during 1937, as compared with 54 in the year 1936.

The districts affected were as follows:—

#### BOROUGH AND URBAN DISTRICTS.

Brighouse ... ..	1	Knaresborough ... ..	1
Cudworth ... ..	1	Knottingley ... ..	1
Dearne ... ..	1	Meltham ... ..	1
Darfield ... ..	1	Morley ... ..	1
Farsley ... ..	2	Normanton ... ..	3
Garforth ... ..	1	Pontefract ... ..	1
Goole ... ..	1	Pudsey ... ..	1
Harrogate ... ..	5	Rawmarsh ... ..	1
Haworth ... ..	4	Silsden ... ..	1
Horsforth ... ..	1	Swinton ... ..	3
Ilkley ... ..	2	Skipton ... ..	1
Keighley ... ..	2	Thurstonland and Farnley Tyas ... ..	1

#### RURAL DISTRICTS.

Barnsley ... ..	1	Knaresborough ... ..	1
Doncaster ... ..	9	Rotherham ... ..	1
Great Ouseburn ... ..	1	Wetherby ... ..	1
Hemsworth ... ..	1		

The cases were spread over a large number of districts, the highest number of cases notified in any one district being nine. Connection between any of the cases was not ascertained.

### ACUTE POLIOMYELITIS AND ACUTE POLIO-ENCEPHALITIS.

#### (INFANTILE PARALYSIS.)

Eleven cases of acute poliomyelitis and two cases of acute polio-encephalitis were notified during the year, as compared with 17 cases of acute poliomyelitis and one case of acute polio-encephalitis in 1936. Only one district reported more than one case, two cases being notified in the Worsborough Urban District.

### CEREBRO-SPINAL FEVER.

34 notifications of Cerebro-Spinal fever were received during the year; the districts chiefly affected were as follows:—

Conisbrough Urban	3	Dearne Urban	4
Keighley Borough	3	Bishopthorpe Rural	3
Maltby Urban	3	Hemsworth Rural	5
Saddleworth Urban	2	Rotherham Rural	2

There is a small reduction in the number of sporadic cases in the administrative area, compared with the previous year.

### DYSENTERY.

The number of notifications of this disease during the year 1937 was 2.

### FOOD POISONING.

No instances of food poisoning were reported during the year.

### ISOLATION HOSPITALS.

The following table gives particulars of the removal to hospital of cases of Smallpox, Scarlet Fever, Diphtheria and Enteric Fever during 1937. Columns 24 to 27 of Table XV folded in at page 26 show the removals for each district:—

TABLE XVII.

	Total cases notified.	Cases removed to Hospital.	
		Number.	Percentage.
Smallpox ... ..	Nil.	Nil.	Nil.
Scarlet Fever ... ..	3,945	3,517	89.2
Diphtheria ... ..	2,337	2,273	97.3
Enteric Fever ... ..	53	43	81.1
Total for 1937 ... ..	6,335	5,833	92.1

## Treatment of Venereal Diseases.

TABLE XVIII.

List of the Venereal Diseases Treatment Centres with the days and hours of attendance:—

Address of Centre.	Days and Hours of Attendance.	
	Men.	Women and Children.
Barnsley Clinic, Queen's Road	Monday, 8 to 10 p.m. Thursday, 6-30 to 9-30 p.m.	Thursday, 3 to 6 p.m.
Bradford St. Luke's Hospital	Monday and Saturday, 9-30 a.m. Tuesday, 6 p.m.	Monday, 5 to 7 p.m. Friday, 10-0 a.m.
Burnley Victoria Hospital	Monday, 10 to 11 a.m. and 5-30 to 6-30 p.m. Thursday, 5-30 to 6-30 p.m.	Friday, 11 a.m. to 12 noon. 5-30 to 6-30 p.m.
Dewsbury and District Infirmary	Monday, 3 to 5 p.m. Thursday, 7 to 9 p.m.	Monday, 3 to 5 p.m. Thursday, 7 to 9 p.m.
Doncaster Royal Infirmary	Tuesday, 4 to 6 p.m. Friday, 9 to 11 a.m. and 4 to 6 p.m.	Monday, 4 to 6 p.m. Friday, 2 to 4 p.m.
Goole, Bartholomew Hospital	Friday, 8-0 p.m.	Friday, 5-0 p.m.
Royal Halifax Infirmary	Thursday, 6 to 8 p.m.	Tuesday, 3-30 to 4-30 p.m. and 6 to 8 p.m.
Huddersfield Municipal V.D. Treatment Centre, York Place, New North Road	Monday, 6 to 8-30 p.m. Tuesday, 6 to 8-30 p.m. Thursday, 6 to 8-30 p.m. Friday, 6 to 8-30 p.m. Wednesday, 10 a.m. to 12 noon.	Monday, 6 to 8-30 p.m. Tuesday, 6 to 8-30 p.m. Thursday, 6 to 8-30 p.m. Friday, 6 to 8-30 p.m. Wednesday, 10 a.m. to 12 noon.
Keighley Victoria Hospital	Thursday, 6 to 8 p.m.	Tuesday, 6 to 8 p.m.
General Infirmary at Leeds	Monday to Friday inclusive, 10 a.m. to 12 noon and 2 to 7 p.m. Saturday, 10 a.m. to 12 noon. Tuesday, 7-30 p.m. Wednesday, 7-30 p.m.	Monday, 1-30 to 3 p.m. Thursday, 5-30 to 7 p.m.
Oldham Royal Infirmary	Tuesday, 11-30 a.m. to 12-30 p.m. and 6 to 8 p.m. Wednesday, 6 to 8 p.m.	Monday, 7-30 p.m.
Rotherham T.B. Dispensary, 12 Frederick Street	—	Tuesday and Thursday, 2 to 4-30 p.m. Friday 11-30 a.m. to 12-30 p.m., and 6 to 8 p.m.
Sheffield Jessop Hospital for Women	—	Tuesday, 5 to 7-30 p.m. Thursday, 5 to 7-30 p.m. Saturday, 11 a.m. to 1-30 p.m. Thursday, 10 a.m. to 1 p.m.
Sheffield Royal Hospital	Thursday, 7 to 9 p.m. Saturday, 12-30 to 2-30 p.m. Tuesday, 7 to 9 p.m. Friday, 7 to 9 p.m.	—
Sheffield Royal Infirmary	Tuesday, 2 to 4 p.m. Thursday, 2 to 4 p.m. Wednesday, 6 to 8 p.m. Friday, 5-30 to 7-30 p.m.	Tuesday, 2 to 4 p.m. Thursday, 2 to 4 p.m.
Wakefield Clayton Hospital	Wednesday, 6 to 8 p.m. Friday, 10 a.m. to 12 noon. Monday, 3 to 4 p.m. Thursday, 6 to 7 p.m. Friday, 7-30 to 8-30 p.m.	Monday, 4 to 6 p.m. Friday, 3 to 5 p.m. Wednesday, 3 to 4 p.m. Friday, 7 to 7-30 p.m.
York County Hospital	—	—

Table showing the Venereal Diseases Treatment Centres and number of attendances, etc., during 1937, of West Riding patients:—

TABLE XIX.

Centre	No. of new patients				No. of In-patient days	No. of Out-patient attendances
	Syphilis	Soft Chancre	Gonorrhœa	Non-Venereal		
Barnsley Clinic, Queen's Road	24	—	53	37	—	7,742
Bradford St. Luke's Hospital	8	—	54	44	68	3,762
Burnley Victoria Hospital	2	—	4	2	—	111
Dewsbury Infirmary	12	—	30	18	12	3,405
Doncaster Royal Infirmary	89	—	134	42	231	12,448
Goole, Bartholomew Hospital	15	—	32	27	—	653
Halifax Royal Infirmary	16	—	36	60	316	2,866
Huddersfield V.D. Centre	21	—	40	43	112	5,028
Keighley Victoria Hospital	26	—	40	10	—	3,560
Leeds General Infirmary	91	—	146	126	37	12,707
Oldham Royal Infirmary	1	—	5	1	26	206
Rotherham T.B. Dispensary, 12, Frederick Street	22	—	20	44	—	2,592
Sheffield Jessop Hospital	3	—	10	24	125	837
Sheffield Royal Hospital	2	—	8	8	14	324
Sheffield Royal Infirmary	11	—	9	9	28	1,320
Wakefield Clayton Hospital	61	—	41	76	33	9,076
York County Hospital	6	—	4	12	—	452
	410	—	666	583	1,002	67,089

TABLE XX.

Table giving an analysis of the combined returns of treatment centres for the year 1937, compared with previous years:—

Year.	New Patients.	No. of In-patient days.	Out-patient attendances.
1932	1,513	2,107	53,383
1933	1,484	3,644	57,868
1934	1,674	1,539	62,231
1935	1,555	1,079	61,646
1936	1,722	1,054	62,204
1937	1,659	1,002	67,089

The returns for the year 1937 for the various treatment centres serving the Administrative County show that fewer new patients attended the clinics. There is no marked decrease in the number of new patients but under each sub-heading (Table XIX) a slight reduction in numbers is apparent compared with last year.

In contrast with this reduction an increase of nearly 5,000 is observed in the total of out-patient attendances. This large increase may be taken as an indication that treatment is being persisted in by the patients and that fewer patients cease to attend with the course of treatment uncompleted.

In February, 1938, Medical Officers in charge of Ante-Natal Clinics were requested to obtain, with the permission of the patient, samples of blood for routine examination. In this way it is hoped that many cases of undetected syphilis will be brought to light and the necessary treatment obtained. This scheme has not been in operation long enough for the results to be reviewed.

Alteration to the premises adjoining Keighley Victoria Hospital were completed during the year and with the enlarged and more modern accommodation it is hoped that the attendances at this centre will show an increase as it is suspected that many cases of gonorrhoea in women in this district are either untreated or the patients attend other clinics.

Treatment is given at Harrogate General Infirmary for venereal diseases but the clinic is not approved by the Minister of Health. Negotiations with the Hospital have proceeded for many years and the building which is being erected by a grant from the County Council is now in course of erection. Application for this clinic to be approved by the Minister of Health will be made on completion of the new building.

Education propaganda measures were carried out in the usual manner during the year. During the spring and autumn, intensive campaigns each of two weeks' duration and consisting of lectures and film tours of districts in the County were arranged in conjunction with the British Social Hygiene Council.

In March the itinerary comprised visits to Featherstone, Wath-on-Deane, Tickhill, Goldthorpe, Swinton, Maltby, Wombwell, Dinnington, Denaby Main and Kiveton Park and in October the districts visited were Pateley Bridge, Kirby Malzeard, Lofthouse, Bishop Monkton, Dacre Banks, Ripon, Sawley, Markington, Littlethorpe, Galphay and Grantley.

The total estimated attendance at the lectures was 4,315, a decrease on the previous year mainly due to the October tour being in a sparsely populated rural portion of the County.

General practitioners who are approved in accordance with the requirements of the Ministry of Health to receive arsenobenzene compounds now number 93, a decrease of 1 from the previous year. The number of doses of arsenobenzene compounds supplied has increased from 948 to 1,092.

The number of patients receiving treatment in the Hope Hospital, Leeds, was 14, the total number of in-patient days being 883 and the number of doses of arsenobenzene compounds given in treatment was seven.

## Public Health Legislation, etc., during 1937.

### I.—ORDERS, CIRCULARS AND MEMORANDA ISSUED BY THE MINISTRY OF HEALTH.

#### GENERAL.

Circular No. 1576.	Public Health Act, 1936. November 3rd, 1936.
—	Public Health Act, 1936. Tables of Comparison showing I—The mode in which earlier enactments are dealt with by the Act; II—The sections of the Act and corresponding provisions in earlier Acts.
Report.	Welfare of the Blind, Advisory Committee on Home Teaching. December 9th, 1936.
Report.	Hospitals and Other Public Buildings. Departmental Committee on the cost of. First Report, The Acute General Hospital. December 16th, 1936.
Circular No. 1609.	On report of Departmental Committee on the Cost of Hospitals and other Public Buildings. March 24th, 1937.
Memo. 166/Med.	Acute Poliomyelitis, Memorandum on. December, 1936.
Circular No. 1597.	Public Health Act, 1936. Provisions relating to Port Sanitary Authorities, Joint Hospital Boards and Isolation Hospital Committees. February 26th, 1937.
Circular No. 1605.	Local Government Act, 1929. Welfare of Blind Persons. March 30th, 1937.
Report.	Nutrition. First Report of Advisory Committee. March 5th, 1937.
Circular No. 1519.	On First Report of Advisory Committee on Nutrition. April 1st, 1937.
Regulations.	Public Health, England (Imported Food) Regulations, dated April 16th, 1937.
Circular No. 1522.	Public Health (Imported Food) Regulations, 1937. April 30th, 1937.
Circular No. 1666.	Public Health (Imported Food) Regulations, 1937. (Postponement of date of Operation of Regulations.) December 7th, 1937.
Report.	River Pollution. Joint Advisory Committee on. Fourth Report. The Machinery of Administration of the Law as to River Pollution. July 2nd, 1937.
Cmd. 5533.	Milk Policy. July, 1937.
Circular No. 1621.	Prevention of Blindness. August 6th, 1937.
Regulations.	Therapeutic Substances (Amendment) Regulations, dated August 7th, 1937.
Circular No. 1641.	Therapeutic Substances Act, 1925. Labelling of Surgical Ligatures and Sutures. August 23rd, 1937.
Memo. 62/Foods.	Meat Inspection. September, 1937.
Bulletin No. 31.	The Handling of Milk and Milk Products. November, 1937. <i>Ministry of Agriculture and Fisheries.</i>

#### HOUSING.

Report.	Rural Housing. Second Report of the Sub-Committee of the Central Housing Advisory Committee. December 16th, 1936.
Order No. 1335.	Abatement of Overcrowding. The Housing Act, 1935 (Operation of Overcrowding Provisions) Order (No. 4), dated December 22nd, 1936.
Circular No. 1591.	Housing Act, 1935. Overcrowding Provisions. January 1st, 1937.
Order No. 78.	The Housing Act (Form of Orders and Notices) Regulations, dated January 25th, 1937.
Order No. 79.	The Housing Act (Extinguishment of Public Right of Way) Regulations, dated January 29th, 1937.
Order No. 80.	The Housing Act (Overcrowding and Miscellaneous Forms) Regulations, dated January 29th, 1937.
Order No. 216.	Abatement of Overcrowding. The Housing Act, 1936 (Operation of Overcrowding) Order, dated March 20th, 1937.
—	House Production, Slum Clearance, etc. England and Wales. Position at March 31st, 1937.
Circular No. 1600.	Public Health Act, 1936. Moveable Dwellings, May 1st, 1937.
Order No. 555.	Abatement of Overcrowding. The Housing Act, 1936 (Operation of Overcrowding Provisions) Order (No. 2), dated June 17th, 1937.
Circular No. 1640.	Building Byelaws. July 12th, 1937.
Order No. 854.	Abatement of Overcrowding. The Housing Act, 1936 (Operation of Overcrowding Provisions) Order (No. 3), dated September 20th, 1937.
Order No. 1172.	Abatement of Overcrowding. The Housing Act, 1936 (Operation of Overcrowding Provisions) Order (No. 4), dated December 22nd, 1937.

#### MATERNITY AND CHILD WELFARE.

Regulations.	The Public Health (Ophthalmia Neonatorum) Amendment Regulations, January 21st, 1937.
Circular No. 1596.	Notification and Treatment of Ophthalmia Neonatorum. February 1st, 1937.
Cmd. 5422.	Maternal Mortality, Report of Investigation into. March, 1937.
Regulations.	The Midwives (Qualification of Supervisors) Regulations, dated April 29th, 1937.
Circular No. 1620.	Supervision of Midwives. May 7th, 1937.
Circular No. 1622.	Maternal Mortality. May 7th, 1937.

#### PHARMACY AND POISONS.

Order No. 1029.	Poisons. The Poisons List (Amendment) Order, dated November 2nd, 1937.
Rules.	Poisons (Amendment) Rules, dated November 2nd, 1937.

#### II. ACTS OF PARLIAMENT.

—	Public Health (Drainage of Trade Premises) Act, 1937.
—	Hydrogen Cyanide (Fumigation) Act, 1937.
—	Milk (Amendment) Act, 1937.

# HOUSING AND GENERAL SANITARY MATTERS.

A. BROOK, Chief County Sanitary Inspector.

## Housing.

### Provision of New Houses.

The table below sets out the numbers of new houses provided in the area of the Administrative County during 1937.

				Houses Provided by:—		
				Local Authorities.	Private Enterprise.*	Totals.
In Municipal Boroughs	...	...	...	655	1,392	2,047
In Urban Districts	...	...	...	1,900	3,538	5,438
In Rural Districts	...	...	...	498	2,266	2,764
				3,053	7,196	10,249

\* Numbers relate to houses completed during the year ended September 30th, 1937, and exclude those with a rateable value exceeding £78.

### HOUSES ERECTED DURING THE YEARS 1931—1936 INCLUSIVE.

1931	1932	1933	1934	1935	1936
4,576	6,265	7,065	9,207	10,499	10,238

It will be seen from the figures set out above that during the last three years, the number of houses erected has been fairly stationary at approximately 10,000 per annum. In spite of the activities of local authorities in providing dwellings, in the West Riding, private builders continue to predominate and during the past year provided 7,196 houses, or in other words out of each ten houses completed, 7 were provided by private enterprise.

It must not be assumed that by the building of 10,249 houses during the year, the total number of houses in the West Riding administrative area has been increased by precisely this number, as it can be stated safely, that among the 3,053 houses provided by local authorities during 1937, many have been built to accommodate families who have been displaced from houses demolished under slum clearance programmes. In 1936, 2,100 houses and in 1937, 3,391 houses were approved for this purpose by the Minister of Health.

The demand for small houses at low rentals is still to be found, and this demand will continue for some years to come.

In regard to overcrowding it is difficult to assess the exact position. There has been improvement in some areas as will be seen from the figures set out in Table XXII.

### Slum Clearance.

*Housing Act, 1936.*

ACTION DURING THE YEAR 1937.

TABLE XXI.

Action taken.	Municipal Boroughs	Urban Districts	Rural Districts	Total
<b>Clearance Orders submitted.</b>				
No. of Orders	54	159	84	297
No. of houses to be demolished	615	1,162	362	2,139
No. of persons to be displaced from above houses	2,053	3,730	1,162	6,945
<b>† Clearance Orders confirmed.</b>				
No. of Orders	38	160	100	298
No. of houses to be demolished	311	1,285	451	2,047
No. of persons to be displaced from above houses	1,050	4,081	1,397	6,528
No. of Clearance Orders where confirmation was entirely refused.	—	—	—	—
<b>* Houses approved for re-housing persons displaced</b>				
	722	2,147	522	3,391

† Includes Orders submitted in 1936, but not confirmed until 1937.

\* Includes houses for re-housing persons displaced as result of demolition under Section 11. Separate figures of houses approved to re-house persons displaced as a result of demolition in clearance areas are not available.

TABLE XXII.  
Housing Statistics.

Summary of housing work, showing action taken by local authorities in the Administrative County during 1937.

1.—INSPECTION OF DWELLING-HOUSES DURING THE YEAR.			
	Urban Districts	Rural Districts	Totals
(1) (a) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts) ... ..	19,362	7,157	26,519
(b) Number of inspections made for the purpose ... ..	40,520	15,793	56,313
(2) (a) Number of dwelling-houses (included under sub-head (1) above), which were inspected and recorded under the Housing Consolidated Regulations ... ..	9,619	2,676	12,295
(b) Number of inspections made for the purpose ... ..	21,139	6,999	28,138
(3) Number of dwelling-houses needing further action ... ..	10,962	2,981	13,943
(a) Number considered to be in a state so dangerous or injurious to health as to be unfit for human habitation ... ..	3,479	1,180	4,659
(b) Number (excluding those in sub-head (3) (a) above) found not to be in all respects reasonably fit for human habitation ... ..	7,483	1,801	9,284
NOTE:—Totals of (3)—(a) and (b) should equal the figure given for (3).			
2.—REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES.			
No of defective dwelling-houses rendered fit in consequence of informal action by the Local Authorities or their Officers ... ..	8,275	1,626	9,901
3.—ACTION UNDER STATUTORY POWERS DURING THE YEAR.			
A. Proceedings under Sections 9, 10 and 16, Housing Act, 1936.			
(1) No. of dwelling-houses in respect of which notices were served requiring repairs ... ..	778	684	1,462
(2) No. of dwelling-houses which were rendered fit after service of formal notices ... ..	404	492	896
(a) By owners ... ..	398	492	890
(b) By Local Authority in default of owners ... ..	6	—	6
B. Proceedings under Public Health Acts:—			
(1) No. of dwelling-houses in respect of which notices were served requiring defects to be remedied ... ..	1,386	418	1,804
(2) No. of dwelling-houses in which defects were remedied after service of formal notices ... ..	987	352	1,339
(a) By owners ... ..	831	332	1,163
(b) By Local Authority in default of owners ... ..	156	20	176
C. Proceedings under Sections 11 and 13 of the Housing Act, 1936:—			
(1) No. of representations, etc., made in respect of dwelling-houses unfit for habitation ... ..	1,286	536	1,822
(2) No. of dwelling-houses in respect of which Demolition Orders were made ... ..	610	291	901
(3) No. of dwelling-houses demolished in pursuance of Demolition Orders ... ..	370	253	623
D. Proceedings under Section 12 of the Housing Act, 1936:—			
(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ... ..	113	1	114
(2) Number of separate tenements or underground rooms, the Closing Orders in respect of which were determined, the tenement or room having been rendered fit, ... ..	6	1	7
4.—HOUSING ACT, 1936—PART IV—OVERCROWDING.			
(a) (1) Number of dwellings overcrowded at the end of the year ... ..	5,299	1,545	6,844
(2) Number of families dwelling therein ... ..	5,516	1,641	7,157
(3) Number of persons dwelling therein ... ..	32,269	10,717	42,986
(b) Number of new cases of overcrowding reported during the year ... ..	436	417	853
(c) (1) Number of cases of overcrowding relieved during the year ... ..	1,878	517	2,395
(2) Number of persons concerned in such cases ... ..	10,908	3,344	14,252
Totals ... ..	184,476	62,266	246,742

NOTE:—The above statement is compiled from Returns furnished by the Medical Officers of Health of the Sanitary Authorities throughout the Administrative County.

### Work of the County Inspectorial Staff.

During the year the County Sanitary Inspectors were chiefly engaged as indicated below:—

#### CLEARANCE AREAS.

(1) Inspections made and evidence given at Ministry of Health inquiries at:—

Goole M.B.

Kirkburton U.D.

(2) Attendances at Ministry of Health inquiries at:—

*Municipal Boroughs*:—Batley, Brighouse, Harrogate (2), Morley, Keighley, Ossett (2), Pudsey (2), Ripon City (3), Todmorden (2).

*Urban Districts*:—Adwick-le-Street, Aireborough, Baildon, Bentley-with-Arksey, Bingley, Castleford, Conisbrough, Darton (3), Golcar, Hebden Royd, Hoyland Nether (2), Mirfield (3), Rawmarsh, Royston, Saddleworth (2), Selby, Shipley, Spenborough, Stanley, Worsborough.

*Rural Districts*:—Goole, Great Ouseburn (2), Hemsworth, Knaresborough, Penistone, Tadcaster, Thorne (2), Wortley (3).

*Housing Surveys* were carried out at Emley U.D., Thurlstone U.D., Ripon and Pateley Bridge R.D. (Azerley), Wakefield R.D. (Crigglestone).

*Re-Surveys* to ascertain progress were made in Pontefract R.D. (Brotherton), Ripon R.D. (North Stanley-w-Slensingford), Selby R.D. (Cawood).

*Inspections* relating to housing conditions were made in the undermentioned districts:—

*Urban Districts.*

Aireborough.

Cudworth.

Featherstone.

Knottingley.

Lepton.

New Mill.

Pudsey M.B.

Saddleworth.

*Rural Districts.*

Barnsley (Carlton).

Bowland (Grindleton).

Great Ouseburn.

Kiveton Park (Dinnington).

Pontefract (Brotherton).

Ripon and Pateley Bridge (Fountains Earth).

Selby (West Haddlesey).

### Housing (Rural Workers) Acts 1926 and 1931.

From the commencement of the operation of these Acts until December 31st, 1937, 116 applications were received.

In 72 cases covering 179 houses, the applications received favourable consideration, and at the end of the year, 107 houses had been re-conditioned at a cost to the County Council of £9,798 6s. 6d. Of this amount, half is repayable to the County Council as loan charges under the provisions of the Acts. In the case of the other houses, the works of re-conditioning are in hand.

Thirty-one applications affecting 90 houses have been refused, and 13 applications, concerning 24 houses, were withdrawn.

Periodical inspections of the re-conditioned dwellings are made by the County Sanitary Inspectors to ascertain that the conditions under which the grants are made are observed.

### Smoke Abatement.

During the year under review it has been possible for the County Sanitary Inspectors to give a little more attention to this subject, a total of 119 observations, each of 30 minutes duration having been made of chimneys situate in 11 separate County Districts.

Reference to the table which follows shows that in 29 cases excessive emissions of black smoke occurred, the maximum being from a chimney where black smoke was turned out for the whole period of the observation. In this particular case, steps are being taken at the time of writing to improve matters. Such steps include the erection of a new and larger chimney stack.

The average time during which black smoke was emitted for the whole of the 29 cases mentioned above where the emission was excessive was 9.37 minutes, so it is evident that conditions in this respect are not very satisfactory. Also, despite the fact that in 60 instances, or in just over half of the observations taken during the year, no black smoke was recorded, the average duration of black smoke over the whole of the 119 observations was as long as 2.73 minutes.

Nearly twelve years have gone by since the passing of the Public Health (Smoke Abatement) Act, 1926, which materially strengthened the hands of local authorities, and during this period repeated crusades have been introduced with the object of securing a pure atmosphere. Industrial smoke, and the smoke from domestic fires (the latter more especially) are responsible for the continuance of this serious and expensive nuisance, and until greater interest is taken by the public at large there can be no hope for its mitigation.

TABLE XXIII.  
Smoke observations taken by the County Inspectors during the year 1937.

No. of observations taken in each District.	Is Byelaw in Force?	Observations showing an excessive emission of Black Smoke.				Number of observations showing:		Average Amount of Black Smoke per observation.
		Number.	Maximum Emission.	Minimum Emission.	Average.	Black Smoke of 3 minutes or under.	No Black Smoke.	
			Minutes.	Minutes	Minutes.			Minutes
3	Yes	1	5.5	5.5	5.5	1	1	2.2
1	No	Nil.	Nil.	Nil.	Nil.	Nil.	1	Nil.
8	Yes	3	28.5	4.5	11.6	3	2	5.8
6	No	4	13.0	8.0	10.9	2	Nil.	7.6
2	Yes	2	30.0	28.5	29.3	Nil.	Nil.	29.3
10	Yes	2	6.3	5.5	5.9	1	7	1.4
25	No	11	15.8	3.5	7.2	9	5	3.8
7	Yes	2	7.5	4.0	5.8	2	3	1.9
6	Yes	Nil.	Nil.	Nil.	Nil.	1	5	0.3
27	Yes	2	8.0	8.0	8.0	7	18	0.9
24	Yes	2	6.5	4.0	5.3	4	18	0.8
119	—	29	—	—	9.4	30	60	2.7

### Drainage, Sewerage and Sewage Disposal.

Although the above matters are continually receiving attention at the hands of the local authorities in the Riding, finality has by no means been reached. With the development of land for building purposes, extensions of sewers are constantly being needed; sewers which by reason of their construction or capacity have become inadequate are being replaced, and in some localities proper sewage systems are being installed for the first time.

In respect of disposal works, the extensive adoption of the water-carriage system and the general installation of baths in the modern houses has in cases necessitated reconditioning or extension of such works.

The following table sets out the schemes in regard to which, up to the end of 1937, the County Council have agreed to contribute towards cost.

TABLE XXIV.  
SEWERAGE AND SEWAGE DISPOSAL.

Name of Authority to whom grant was made.	Townships or Districts for which works are to be carried out.	Estimated cost of works.	Amount of grant made by County Council.
		£	
Bowland Rural ... ..	Grindleton ... ..	5,950	£37 annually for 30 years.
Doncaster Rural ... ..	Braithwell ... ..	2,825	£70 do.
Do. ... ..	Norton ... ..	13,000	£127 10s. do.
Great Ouseburn Rural ... ..	Upper and Nether Poppleton ...	14,768	£192 do.
Skipton Rural ... ..	Linton ... ..	2,500	£9 do.
Do. ... ..	Bradleys Both ... ..	4,250	£80 do.
Tadcaster Rural ... ..	Sherburn-in-Elmet ... ..	6,275	£183 do.
Do. ... ..	Appleton Roebuck ... ..	2,450	£67 10s. do.
Do. ... ..	Askham Bryan ... ..	4,250	£34 do.
JOINT WATER AND SEWAGE SCHEME.			
Knaresborough Rural ... ..	Ferrensby ... ..	3,363	£72 do.

Local inquiries were held by the Ministry of Health into application for sanction to borrow money for schemes of sewerage and/or sewage disposal as under:—

Conisbrough U.D.	Stocksbridge U.D.
Ilkley U.D.	Doncaster R.D. (Norton).
Keighley M.B.	Great Ouseburn R.D. (Upper and Nether Poppleton).
Pontefract M.B.	Knaresborough R.D. (Hampsthwaite).
Queensbury and Shelf U.D.	Rotherham R.D. (Dalton and Thrybergh).
Silsden U.D.	Tadcaster R.D. (Askham Bryan).

Investigation or inquiry was made by the Department in regard to matters affecting drainage, sewerage or sewage disposal in the following areas:—

#### URBAN.

Darton, Ilkley, Ripon City.

#### RURAL.

Goole (Swinefleet), Pontefract (Brotherton, Glasshoughton), Thorne (Thorne).

### Water Supplies.

The question of water supplies to County Districts has been receiving careful attention during the year and although Government grants, out of which contributions were made to rural authorities towards the cost of supplies, are exhausted there was nevertheless a commendable desire evinced by a number of authorities to improve water supplies which were unsatisfactory for one reason or another.

In those areas particularly that are served by supplies from springs, wells, etc., there is a great demand being made for piped water supplies. This attitude can be well understood inasmuch as such sources of supply not infrequently fail during periods of drought, and are more apt to lend themselves to pollution while, added to these factors, is the continued growth in the water-carriage system and the increase in the number of houses provided with baths and hot and cold water. Local Authorities generally are endeavouring to meet these demands so far as their financial resources permit.

With a view to obtaining more detailed information regarding water supplies in the County area, this Department, in the latter part of the year, commenced to make a survey of such supplies. In the first instance, this survey is designed to obtain information on the following points:—

Distribution of population, source of water supply, treatment (if any), storage, distribution, yield and consumption. Samples of water for chemical and bacteriological examination are collected from each supply.

From the information obtained on the completion of the survey, the Department will be in a position to concentrate attention on areas where the water supplies are either inadequate in quantity, quality or both.

The statement set out on the next page is self-explanatory.

TABLE XXV.  
RURAL WATER SUPPLIES ACT, 1934.  
LOCAL GOVERNMENT ACT, 1929—SECTION 57.  
PUBLIC HEALTH ACT, 1936—SECTION 307.  
SCHEDULE OF GRANTS IN AID OF SCHEMES FOR THE PROVISION OF WATER SUPPLIES  
TO END OF 1937.

Name of Authority to whom grant is made	Townships or Districts to be supplied	Estimated cost of works	Amount of grant made by County Council
		£	£
Bowland Rural ... ..	Gisburn Forest	450	75
Do. ... ..	Rimington	1,200	150
Do. ... ..	Newton-in-Bowland	1,250	100
Goole Rural ... ..	Adlingfleet and Fockerby	1,602	250
Great Ouseburn Rural ... ..	Nun Monkton	3,000	750
Do. ... ..	Roecliffe	1,088	75
Do. ... ..	Whixley	3,530	85
Hemsworth Rural ... ..	Winterset	1,050	400
Do. ... ..	Skelbrooke	1,850	450
Do. ... ..	Walden Stubbs	925	500 (By annual payments
Do. ... ..	Ackworth	25,061	5,000
	Kirk Smeaton		
	Little Smeaton		
	North Elmsall		
	Thorpe Audlin and Upton		
Kiveton Park Rural ... ..	Anston	25,157	6,000
	Dinnington		
	Firbeck		
	Gildingwells		
	Harthill-with-Woodall		
	Letwell		
	St. John's-with-Throapham		
	Thorpe Salvin		
	Todwick		
	Wales		
	Woodsetts		
Knaresborough Rural ... ..	Ferensby		Joint Water and Sewage Scheme*
Penistone Rural ... ..	Greenmoor, Hunshelf	1,536	275
Do. ... ..	Sim Hill and Eastfield, Thurgoland	735	125
Pontefract Rural ... ..	Whitley	2,205	250
Do. ... ..	Womersley	2,117	
Do. ... ..	Burton Salmon, Hillam and Monk Fryston	5,000	125
Do. ... ..	Cridling Stubbs	1,657	150
Rotherham Rural ... ..	Aston, Ulley and Thurgoland	2,547	600
Do. ... ..	Aston	317	75
Do. ... ..	Thurgoland	208	25
Do. ... ..	Thrybergh and Hooton Roberts	1,565	325
Do. ... ..	Wickersley	179	25
Do. ... ..	Whiston	453	100
Selby Rural ... ..	Newland	2,514	625
Do. ... ..	Long Drax	1,360	400
Skipton Rural ... ..	Hartlington	1,500	200
Tadcaster Rural ... ..	Grimston	6,376	1,000
	Kirkby-cum-Milford		
	Ryther-cum-Ossendyke		
	Stutton-cum-Hazelwood		
	Towton		
	Ulleskelf		
Do. ... ..	Appleton Roebuck, Colton and Bolton Percy	7,500	£59 annually for 30 years
Wetherby Rural ... ..	Wike	1,550	450
Do. ... ..	Kearby-with-Netherby	3,280	225
Do. ... ..	Angram	11,700	£22 annually for 30 years
	Bickerton		
	Bilton		
	Cowthorpe		
	Hutton Wandesley		
	Long Marston		
	Tockwith		
Wharfedale Rural ... ..	Askwith	1,400	250

\* See Table XXIV on page 38.

During the year, local inquiries were held by the Ministry of Health into application for sanction for loans in connection with water supplies in the districts set out below:—

#### URBAN DISTRICTS.

Hebden Royd.  
Holmfirth.  
Otley.

#### RURAL DISTRICTS.

Bowland (Newton).  
Great Ouseburn (Whixley, Cattall, Hunsingore,  
Walshford, Thorneville, Kirk Hammerton,  
Nun Monkton).  
Hemsworth (Ackworth and Badsworth).  
Skipton (Gargrave).  
Tadcaster (Appleton Roebuck, Bolton Percy,  
Colton),

and by the Doncaster and Tickhill Joint Water Board.

Investigations were made by officers of the Department in regard to water supplies in the following areas:—

#### URBAN DISTRICTS.

Aireborough.  
Bingley.  
Burley-in-Wharfedale.  
Denby and Cumberworth.  
Holmfirth.  
Honley.  
Meltham.  
Midgley.  
New Mill.  
Saddleworth.  
Thurstonland and Farnley Tyas.  
Tadmorden M.B.

#### RURAL DISTRICTS.

Bowland (Bolton by Bowland).  
Doncaster (Sprotborough, Adwick-upon-Deane).  
Hemsworth (Kirk Smeaton).  
Knaresborough (Ferrensby).  
Keighley (Sutton-in-Craven).  
Ripon and Pateley Bridge (Dacre, Laverton,  
Menwith-with-Darley, Stonebeck Down).  
Tadcaster (Appleton Roebuck).  
Wetherby (Kearby-with-Netherby, Kirkby Over-  
blow, Sicklinghall).  
Wharfedale (Middleton).

### Plumbo Solvency.

During the year samples were taken from water supplies known to have plumbo solvent qualities, in order to ascertain if effective measures were being taken to counteract this characteristic.

The method adopted was to collect two samples at a point where there was a lead service pipe, one sample after the water had stood overnight in such service pipe, and the second after standing therein for 30 minutes. In all, 78 samples were obtained from 35 different sources of supply, and examined for the presence of lead. The result of the examinations showed that 22 samples from 15 different supplies contained lead. Six of these were of water which had stood for 30 minutes in the lead service pipes, and the lead found therein varied in amount from 1/50th to 1/8th of a grain per gallon, whilst the remaining 16 were waters which had stood overnight in the pipes, and in these the amount of lead found varied from 1/100th to 2/5ths of a grain per gallon.

It is generally considered that lead to the extent of 1/10th grain or over per gallon of water is inimical to the health of the consumers of such water, and six of the water supplies examined contained this amount or over, *viz.*:—

Supply.	Result of examination of samples of water standing in pipes.	
	(a) Overnight.	(b) 30 minutes.
R. ... ..	1/10th	None.
H. ... ..	1/10th	1/20th
B. ... ..	2/5ths	1/25th
E. ... ..	1/8th	1/40th
W.G.C. ... ..	2/5ths	1/8th
N.P. ... ..	1/10th	1/50th

In these cases the Medical Officer of Health for each of the authorities involved was notified of the result of the examination so that action could be taken to counteract the plumbo solvent qualities of the supplies concerned.

### Collection and Disposal of Refuse.

There is good reason to believe that the amount of domestic refuse which has to be collected and disposed of in the West Riding, is still increasing, and, as was pointed out in the Annual Report for 1936, there appears to be a growing demand by the public for a reduction in the interval time between the collections of such refuse.

The work of local authorities in this connection would be lightened somewhat if householders would as far as possible burn the combustible matter that at present so frequently finds its way into the dustbin or ashpit. But with the increased use of gas and electric fires for heating and cooking and consequent lack of facilities for burning such articles as cardboard boxes, paper, vegetable matter and the like, which in many ways form the most troublesome part of the refuse to deal with, it would appear that in the not so far distant future the exhortation which is now seen on many refuse collection vehicles "Burn your Refuse and Reduce your Rates" will not be of much avail, because however much they may desire to burn the refuse, etc., many householders will have no facilities for so doing.

In the West Riding, so far as the collection of refuse is concerned, there is generally speaking little cause for complaint, and Sanitary Authorities evidently recognise the necessity for the work being regularly and efficiently performed. In the urban areas public scavenging is almost universal, whilst in rural districts it is being more extensively adopted. During the year, only on one occasion was personal investigation by an officer of this Department required in connection with scavenging.

In regard to the disposal of refuse, improvement is still needed in a number of districts, particularly in respect of the condition in which refuse tips are maintained. The old method of disposing of refuse by tipping it into any available quarry or on to a piece of waste land, and leaving it uncovered, is still practised in a few districts, while in other cases, although some attempt is made occasionally to level up the surface of the refuse, etc., and cover up some of the refuse, conditions cannot be regarded as satisfactory.

In these days of rapid transport it should be the aim of local authorities to limit to a minimum the number of places used for tipping refuse, and then to see that such tips are maintained in such a condition that no cause for complaint as regards fire, smell, unsightliness, etc. can arise.

Officers of the Department made investigations into methods of refuse disposal in four urban and eight rural areas during the year.

### Sanitary Accommodation.

The statement below sets out the percentages of closets on the water carriage and conservancy systems in the urban and rural districts which form the Administrative County, for each of the years 1933 to 1937 inclusive:—

TABLE XXVI.

	Urban Areas.					Rural Areas				
	1933	1934	1935	1936	1937	1933	1934	1935	1936	1937
Water-Carriage System	89·87	90·29	90·98	92·59	92·61	65·65	68·24	68·34	71·91	72·81
Conservancy System ...	10·13	9·71	9·02	7·41	7·39	34·35	31·76	31·66	28·09	27·19

The water carriage system still continues to increase, but it is thought that in the rural areas, now so many are equipped with a public water supply and sewers, there is room for greater rate of progress. It is not expected of course that rural areas will on the whole show as large a percentage of closets on the water carriage system as obtains in urban districts, but a hope for 80% of the closet accommodation in the rural districts in the West Riding is not considered unduly optimistic, and should be attainable in the near future.

The percentage of closets on the water carriage system, in a district used to be, and still can be regarded as a very good index for assessing the general sanitary conditions of a district, and is a matter that should be borne in mind by Sanitary Authorities generally.

The number of privies replaced by water closets during 1937 was 1,223 in urban, and 919 in rural districts and in addition 1,477 water closets were provided for existing properties to augment the existing accommodation. For new properties 9,170 water closets were provided during the year.

As stated on a previous occasion, it is thought that the time has arrived when every house should have its own separate closet accommodation. This is now generally provided in the case of new houses, but should be the rule also in the case of older property.

In my report for 1936 I referred to this question of closet accommodation of old property and I emphasise again that it is neither desirable nor satisfactory to group sanitary conveniences in blocks in public situations such as in the centre of a large common yard or at the end of a long block of property, or as sometimes occurs at an unreasonable distance from the houses which they are designed to serve.

During the year 1937, Officers of the Department made investigation in regard to sanitary accommodation in one urban and three rural areas.

## Milk Supplies.

### MILK (SPECIAL DESIGNATIONS) ORDER, 1936.

Duties devolving on the Inspectorial Staff in connection with the above Order have taken up a large amount of time, and although the number of applications for licences is decreasing, the time taken up by visits and revisits to the premises of applicants for licences, in connection with improvements or additions to premises, installation of equipment, etc., is still very considerable. As a result of the transfer of the County Veterinary Staff to the Ministry of Agriculture, it is anticipated that in the future still more of the time of the Sanitary Inspectors will need be devoted to this work, as duties such as routine inspection of licensed premises, investigations in regard to unsatisfactory reports on milk samples, etc., formerly undertaken by the County Veterinary Staff will now fall upon them.

Although the number of applications for licences to produce "Tuberculin Tested" or "Accredited" milks has fallen considerably during 1937, the applications received during the year numbering 13 for "Tuberculin Tested" and 148 for "Accredited" licences came from cowkeepers keenly anxious to be placed on the respective registers.

The inspections and re-inspections of premises, etc., carried out by the officers of this Department tend to show that there is an undoubted desire on the part of the large majority of the milk producers in the West Riding to provide the public with a good, clean milk supply. There are of course a few, but not many, of the licensees who do not appear to entirely appreciate their responsibilities as they should do, but taking them on the whole there is not much ground for complaint. There is, however, one matter, the importance of which a number of licensees do not appear to realise, *viz.*: the necessity for steam sterilisation of milking utensils, etc. before each use. On inquiry it was found that in quite a number of cases, sterilisation was only carried out once per day. It cannot be too strongly impressed upon milk producers that this is one of the important essentials for the consistent production of clean milk and it is hoped that as a result of the advice and warnings given in this connection by the County Sanitary Inspectors no further cause for complaint will arise.

In regard to "Tuberculin Tested" and "Accredited" milk there is one other point which appears to call for comment, and that is the apparent apathy of the general public in regard thereto. "Tuberculin Tested" milk is the best and safest milk, and of necessity costs more to produce. "Accredited" milk though not coming from tuberculin tested cows, is from cows that are regularly examined by Veterinary Inspectors, and has to reach the same standard of cleanliness as "Tuberculin Tested" milk, yet the general public as shown by its apparent unwillingness to pay a better price for a superior article, gives little encouragement to the producers of such milk.

It is thought that more action might be taken to educate the general public in this matter both by local authorities and milk producers.

From January 1st, 1937, the standards which both "Tuberculin Tested" and "Accredited" milks have to reach have been as follows:—"The milk when tested in accordance with the prescribed methods must not decolourise methylene blue within  $4\frac{1}{2}$  hours if the sample is taken at any time from 1st May to 31st October, or within  $5\frac{1}{2}$  hours if the sample is taken at any time from the 1st November to the 30th April, and at all dates it must contain no coliform bacillus in 1/100 millilitre."

The methylene blue reduction test has only been in operation for one complete year, so that any opinion as to whether the test is more or less severe than the plate count test is largely speculative. It would appear, however, that during the colder months of the year there is likely to be less failures and during the warmer months more failures than was the case with the plate count test.

#### "Tuberculin Tested" Milk.

On January 1st, 1937, the number of persons holding licences for the production of "Tuberculin Tested" milk in the West Riding Administrative Area was 53. During the year, changes affecting 13 licensees occurred, as follows:—(a) Owing to the scheme for revision of County areas, one producer's premises was transferred to Huddersfield County Borough area. (b) Seven others gave up their "Tuberculin Tested" licences and took out "Accredited" licences. (c) Three others for various reasons did not renew their licences at the end of the year. (d) Another failed to renew the licence on January 1st, 1938, but eventually took out a licence at the end of that month. (e) In the remaining case the licence was relinquished during part of 1937 when the licensee was re-testing and enlarging his herd of cattle, and altering his premises. This licence was, however, taken out again before the end of the year.

Nine new licences were issued during the year, and on January 1st, 1938, there were 50 licences for production of "Tuberculin Tested" milk in force and 37 of the licensees also held licences for bottling of such milk at place of production.

During the year 227 samples of "Tuberculin Tested" milk were collected by the County Staff and of these 51, which is 22.4% of the whole, failed to reach the required standard on examination. This is not a very satisfactory result, but it is only just to say that during the year, 34 of the licensees had an absolutely clean record so far as milk samples were concerned.

### "Accredited" Milk.

On January 1st, 1937, there were 397 licensed producers of "Accredited" milk in the West Riding Administrative area, 91 of whom also held licences for bottling. By January 1st, 1938, the number has increased to 539 producers, 110 of them also holding licences for bottling such milk at place of production.

The licence of one producer was revoked during the year following upon various unsatisfactory reports, and in certain other instances producers were required to appear before the appropriate Committee of the County Council in consequence of contravention of the Order and/or samples of milk being found below standard on examination. During the year 2,060 samples of "Accredited" milk collected by the County Staff were submitted for examination, and of these 433, equal to 21.0% failed the test.

These results are not regarded with much satisfaction. It is believed that they can and will be improved to a considerable extent; and with willing co-operation between the licensees and the County Staff a figure of at least 90% of satisfactory reports on milk samples, both from "Tuberculin Tested" and "Accredited" milk producers is to be expected.

### SUPPLY OF MILK TO SCHOOL CHILDREN.

Milk for school children is supplied in bottles each containing one-third of a pint. This general rule does not apply in the case of two or three isolated schools where, owing to the very small amount of milk required, difficulty is experienced in finding milk producers who are willing to supply milk in bottles.

Below is a statement setting out for the last three years the total bottles of milk supplied each year, and average number of bottles supplied daily:—

	1935	1936	1937
Total bottles supplied ... ..	23,152,999	22,596,766	21,827,298
Average number of bottles per day ...	105,241	103,793	101,051

It will be seen that there is a still further decline in the number of bottles of milk supplied during 1937, as compared with 1936, and that year showed a fall as compared with 1935. It is difficult to state with any degree of certainty the reason for the decline in the consumption of school milk. It appears, however, that only two out of every three scholars are taking the milk, and therefore there is scope for renewed efforts to secure the participation of a larger percentage of children in the scheme.

In all, 89 contractors supply milk to the various schools, 21 supplying pasteurised and 68 raw milk. During the year, 18,305,328 bottles of pasteurised and 3,521,970 bottles of raw milk were supplied.

In addition to the visitation of the premises of milk producers and pasteurising plants from which milk is supplied to schools, by the County Sanitary Inspectors, systematic examination of the milk supplied is carried out. The following table shows the results of samples of school milk examined during the year and it is satisfactory to be able to report that as compared with 1936, the percentage of samples falling below the stipulated standard shows a decided decrease:—

TABLE XXVII.  
Samples of School Milk Examined.

Class of Milk.	Numbers and Percentages.		Total.
	Satisfactory.	Unsatisfactory.	
Pasteurised ... ..	146 (78.1%)	41 (21.9%)	187
Raw ... ..	353 (78.4%)	97 (21.5%)	450
Totals ...	499 (78.3%)	138 (21.6%)	637

The standards adopted for school milk are set out below:—

#### 1. TUBERCULIN TESTED MILK.

Must not decolourise methylene blue within 4½ hours if the sample is taken at any time from the 1st May to the 31st October; or within 5½ hours if the sample is taken at any time from the 1st November to the 30th April. The milk must not contain coliform bacillus in 1/100 millilitre.

#### 2. TUBERCULIN TESTED MILK (PASTEURISED).

Not to contain more than 30,000 bacteria per millilitre.

## 3. ACCREDITED MILK.

Must not decolourise methylene blue within  $4\frac{1}{2}$  hours if the sample is taken at any time from the 1st May to the 31st October; or within  $5\frac{1}{2}$  hours if the sample is taken at any time from the 1st November to the 30th April. The milk must not contain coliform bacillus in 1/100 millilitre.\*

## 4. PASTEURISED MILK.

Not to contain more than 100,000 bacteria per millilitre.

## 5. ORDINARY MILK.

Must not decolourise methylene blue within  $4\frac{1}{2}$  hours if the sample is taken at any time from the 1st May to the 31st October; or within  $5\frac{1}{2}$  hours if the sample is taken at any time from the 1st November to the 30th April.

\* Most of the samples will be submitted only to the Methylene Blue test, the Coliform test being reserved for occasional use.

The results of the examinations of the pasteurised milk samples is somewhat difficult to account for. The fault may lie either in the plant or in its operation—one would rather suspect the latter in most cases.

As the tendency appears to be for the pasteurisation of more and more of the milk supply, it is somewhat perturbing to find that of the milk supplied to school children, the percentage of samples of pasteurised milk failing the test prescribed reached 21.9% of the whole.

It cannot be too strongly emphasized that no matter how efficient the plant is, it is the personal element that counts, and in connection with such an important food as milk it would appear desirable for legislation to be enacted making it compulsory for persons supervising or operating pasteurising plants to possess a certificate, which should only be granted after they had attended a thorough course of training and have shown by examination that they are competent to operate and supervise such plants.

Further, it should be made obligatory for all persons handling milk or other food stuffs to undergo medical examination at regular intervals so as to ensure that such persons are not suffering from any disease likely to be communicable through such food supply.

The licensing authority in connection with the pasteurisation of milk is the Council of the district in which the plant is situate. It is suggested that greater uniformity as regards conditions which must be observed, and more efficient supervision would result if the licensing of such premises devolved upon County Councils.

This suggestion is not meant to imply in any way either neglect or inefficiency on the part of the officers of the local authorities, but it must be apparent that with one licensing authority for a large area, a greater experience of the different types of apparatus, methods, etc. would be gained by the officer responsible for this work, which will naturally, as stated above, result in greater uniformity and more efficient supervision.

## MILK AND DAIRIES (CONSOLIDATION) ACT, 1915.

Under the above Act a Medical Officer of Health of any Local Authority who has reason to suspect that tuberculosis is caused or is likely to be caused by the consumption of milk which is being sold within the area of the Local Authority, shall endeavour to ascertain the source of supply and on ascertaining the facts, at once notify the County Medical Officer. On receipt of such notification, information is forwarded to the West Riding Chief Veterinary Officer who arranges an early examination of all milk producing animals on the farm. Samples of milk are collected from cows showing suspicious signs and group samples are taken from the remainder of the herd for examination in the County Laboratory. Where tubercle bacilli are discovered, arrangements are made for the immediate slaughter of the affected animals.

Notifications were received from the under-mentioned Authorities during the year ended 31st December, 1937.

Barnsley	...	...	...	...	...	...	...	1
Bradford	...	...	...	...	...	...	...	9
Dewsbury	...	...	...	...	...	...	...	1
Doncaster	...	...	...	...	...	...	...	2
Halifax	...	...	...	...	...	...	...	2
Huddersfield	...	...	...	...	...	...	...	6
Leeds	...	...	...	...	...	...	...	4
Manchester	...	...	...	...	...	...	...	2
Oldham	...	...	...	...	...	...	...	1
Rotherham	...	...	...	...	...	...	...	5
Salford	...	...	...	...	...	...	...	3
Sheffield	...	...	...	...	...	...	...	13
Wakefield	...	...	...	...	...	...	...	3
York	...	...	...	...	...	...	...	2
Lancashire	...	...	...	...	...	...	...	5

## Food and Drugs (Adulteration) Act, 1928.

TABLE XXVIII.

## Quarterly Report of Samples taken during 1937.

District.	Sampling Officer.	Samples taken during 1937.				
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
Harrogate	W. B. Greenwood	100	106	84	103	393
Mexborough	R. Hutchison	103	101	115	95	414
Mirfield	E. Ward	119	133	128	125	505
Pontefract	H. F. Wilkinson	68	88	63	107	326
Rothwell	T. A. Bramley	91	91	87	97	366
Shipley	W. Bates	97	97	104	105	403
Skipton	T. S. Roberts	97	87	103	94	381
Sowerby	J. W. Bramley	93	89	90	92	364
Wombwell	A. Nobbs	82	89	77	101	349
Total samples taken by Sampling Officers ...		850	881	851	919	3,501
Local Authorities ...		168	232	200	304	904
Total Samples ...		1,018	1,113	1,051	1,313	4,495

The above total includes 87 "appeal to cow" samples (*i.e.*, samples direct from the farm at the time of milking), which frequently entail early morning visits. Of the 87 samples, 68 were obtained by our Sampling Officers and 19 by Local Authorities.

Excluding the "cow" samples, 2,382 samples of milk were collected by our officers, and 898 by local Sanitary Inspectors, making a total of 3,280, and of this total 224 or 6·8 per cent. were adulterated.

TABLE XXIX.

## Record of Samples for Five Years, 1928-1932 and for Five Years, 1933-1937.

Year.	Total samples submitted by		Total examined.	Total adulterated.	Percentage adulterated.
	County Council.	Local Authorities.			
1928	3034	792	3826	193	5·0
1929	2807	706	3513	207	5·8
1930	3153	702	3855	187	4·8
1931	3241	741	3982	201	5·0
1932	3308	858	4166	232	5·5
Average for 5 years, 1928-32	3108	760	3868	204	5·2
1933	3305	876	4181	263	6·2
1934	3233	858	4091	224	5·4
1935	3495	878	4373	210	4·8
1936	3276	868	4144	180	4·3
1937	3433	975	4408	258	5·8
Average for 5 years, 1933-37	3348	891	4239	227	5·3

It will be noted that in 1937, 258 (or 5·8 per cent.) samples were adulterated, and these consisted of 224 of milk and 34 other, namely:—Baking Powder 1, Bottled Cream 1, Brawn 1, Butter 1, Buttercream Cheese 1, Cocoa 1, Cream 3, Cream Cheese 1, Dried Herbs 2, Epsolabs 1, Iodised Salt 1, Jam 2, Laxative Chocolate 1, Laxative Tablets 1, Mint 1, Potted Meat 4, Sausage 1, Stilton Cheese 1, Sweets 3, Tinned Cream 4, and Vinegar 2.

The extent of adulteration necessitated proceedings in regard to 24 samples of milk, one of Brawn, one of Butter and one of Mint. As regards the other adulterated samples, cautions were issued where deemed necessary.

TABLE XXX.

## Particulars of Milk Samples obtained by County Sampling Officers during the past Five Years.

Year.	Genuine.	Adulterated.	Total.	Percentage Adulterated.
1933	2089	154	2243	6·8
1934	2141	138	2279	6·0
1935	2180	131	2311	5·6
1936	2145	144	2289	6·3
1937	2222	160	2382	6·7

**SPECIAL MILK SAMPLING.** Sampling Officers made surprise visits in 24 districts, and obtained 100 samples of milk from Sunday morning supplies, and six samples were reported against by the County Analyst.

One sample was seriously adulterated and a prosecution ensued, and as regards the remainder, cautions were issued where action was deemed necessary.

#### Milk Samples taken by Local Authorities.

The following local authorities are authorised under the Food and Drugs (Adulteration) Act, 1928, to take samples for analysis, and with few exceptions, the milk samples shown in the table below are obtained under a scheme whereby the County Council defrays the cost of analysis, and conducts any subsequent proceedings:—

Baildon ... ..	3	Harrogate ... ..	214	Royston ... ..	7
Barnoldswick ... ..	49	Haworth ... ..	20	Silsden ... ..	3
Batley ... ..	130	Hemsworth ... ..	20	Stanley ... ..	13
Bentley ... ..	32	Horsforth ... ..	12	Todmorden ... ..	24
Birstal ... ..	6	Hoyland Nether ... ..	20	Wath-upon-Deane ... ..	8
Brighouse ... ..	27	Ilkley ... ..	12	Hemsworth R. ... ..	8
Castleford ... ..	37	Keighley B. ... ..	25	Kiveton Park R. ... ..	15
Cudworth ... ..	19	Maltby ... ..	16	Knaresborough R. ... ..	9
Elland ... ..	34	Mexborough ... ..	14	Ripon R. ... ..	1
Featherstone ... ..	7	Normanton ... ..	12		
Garforth ... ..	4	Pudsey ... ..	12		
Goole ... ..	39	Rothwell ... ..	65		
					917

#### Swimming Baths and Bathing Pools.

The necessity for maintaining the water in public swimming baths and bathing pools in a wholesome condition is now seriously recognised and the question became increasingly important with the passage through Parliament in 1937 of the Physical Training and Recreation Act, and the inauguration of the national campaign for physical fitness. It can be anticipated confidently that one result will be an increase in the number of persons of all ages using swimming baths.

In the year 1929 the Ministry of Health issued a handbook on the Purification of the Water of Swimming Baths, setting out the considerations involved and giving practical suggestions. In November, 1935, the Ministry sent a circular (No. 1503) to County Borough and County District Councils calling attention to "the opportunity afforded by the coming winter months to take any necessary steps for ensuring a proper standard of cleanliness and purity of water in swimming baths and pools."

In the handbook above referred to it is stated that efficient continuous filtration combined with continuous and accurately controlled chlorination are the best means of maintaining the requisite degree of purity, although other equally effective means of sterilisation can be used, if desired, in place of chlorination. Chlorination should be continuous during the whole period of bathing, and working the filter plant, and the dosage must be sufficient to maintain a strength of free chlorine in the water of the pool itself which shall not be less than 0.2 parts of chlorine per million of water, or greater than 0.5 parts per million.

This amount, when the filtration and aeration are efficient, "will give on the one hand a bacterial degree of purity equal to that of most drinking waters, and on the other hand a bright and sparkling water with entire freedom from complaint."

The handbook further states that the water of a swimming bath purified by continuous filtration and chlorination must always be kept alkaline in reaction so as to neutralise the acids formed by the process of filtration and the added chlorine. The standard of alkalinity can be expressed in terms of what is known as the pH value of the bath water and is easily ascertainable. The value should lie between 7 and 7.6.

In July, 1937, a letter was sent from the County Health Department to the Medical Officer of Health of every County District in which a swimming bath used by the public was situate. The following is an extract from that letter:—

"I would draw your attention to circular 1503 of the Ministry of Health, copy of which is enclosed, and to the necessity for having periodical examinations made of the bath water in order to ascertain if a proper standard of cleanliness and purity is being maintained."

"Certain tests such as the determination of the free chlorine content and alkalinity can, with suitable apparatus, be easily and accurately made at the bath itself, and perhaps such tests are already in use."

"At less frequent intervals, however, samples of the bath water from the pool itself should be examined bacteriologically in order to ascertain the bacterial content. I have no information as to whether your Council have an arrangement for such examinations elsewhere, but from my records it would appear that no samples of water from the above-mentioned bath have been submitted for examination in the bacteriological laboratory of this Department since at any rate the beginning of 1935, and I would bring to your notice that facilities are available therein for the examination of a reasonable number of samples. I would suggest that samples should be submitted, and on hearing from you I shall be glad to make the necessary arrangements. Special containers, which can be obtained on loan from the laboratory, are necessary for the conveyance of the samples."

Particulars were requested regarding construction of the baths and methods of purification of the bath water.

This opportunity is taken of acknowledging the co-operation of the Medical Officers of Health and Sanitary Inspectors. A large number of samples of water was examined in the County Laboratory, and advice was given when sought relating to the technique of using the apparatus for carrying out the tests at the bath in connection with the alkalinity and free chlorine mentioned in the letter, and a number of visits has been paid to baths by members of the staff of the County Public Health Department. There are approximately 40 swimming pools in the Administrative County, and many of them are equipped with purification plants capable of maintaining the water in the pool at a satisfactory degree of purity. Where examination of samples of water from such baths showed that the plant was not being efficiently operated, steps have been taken for improvement. Other baths were found to have no proper method of purification and in most of these cases examination of samples of water disclosed very unsatisfactory conditions.

At practically all of the swimming pools situate in the Administrative County, school children attend for instruction in swimming under the auspices of the West Riding Education Committee, and thus the County Council has some direct responsibility in securing that hygienic conditions are obtained and maintained. It was decided that the use of those baths for instruction in swimming where unsatisfactory conditions exist in regard to the purity of the water should cease until a proper improvement had been effected. A report was submitted to the West Riding Public Health and Housing Committee and appropriate action was taken.

Improvements to some of the baths where the water proved to be unsatisfactory have been effected, and in connection with others, schemes are under consideration.

### Air Raid Precautions.

Following upon consultations with Commander Franks and other representatives from the Home Office, a report was prepared putting forward tentative suggestions relating to casualty and base hospitals to form the basis of discussion by the County Air Raid Precautions Committee. This report indicated the manner in which, by reciprocal arrangements, hospitals of various kinds—voluntary, county, municipal, etc.—might be designated as casualty or base hospitals to serve singly or jointly the Administrative County or County Boroughs. During the early part of January, 1938, a visit was received from one of the general Inspectors and a Medical Officer of the Ministry of Health, who indicated that the Ministry are undertaking a survey of all hospital accommodation in the country; and the assistance of the County Council was requested in connection with this survey by providing certain hospital statistics already in possession of the County Public Health Department and by communicating with the various hospital authorities to secure additional information. In the meantime it was decided that consideration of the preliminary report referred to above should be deferred.

Dr. Johnston, the Chief Clinical Tuberculosis Officer, has been acting as liaison officer for the work of Air Raid Precautions. He has paid visits to all rural districts, and has discussed the various recommendations of the Home Office with Rural District Council members and officials; and subsequently to confirm the consultations which he has had with District Council representatives, lengthy communications have been issued to the local Medical Officers of Health.

In addition to these interviews a questionnaire has been addressed to Rural District Councils inviting them to indicate under the various headings of the questionnaire the action which each District Council, after due consideration, proposed to take to implement the recommendations of the Home Office.

It will be understood that until Councils have had the opportunity of considering a draft scheme in each area on the lines suggested in letters sent from the County Department it will be impossible to complete and return the questionnaire.

A number of points have emerged from the discussions that have taken place with the District Council representatives. One of these concerns the appointment of a local officer to undertake the organisation and supervision of the medical and allied matters in the Rural Districts, both in the present stage when local schemes are in the course of preparation, and in the future when the actual emergency may arise. It is probable that the Medical Officer of Health, on account of his knowledge of the whole of the Rural District should undertake these duties. The difficulty at the present time, however, is that most of the local Medical Officers of Health are part-time officers engaged also in general practice and a number of them are fast reaching the retiring age. This difficulty will be overcome gradually as the result of the provisions contained in the Local Government Act, 1933, which requires the County Council to formulate arrangements whereby every Medical Officer of Health of a County District shall be restricted from engaging in private practice as a medical practitioner.

Another matter upon which District Councils will require further advice is in connection with the function of decontamination. Ordinarily it has been suggested that the Surveyors to District Councils should be responsible for decontamination. This is a matter, however, which cannot be entirely dissociated from the functions of First-Aid Parties and First-Aid Posts as there is the question of decontamination of casualties, clothing, equipment, etc. It is therefore suggested that a fairly clear line of demarcation should be made, if possible, between the responsibilities of these two groups of officers.

A further point is the difficulty likely to be experienced in certain areas in obtaining the necessary personnel. It should be borne in mind that women can undertake many of the duties in the various services, being particularly suitable as first-aid workers, clerks, storekeepers, etc.

From correspondence which has taken place with one or two large County Boroughs it is feared that there is little hope of securing joint action between Rural District Councils and County Boroughs in the provision of first-aid posts and first-aid parties. The difficulty in this matter is due particularly to the comparatively small extent to which the area of the large Rural Districts are in close proximity to County Borough boundaries. It is hoped that a greater degree of co-ordination of these services can be obtained between Rural Districts and Urban Districts of the County, but the extent of such co-ordination cannot be gauged until Rural District Councils have completed the enquiry form, when it will be possible to communicate with Urban District Councils informing them of the proposals of the Rural District Councils and inviting their co-operation. The Home Office representatives advised that Urban District Councils should be requested to make their own arrangements for all air-raid precautions measures excepting hospital and ambulance provision, the co-ordination of which services would devolve upon the County Council.

As regards ambulance services, schedules of the ambulances available in the Administrative County have been prepared, and the next step to be taken in this connection will be to select a site or building in each Urban and Rural Area and in each Municipal Borough to be used as an ambulance depot in the event of an emergency arising. It is considered that action in this direction will best be taken after the replies from Rural District Councils have been received, and after communications with the Urban District Councils in connection with their schemes have been entered into.

Supplies and equipment will be required for all services and the source of supply will need to be determined having regard to the two alternatives; a central supply for the County or the nearest available supply for each district. The former method may be used in providing the initial equipment for the various services, but there is a danger in placing too much reliance on this source in the event of war. Vital communications may be broken or transport vehicles may be required for more urgent needs and it will not therefore be possible to guarantee a continuous service. Medical Officers of Health have accordingly been advised to make every effort to ensure that supplies can be obtained locally.

Employers of labour are being urged to prepare schemes for their factories and workshops. It is stated authoritatively that every factory or workshop with one-hundred or more employees should have a completely self-contained scheme ready to operate at once, and dependent on the local authority for hospital accommodation only. In preparing such schemes there should be close co-operation between employers and local authorities, whose officers should be ready to render any assistance required.

In connection with first-aid work, the County Committee have authorised the construction of a model first-aid post within reasonable distance of the County Hall. When completed this Post should be available for demonstration purposes and for the training of first-aid personnel. Precautions for safety against air attack should also be included in all future building schemes. In this connection attention is drawn to the comprehensive hospital programme now before the County Council.

Mr. H. Tayler, one of the County Sanitary Inspectors, attended a course of instruction at the Civilian Anti-Gas School, Falfield, Gloucestershire, from the 18th to the 30th January, 1937, and after examination qualified as a first-class instructor in anti-gas measures.

He has since been engaged in training the Sanitary Inspectors and other members of the staff of local authorities in the County. Ninety-one Sanitary Inspectors and Surveyors have attended the series of lectures, which comprise the full decontamination course, and seventy-one sat for the examination held at the conclusion. The papers were passed to the Chief Constable's Department for marking and the results are not yet known.

In addition, Mr. Tayler has been giving a short series of anti-gas lectures to members of the central administrative staff of the County Council. One hundred and twenty-six members have attended this course and all have passed the examination held at the completion.

It is now proposed that arrangements shall be made for Mr. Tayler to continue with his lectures at the County Hospitals, Sanatoria, and Public Assistance Institutions. A suitable programme is being prepared, which will enable all members of the staff of these institutions to be instructed in anti-gas measures.

## Prevention of Blindness.

In September, 1937 the Committee considered the Ministry of Health Circular No. 1621 which drew attention to the importance of taking all practicable steps to prevent blindness and impaired eyesight. Arising out of the report of the County Medical Officer on this Circular, the Committee resolved:—

- (a) That the County Medical Officer be authorised:—
- (i) To arrange for the systematic visiting of persons ascertained to be threatened with blindness to secure that they avail themselves of the facilities provided for expert treatment and supervision.
  - (ii) To arrange where necessary for the examination by an ophthalmic surgeon of persons suffering from disease of or injury to the eyes, at a fee not exceeding £3 3s. 0d. per patient for the examination and report.
  - (iii) To arrange for suitable operative treatment for such patients at hospitals approved by him, at a charge to be agreed by the Hospitals Management Sub-Committee, depending upon the requirements of each individual case.
  - (iv) To obtain an estimate of the cost of spectacles or other ophthalmic appliances required by an approved patient and arrange for such spectacles or appliances to be supplied at a charge to be agreed by the Hospitals Management Sub-Committee, depending upon the requirements of each individual case.
  - (v) To disseminate or arrange for the dissemination of information regarding the prevention of blindness, including the issue and distribution of literature having this object.
- (b) That an estimate of £250 to cover the expenditure incurred during the current financial year be transmitted to the West Riding Finance Committee.

The above arrangements came into operation on the 1st October, 1937 and since that date 71 patients have been dealt with as follows:—

(a) No. examined by County Oculists	...	...	...	...	...	40
(b) No. recommended for provision of glasses	...	...	...	...	...	31
(c) No. who provided glasses at own expense	...	...	...	...	...	6
(d) No. who have or are having glasses provided at County Council's expense	...	...	...	...	...	25
(e) No. of cases under investigation	...	...	...	...	...	31

With regard to (d) the financial circumstances of the cases have been submitted to the Hospitals Management Sub-Committee in accordance with paragraph (iv) of the Scheme. Arrangements were made with the firm of opticians who supply spectacles for school children to supply the spectacles required under the Prevention of Blindness Scheme at an approximate cost of 3/3d. per case.

The expenditure on the provision of glasses to the 31st March, 1938, is small but it is anticipated that this will increase during 1938-39 as a result of the circularising of information to Medical Officers of Health, Medical Practitioners, District Nurses, Health Visitors and others explaining the services available under the scheme.

## General Hospitals and Public Assistance Institutions.

**Date of Appropriation.** As foreshadowed in my Annual Report for the year 1936, after careful consultation with the County Public Assistance Committee, a recommendation was submitted to the County Council in January, 1937, that steps should be taken to provide hospital treatment for necessitous persons otherwise than by way of Poor Relief, and that the Sick Wards of the County Public Assistance Institutions at Batley and Wakefield should be appropriated as Public Health Hospitals as from the 1st April, 1937. The County Council approved of the recommendation which was submitted to the Ministry of Health. The Ministry's approval, however, was not received until May 1937 and, therefore, the date of appropriation was fixed as 4th July, 1937. From that date, County Council hospital facilities have been available not only for the sick poor in the West Riding but to all classes of the community without distinction. The County Council subsequently decided that the designations of the two appropriated hospitals should be as follows:—

Staincliffe County Hospital, Dewsbury.

White Rose County Hospital, Wakefield.

**Details of Accommodation Provided.** The following table gives particulars of the medical and nursing staffs, the number and classification of the beds available and the number of admissions and discharges during the period 4th July, 1937 to 31st December, 1937:—

**Staincliffe County Hospital, Dewsbury.** (Telephone No. Dewsbury 565.)

Medical Superintendent, Dr. J. J. O'Reilly.

Deputy Medical Superintendent, Dr. D. B. McVittie.

Classification of Beds.					Males.	Females.	Children.	Total.
Medical	}	...	...	...	130	165	12	307
Surgical		...	...	...				
Chronic		...	...	...				
Tuberculosis		...	...	...	12	10	—	22
Isolation		...	...	...	5	5	—	10
Maternity		...	...	...	—	10	—	10
								349

Total No. of Admissions ... 675

Total No. of Discharges ... 623

**White Rose County Hospital, Wakefield.** (Telephone No. Wakefield 2837.)

Visiting Physician, Dr. J. B. Lyle.

Visiting Surgeon, Dr. D. H. Russell.

Classification of Beds.					Males.	Females.	Children.	Total.
Medical	}	...	...	...	76	58	26	160
Surgical		...	...	...				
Chronic		...	...	...				
Tuberculosis		...	...	...	4	2	—	6
Maternity		...	...	...	—	2	—	2
								168

Total No. of Admissions ... 362

Total No. of Discharges ... 338

**User Agreements.** Prior to the date of appropriation, the County Council had agreements with the County Boroughs of Dewsbury (in regard to Staincliffe) and Wakefield (in regard to White Rose) for the accommodation of the sick poor from those two County Boroughs. This arrangement has been continued, and the following table shows the number of User Agreement patients admitted and discharged since the date of appropriation to the 31st December, 1937.

**Staincliffe County Hospital.**

Total No. of Admissions ... 152

Total No. of Discharges ... 139

**White Rose County Hospital.**

Total No. of Admissions ... 162

Total No. of Discharges ... 166

**Improvements to Hospital Buildings.** A preliminary survey of the buildings taken over at Staincliffe and White Rose County Hospitals indicated that extensive additions and adaptations would be necessary to bring the hospitals into line with modern standards. Fortunately, at both hospitals there is a considerable amount of land available for developments, and at the present time the following items are under consideration.

**Staincliffe County Hospital.**

- New Ward Blocks for 60 General Patients.
- New Ward Blocks for 25 Tuberculosis Patients.
- New Ward Blocks for 60 Maternity Patients.
- New Continuation-of-Treatment Department.
- Extensions to the Nurses' Home.
- New Stores and Kitchen Block.
- New Operating Theatre and X-Ray Unit.
- New Mortuary and Post-Mortem Room.
- Provision of Lift.
- New Heating and Telephone Installations, etc.

**White Rose County Hospital.**

- New Ward Blocks for 150 General Patients.
- New Ward Blocks for 25 Tuberculosis Patients.
- New Ward Blocks for 80 Maternity Patients.
- New Nurses' Home.
- Extensions to Stores and Provision of new Kitchen.
- New Mortuary and Post-Mortem Room.
- Accommodation for Resident Medical Officer.
- Improvements to existing Wards, etc.

**Joint Services.** Although the physical separation of the hospitals from the Public Assistance Institutions in each case has been effected by means of a fence with suitable communicating gates, it has been necessary for the time being that several of the essential services, e.g., heating, lighting, laundry, electricity, water, etc., should be obtained through the Public Assistance Institutions, and the cost of such services is borne jointly between the two committees in proportion to user. When the proposed extensions and alterations previously mentioned have been carried out, it is anticipated that the hospitals will be largely self-contained, with the exception of one or two essential services which can probably be more economically and efficiently provided jointly than otherwise.

**Assessment of Contributions for Hospital Treatment.** In accordance with Section 184 of the Public Health Act 1936, consideration was given to the preparation of a scale of income for the assessment of contributions towards the cost of hospital treatment. On the 21st July, 1937, the County Council approved of the scale recommended which is based on "ability to pay."

Briefly the assessable income of each patient or liable relative concerned is arrived at as follows:—

Weekly Income, plus Special Income = Gross Income.

Less

Deductions allowed, plus Personal Allowances = Assessable Income.

Of the Assessable Income varying fractions are taken according to the degree of relationship to the patient, ranging from two-thirds in the case of a husband contributing in respect of his wife, to one-tenth in the case of a grandparent contributing in respect of a grand-child. Experience during the past two months shows that the assessments based on the existing fractions (particularly the first-mentioned one above) are in some instances high and, although the amounts may be paid in small weekly instalments, the contributors have difficulty in meeting their obligations. The Scheme provided that the ascertainment of financial circumstances and the assessment of contributions should be carried out in the Public Health Department, the County Medical Officer being designated "Assessment Officer" for this purpose.

The appropriate committee is at present considering the possibility of revising the Scale of Income with a view to securing some measure of co-ordination of assessments throughout the County Administration, in conjunction with the Public Assistance and other Committees providing institutional treatment.

**Work of the Hospitals.** Since the date of appropriation, the work of the hospitals has been well maintained and gradually developed, with the result that there is now an increasing proportion of acute patients in the Wards. Improvements have been effected at both hospitals in the staffing by the appointment of additional medical, nursing, domestic and other staffs. The Committee has sanctioned the carrying out of internal and external decorations at Staincliffe in addition to the installation of a new telephone, new cooker for the Nurses' Home Kitchen and improved accommodation for visitors.

**Staincliffe County Hospital, Dewsbury.** The following are extracts from the report of the Medical Superintendent (Dr. J. J. O'Reilly) :—

Miss A. Kershaw, Matron, who had been on the staff of the Hospital for 30 years and had given long and untiring service to the patients, retired in August, 1937. Miss P. Gray Gibson, Matron at Keighley County Hospital, was appointed as successor to Miss Kershaw, and took up duty on the 10th September, 1937.

Subsequently Dr. D. B. McVittie was appointed Resident Medical Officer and Deputy Medical Superintendent, and took up duty on the 13th December, 1937.

A growing difficulty experienced is that of obtaining an adequate number of Probationer Nurses. Intensive advertisements in several provincial newspapers as well as in the nursing journals have been instrumental in increasing the number of applications, but the higher standard of education made compulsory by the General Nursing Council as from the 1st January, 1938, will result in a diminished number of applications.

I am particularly impressed by the increasing usefulness of male nurses for the nursing of male cases, and though the conventional objections to their general use are not quite clear, I fail to see why the male sex should not come into their own in this sphere of humanitarian work. Their more universal employment for the care of male cases would go a long way towards the solution of a difficult problem.

The average number of beds occupied during the second half of the year was 315, whilst the highest number was 348.

The continuation-of-treatment department established for general medical and surgical cases has been helpful in connection with the following-up of patients after discharge, thus increasing the turnover of beds and enabling the treatment of inmates from the County Institution, whose condition did not necessitate admission to hospital, to be carried out.

The X-Ray Department has, on the whole, given satisfaction. The difficulty in keeping the voltage constant is often reflected in under-exposed negatives. The X-Ray plant has been extensively used as the apparatus does the work of the local County Tuberculosis Dispensary as well as that of the hospital. Skeletal photographs, opaque meals, enemas, cholecystographic and pyelographic examinations for the second half of the year totalled 265.

The usual systematic examinations of bacteriological and pathological specimens have been carried out at the Public Health Laboratory at Wakefield.

**White Rose County Hospital, Wakefield.** Dr. J. B. Lyle, Visiting Physician, reports :—

Since the 4th July, 1937, there have been 362 patients admitted and 338 discharged. The hospital has been free from any outbreak of infectious disease.

During the winter months, the accommodation in the female wards has been taxed to its utmost; the number of beds occupied reaching 80, compared with a nominal 60 beds available. The male wards did not suffer the same overcrowding, the highest figure being 69, whereas there is accommodation for 80 males.

Whilst the classification of the patients admitted continues to be mainly chronic, it would seem that the proportion of acute cases is increasing slightly.

Various improvements have been made since the date of appropriation and efforts are being made to further improve the conditions under which the nursing staff work and live.

A new range was installed in the Hospital Kitchen, and a separate entrance to the Hospital provided by means of a new road through the land on the east side of the hospital.

TABLE XXXI.

Classification of In-patients Discharged from or Died in the Staincliffe and White Rose County Hospitals during the period 4th July, 1937 to 31st December, 1937.

Disease Groups.	STAINCLIFFE.				WHITE ROSE.			
	Children (under 16 years of age)		Men and Women		Children (under 16 years of age)		Men and Women	
	Dis- charged	Died	Dis- charged	Died	Dis- charged	Died	Dis- charged	Died
A. Acute infectious disease ... ..	18	3	5	5	1	—	4	—
B. Influenza ... ..	—	—	1	—	—	—	—	—
C. Tuberculosis—								
Pulmonary ... ..	1	—	10	5	—	—	3	2
Non-pulmonary ... ..	2	—	3	2	—	—	2	—
D. Malignant disease ... ..	—	—	13	22	—	—	4	9
E. Rheumatism—								
(1) Acute rheumatism (rheumatic fever) together with sub-acute rheumatism and chorea ... ..	1	—	1	—	4	—	2	—
(2) Non-articular manifestations of so-called "rheumatism" (mus- cular rheumatism, fibrositis, lumbago and sciatica) ... ..	—	—	9	1	—	—	—	—
(3) Chronic arthritis ... ..	—	—	—	—	—	—	4	—
F. Venereal disease ... ..	2	—	4	—	1	—	4	3
G. Puerperal pyrexia ... ..	—	—	1	—	—	—	—	—
H. Puerperal fever—								
(a) Women confined in the hospital ...	—	—	—	—	—	—	—	—
(b) Other cases ... ..	—	—	2	—	—	—	3	—
I. Other diseases and accidents connected with pregnancy and childbirth ... ..	2	5	24	—	—	—	—	—
J. Mental diseases—								
(a) Senile Dementia ... ..	—	—	1	—	—	—	—	—
(b) Other ... ..	—	—	—	—	—	—	4	—
K. Senile decay ... ..	—	—	8	21	—	—	19	17
L. Accidental injury and Violence ... .. In respect of cases not included above.	—	—	13	3	—	—	—	—
M. Diseases of the Nervous System and Sense Organs ... ..	8	1	58	40	—	—	8	1
N. " " Respiratory System ... ..	1	1	23	13	2	1	16	3
O. " " Circulatory " " ... ..	1	—	30	34	1	—	22	45
P. " " Digestive " " ... ..	10	1	32	6	1	3	10	—
Q. " " Genito-urinary " " ... ..	—	—	8	6	—	—	3	5
R. " " Skin ... ..	7	—	16	—	13	—	15	—
S. Other Diseases ... ..	9	—	17	3	6	2	75	5
T. Mothers and infants discharged from Maternity Wards and not included in above figures.								
Mothers ... ..	—	—	56	—	—	—	6	—
Infants ... ..	54	—	—	—	4	—	—	—
U. Any persons not falling under any of the above headings ... ..	—	—	—	—	—	—	1	—
Normal ... ..	—	—	—	—	3	—	1	—

### Developments in Provision of Additional Hospital Accommodation.

In previous Annual Reports reference has been made to the development of the County Hospital Policy following upon the appointment of a "Composite" Committee comprising representatives of the Education, Public Health, Public Assistance and Mental Deficiency Acts Committees.

After consideration of the reports of the County Medical Officer and the County Public Assistance Officer relating to the County Public Assistance Institutions and the report of the deputation which visited hospitals in towns in Great Britain and abroad, the "Composite" Committee appointed a Special Sub-Committee to consider the whole of the available hospital accommodation and to confer with the representatives of Voluntary Hospitals in the West Riding.

The Special Sub-Committee at the commencement of their consideration of the subject realised the complexity of the task before them, and decided that before they could approach the voluntary hospitals they required to know the number of beds available for the treatment of sick in the County, and details of this accommodation were furnished by the County Medical Officer.

One feature which presented difficulties at the time was that the West Riding Public Assistance Committee's Institutions have been engaged in the treatment of the acute sick to a small extent only, they having been mainly concerned with the care of the chronic sick and aged infirm, and it was realised that as soon as modern hospital facilities were provided by the County Council an immediate and large response could be expected from the public. Thus it was appreciated that the demands in the past could not be taken as an indication of future requirements, and as the waiting lists of the various hospitals also provided no real criterion on which to base this estimate, as they obviously do not include the acute sick, who cannot wait for treatment, it was therefore necessary to fall back on arbitrary standards for the calculation of the accommodation required.

The "Composite" Committee had already decided that four "General" hospital beds per thousand of the population was the minimum hospital requirement, and to reach this level the number of additional beds required for the County as a whole was computed at 3,168.

The Sub-Committee were of the opinion that in order to ascertain the requirements of the several districts of the County it was both necessary and desirable that the County should be divided into five areas, and the following table indicates the provision to be made in these areas:—

TABLE XXXII.

	Division.	Population (estimated mid-year 1935).	No. of beds required.
North-Eastern Ring	<b>North-Eastern.</b> Claro	219,780	370
	Skyrack		
	Barkston Ash		
	<b>Eastern.</b> Goole and Selby	296,688	767
	Osgoldcross		
	Lower Agbrigg		
North-Western Ring	<b>North-Western.</b> Ewecross	223,828	478
	East Morley		
	Staincliffe		
	Worth Valley	576,621	1,073
	<b>Western.</b> Calder		
	Spen Valley		
	Upper Agbrigg		
Southern Ring	<b>Southern.</b> Staincross	434,168	1,143
	Don Valley		
	Rother Valley		
		1,527,257	3,353

It will be noted that this estimate of 3,353 beds, calculated by dividing the County into five areas, approximates closely to the estimate given above of 3,168 beds, arrived at by taking the County as a whole.

The foregoing estimate of beds was arrived at after making due allowance for the occupation of beds by residents of the West Riding Administrative County in voluntary hospitals, beds contained in the appropriated hospitals at Wakefield and Staincliffe, and the right of user of the County Council in transferred Poor Law Institutions contained in County Boroughs.

It was not intended that five independent areas should be established, but that there should be a pooling of resources which would permit of a constant process of re-classification, whereby similar conditions or diseases could be drafted so far as possible to the wards or special departments of particular hospitals.

In assessing the needs of the southern group, the increased population and industrial character of the area were taken into account and a higher proportion of beds were allocated to the South of the County than to the remaining areas.

The first conference with Voluntary Hospitals representatives took place in January, 1937. At this meeting the representatives were asked to indicate what schemes they had in hand or proposed to undertake in connection with the provision of additional beds or equipment or other extensions to existing hospitals. They were informed that the County Council could then determine to what extent they should make hospital provision and how best to co-operate with the Voluntary Hospitals serving the County Area.

Considerable discussion took place as to the best methods of collecting and classifying the necessary accommodation, and the possibility of setting up an Advisory Committee comprising members of the County Council and the Voluntary Hospitals was suggested.

Questions were raised regarding finance and the representation of the County Council on the governing bodies should capital grants be made by the County Council towards the cost of extensions of existing hospitals.

It was agreed that the information referred to should be given to the County Council by the individual hospitals, after which a further consultation should take place.

The replies of the various hospitals, upon which the further recommendations are based hereto, but for convenience the effect of these in the various proposed hospital areas, together with the observations of the County Medical Officer, may be summarised as follows:—

#### North-Eastern District.

Area No. 1 contains the following Voluntary Hospitals (excluding Homes for Incurables, etc., Bath Hospitals, Orthopaedic Hospitals):—

Name of Hospital.	Number of Beds.	Average number used by West Riding Patients.
Ripon and District Hospital ... ..	30	25
Ilkley Coronation Hospital ... ..	16	16
Harrogate General Hospital ... ..	132	122
Leeds Public Dispensary ... ..	40	3
Leeds General Infirmary ... ..	656	236
Leeds Hospital for Women ... ..	84	37
York County Hospital ... ..	198	18
Leeds Maternity Hospital ... ..	140	17
		474

Of this group of hospitals, those considered suitable for extension and capable of being merged into the County Council's scheme were:—

Harrogate and District General Hospital.  
Leeds General Infirmary.  
Leeds Hospital for Women.  
York County Hospital.

Out of this reduced number the only Committee or Board which stated they were prepared to provide extension (in addition to those already contemplated from voluntary funds) if the County Council made a satisfactory grant was that of the Leeds General Infirmary, and they said they might provide 100 additional beds. The remaining hospitals were non-committal in their replies, but if they had declined to extend, subject to a grant being forthcoming from the County Council, the remaining number of beds to be provided by the County Council would have amounted to 300 approximately.

#### North-Western District.

Area No. 2 contains the following Voluntary Hospitals:—

Name of Hospital.	Number of Beds.	Average number used by West Riding Patients.
Bingley Hospital ... ..	47	47
Sir Titus Salt's Hospital, Shipley ... ..	25	25
Skipton and District Hospital ... ..	61	61
Keighley and District Victoria Hospital ... ..	124	124
Bradford Royal Eye and Ear Hospital ... ..	94	32
Bradford Royal Infirmary ... ..	455	145
Bradford Children's Hospital ... ..	106	17
		451

Of this group of hospitals, those considered suitable for extension and capable of being merged into the County Council's scheme were:—

Keighley and District Victoria Hospital.  
Bradford Royal Infirmary.  
Bradford Children's Hospital.

Each of these hospitals gave a general expression of opinion that they might be prepared to extend, subject to a satisfactory grant being forthcoming from the County Council. Allowing for the occupation of voluntary hospital beds by residents from the Administrative County, the number of beds estimated to be required for No. 2 Area upon the basis of 4 per 1,000 of population was approximately 450.

#### Western District.

Area No. 3 contains the following Voluntary Hospitals:—

Name of Hospital.	Number of Beds.	Average number used by West Riding Patients.
Royal Halifax Infirmary ... ..	250	91
Huddersfield Royal Infirmary ... ..	302	101
Mirfield Memorial Hospital ... ..	18	18
Holme Valley Memorial Hospital ... ..	33	33
Dewsbury and District Infirmary ... ..	100	38
Batley and District Infirmary ... ..	84	81
		362

The hospitals in this group considered suitable for development were:—

The Huddersfield Royal Infirmary.  
The Royal Halifax Infirmary.

Both these hospitals were prepared to consider the question of extension in co-operation with the County Council, although no precise figures as to beds they would be prepared to provide were mentioned. The position in regard to Area No. 3 may be summarised as follows:—

	No. of Beds
Total beds required at 4 per 1,000 of population ...	1,408
Total average occupation of voluntary hospital beds by West Riding residents	362
Public Assistance Committee—	
Sick beds provided:—	
Halifax General Hospital ... ..	52
Deanhouse Institution ... ..	140
Public Health Committee:—	
Staincliffe County Hospital ... ..	347
	539
	901
Balance of beds remaining to be provided to reach a standard of 4 beds per 1,000 of population ...	507

If the Dewsbury County Borough desires to continue to have its sick treated in the Staincliffe County Hospital, it will be necessary to increase this figure by 85, namely, the deficit of 507 becomes 592.

#### Eastern District.

Area No. 4 contains the following hospitals:—

Name of Hospital.	Number of Beds.	Average number used by West Riding Patients.
Goole Bartholomew Hospital ... ..	24	24
Pontefract General Infirmary ... ..	70	70
Wakefield Clayton Hospital ... ..	166	83
Castleford, Normanton and District ... ..	38	38
Selby and District Memorial Hospital ... ..	31	20
Warde Aldam (South Elmsall) Hospital ... ..	20	20
		255

The hospitals in this group which were considered suitable for development were:—

Goole Bartholomew Hospital,  
Pontefract General Infirmary.  
Wakefield Clayton Hospital.  
Selby and District Memorial Hospital.

The Committees of the first three of these hospitals were prepared to extend or consider the question of extension of the bed accommodation. In the case of the Selby Hospital a reply was received indicating that no extensions whatever were contemplated.

The position in Area No. 4 may be summarised as follows:—

	No. of Beds.
Total number of beds required at 4 per 1,000 ...	1,180
Total average occupation of voluntary hospital beds by West Riding residents ...	255
Total beds provided for the sick in County Public Health Hospital, Wakefield White Rose ...	149
	404
Balance of beds remaining to be provided to reach a standard of 4 beds per 1,000 of population ...	776

If the Wakefield County Borough desires to continue to have its sick treated in the Wakefield County Hospital it will be necessary to increase this figure by 74, namely, the deficit of 776 becomes 850.

#### Southern District.

Area No. 5 contains the following Voluntary Hospitals:—

Name of Hospital.	Number of Beds.	Average number used by West Riding Patients.
Sheffield Jessop Hospital for Women ...	151	40
Sheffield Children's Hospital ...	120	23
Sheffield Royal Hospital ...	340	36
Sheffield Royal Infirmary ...	500	115
Rotherham Hospital ...	130	65
Mexborough Montagu Hospital ...	113	113
Doncaster Royal Infirmary ...	185	112
Barnsley Beckett Hospital ...	153	77
Fullerton, Denaby Main ...	40	40
		621

In this group the hospitals considered suitable for development were as follows:—

Barnsley Beckett Hospital.  
Sheffield Royal Hospital.  
Sheffield Royal Infirmary.  
Sheffield Jessop Hospital.  
Sheffield Children's Hospital.  
Mexborough Montagu Hospital.  
Doncaster Royal Infirmary.

The Barnsley Beckett Hospital, the Mexborough Montagu Hospital, and the Doncaster Royal Infirmary undoubtedly carry on useful work in connection with residents of the Administrative County, and it was considered any representations relating to proposed extensions made by the Boards of Governors should receive careful consideration.

As regards Sheffield, it will be noted that the hospitals in this County Borough undertake important work in connection with the West Riding residents, although their services are directed in greater part to County Borough ratepayers and possibly to residents in other Counties. It is probable that Sheffield will continue to serve as the centre for general hospital purposes for a number of districts in South Yorkshire, in particular the adjacent areas of Kiveton Park Rural and Rotherham Rural, and the southern part of the Wortley Rural District, including Stocksbridge, but it should be borne in mind that contributory schemes are more highly developed in South Yorkshire than in other parts of the Administrative County, and in view of such schemes and the likelihood that the Sheffield Hospitals will be used to a greater extent in future by County Borough residents, it was considered that any proposal to make grants towards capital expenditure in respect of general hospital beds should be carefully examined and compared with alternative schemes of provision. It was thought also that there might be more justification for giving financial assistance to the Sheffield group of hospitals in connection with specialised departments such as the building of a new radium centre.

The position in Area No. 5 may be summarised as follows:—

	No. of Beds.
Total beds required at 4 per 1,000 of population ...	1,735
Total of average occupation of voluntary hospital beds by West Riding residents	621
Sick beds provided in Public Assistance Hospitals or Institutions—	
Barnsley County Borough ...	44
Doncaster (Balby Road) ...	56
	100
	721
Approximately 134 beds are occupied by West Riding Administrative County residents in the Rotherham Alma Road Institution, but it is considered that the County Borough will require this accommodation in the future.	
Balance to be provided by voluntary hospitals or by the County Council ...	1,014

#### Recommendations.

The Special Sub-Committee having carefully reviewed the report of the County Medical Officer, were of the opinion that before further negotiations could take place it was essential that an outline of the policy which the County Council were to be recommended to adopt should be settled, and they therefore made the following recommendations:—

(a) That the requirements of the several areas of the County be given individual consideration.

(b) That so far as possible the County Council should co-operate with the voluntary hospitals for the purpose of providing hospital treatment, but that it is not practicable to make grants in respect of capital expenditure except when special services and specialised forms of treatment are provided, and that in no case shall grants be made to hospitals situate in County Boroughs unless the County Council are satisfied that arrangements are made by the respective County Borough Councils with the hospitals, under which the hospitals will receive similar benefits in respect of the treatment of cases from the Borough to those received in respect of the treatment of cases from the Administrative County.

(c) **New Hospital Accommodation.** That it is desirable that 1,250 beds in general hospitals should be provided.

(d) **Specialised Services.** That it is desirable that the County Council should co-operate with the Governing Bodies of hospitals for specialised forms of treatment.

#### Allocation of New Hospital Beds.

It was then necessary that the declared policy should be advanced a further stage by the allocation of the suggested accommodation in order that, so far as was possible at this juncture, the framework of the Scheme should be complete.

In considering the location of the hospital beds it became necessary to consider (a) districts in greatest need of hospital beds; (b) accessibility of existing accommodation in voluntary, municipal or county hospitals, having regard to distance to be travelled and road communications; (c) the existence in various parts of the County of these three types of hospitals and the relative merits of extending any of them so as to provide some portion of the new accommodation required; (d) the balance of advantage, if any, of extending the appropriated County Hospitals in preference to making grants towards the cost of extensions to voluntary hospitals in those cases where County Hospitals and voluntary hospitals are in close proximity; (e) the provision of specialised departments either at existing voluntary hospitals or by extensions of the appropriated County Hospitals.

As already shown, although the Administrative County was divided into five areas for the purpose of estimating beds required in each of these areas, it was not intended that the general hospital scheme should be administered in five such "watertight" compartments.

The Committee decided to recommend that this new accommodation should be situated where the need for beds is greatest and at the same time provide it in such a manner that any new hospital or extensions to existing hospitals can be merged in an efficient and economical manner in the future general hospital scheme of the County whether these institutions be of a County, municipal or voluntary character. The Committee were satisfied that the greatest urgency in connection with the provision of general hospital beds arises in connection with the population contained in the Staincross, Don and Rother Valley Areas of South Yorkshire; and in the North-West Area of the County; and they recommended that one hospital be erected in South Yorkshire somewhere between Doncaster and Barnsley, containing 640 beds, and another to serve the North-West of the Riding to be erected to the North of Leeds and Bradford, containing 400 beds.

The present accommodation (in permanent buildings) contained in the sick wards at the Staincliffe County Hospital is 290 beds, and it was recommended that the accommodation at the Staincliffe County Hospital should be increased by 60 beds, giving a total complement of 350 beds. The present accommodation contained in the sick wards of the White Rose County Hospital, Wakefield, is 150 beds, and it was recommended that accommodation for 150 beds should be added to the White Rose County Hospital, Wakefield, giving a complement of 300 beds.

If this policy of extension of the appropriated hospitals is followed immediate relief of overcrowding will result, and the Committee will be enabled to proceed with essential modernisation of existing wards and departments, extension of nurses' homes, etc., which have been held up for so long. Such extensions would also have the effect of relieving pressure upon voluntary hospital beds.

If the requirements of the County were based on a standard of 3 beds (instead of 4) per 1,000 of population, the number of beds required would be 1,365, which closely approximates the provision now recommended by the Committee (viz., 1,250).

In making their recommendations as to the situation of the hospital beds to be provided the Committee had in mind that road communications and distance from a hospital (within limits) are not necessarily of paramount importance, thus it would be a mistake to extend a second-rate hospital so as to provide certain special departments merely because the hospital was situated in close proximity to a particular community of people; due regard should be given to the better facilities in buildings and equipment which might be provided in such cases by setting up a larger unit at more modern hospitals (new or existing), although such hospitals may be situated a fair distance away from districts which are in need of additional beds.

In addition, at the two proposed new hospitals and the extensions at Staincliffe and Wakefield Hospitals, it is desirable to provide units for tuberculosis cases (observation and advanced) for which capital sums have already been included in the estimates of capital budget.

#### **Proposed Orthopaedic Units.**

Again, should the sites selected be suitable, it was decided that it would be necessary to consider whether units for long-stay orthopaedic cases should be added. This matter was carefully examined in conjunction with the orthopaedic surgeons serving Yorkshire, and the conclusion arrived at was that the County Councils and the County Boroughs of Yorkshire should enter into a joint orthopaedic scheme both in connection with institutional provision and after-care of patients.

For the geographical County of the West Riding it was considered that three orthopaedic units for long-stay cases, each of 200 beds were required. It was anticipated that one of these units would be provided by alterations and extensions at the existing Thorp Arch Orthopaedic Hospital near Leeds, while sites would have to be found for the other two units, one in South Yorkshire and one in north-west Yorkshire. It was considered possible that the sites selected for the proposed "general" hospitals in these parts of the County would serve equally well the purpose of long-stay hospital units, and subject to agreements with other municipal authorities in the County and with the Voluntary Committee which had been recently set up under the Chairmanship of Judge Frankland for the purpose of launching an appeal for funds to provide these hospitals, it was suggested that the possibility of setting up long-stay hospital units alongside the proposed new general hospitals should be borne in mind.

#### **Type of Accommodation to be Provided in Proposed New Hospitals.**

The Sub-Committee recommended that the accommodation to be provided should make provision for the following:—

General Medical	}	including children.
General Surgical		
Infants.		
Throat, Nose and Ear.		
Ophthalmic.		
Skin and Venereal Diseases.		
Maternity and Gynaecological.		
Isolation Cubicles.		
Cancer Wards.		
Wards for Chronic Sick.		

#### **Tuberculosis Wards—**

(50 beds at South Yorkshire New Hospital.)

(25 beds at White Rose Hospital.)

(25 beds at Staincliffe Hospital.)

(12 beds at North-west Yorkshire New Hospital.)

Orthopaedic Wards and Department for "short-stay" cases.

Orthopaedic Units for "long-stay" cases—400 beds (part of the County Orthopaedic Scheme).

### Summary.

Briefly the recommendations of the Committee which were submitted to the County Council on the 19th January, 1938 and approved, were as follows:—

- (1) It is not practicable to make grants in respect of capital expenditure to voluntary hospitals except when special services and specialised forms of treatment are provided.
- (2) That grants should not be made to hospitals situate in County Boroughs unless the County Council are satisfied that arrangements are made by the respective County Borough Councils with the hospitals, under which the hospitals will receive similar benefits in respect of the treatment of cases from the County Borough to those in respect of treatment of cases from the County Area.
- (3) That it is desirable that the County Council should co-operate with the governing bodies of hospitals for specialised forms of treatment.
- (4) It is desirable that 1,250 beds in general hospitals should be provided as follows:—
  - (a) That one hospital be erected in South Yorkshire somewhere between Doncaster and Barnsley, containing 640 beds, and another to serve the north-west of the Riding to be erected to the north of Leeds and Bradford, containing 400 beds.
  - (b) That the accommodation at the Staincliffe County Hospital should be increased by 60 beds, giving a total complement of 350 beds.
  - (c) That accommodation for 150 beds should be added to the White Rose County Hospital, Wakefield, giving a complement of 300 beds.
  - (d) That, in addition, at the two new general hospitals and the extensions at Staincliffe and Wakefield, it is desirable to provide units for tuberculosis cases (observation and advanced), for which capital sums have already been included in the estimates of capital budget."

The following tabular statements set out briefly the work undertaken in the sick and infirm wards of the County Public Assistance Institutions:—

TABLE XXXIII.

	Able-bodied		Infirm.		Sick			Maternity	Mental		Receiving and isolation wards		Tuberculosis	Healthy Children	
	M.	F.	M.	F.	M.	F.	C.		M.	F.	M.	F.		Under 3 years	Over 3 years
Available accommodation	692	320	370	200	620	632	87	45	120	180	72	35	66	100	117
Beds occupied 31. 12. 37.	332	164	256	148	495	491	58	12	112	144	16	5	23	40	95

The hospital portions of the Batley and Wakefield Institutions were appropriated on the 4th July, 1937, and therefore the figures relating to these hospitals are not included in the above table.

TABLE XXXIV.

BRIEF ANALYSIS OF CASES MAINTAINED DURING THE YEAR (EXCLUDING ABLE-BODIED AND CASUALS).

Type of Case.	Name of Institution.																			Total
	Settle	Skipton	Knarborough	Ripon	Tadcaster	Wetherby	Osley	Keighley	Clayton	Todmorden	Staincliffe* Batley	Wakefield*	Pontefract	Hemsworth	Goole	Selby	Penistone	Grenoside	Deanhouse	
Sick (Acute and Chronic) ...	40	237	89	90	23	31	162	421	359	134	705	471	501	194	196	112	23	82	264	4134
Infirm ...	10	122	163	22	37	24	123	145	237	74	166	173	155	50	51	57	41	21	21	1692
Mental ...	78	—	2	1	2	1	11	160	70	12	86	14	40	7	16	7	2	38	41	587
Maternity ...	2	6	9	1	2	1	5	245	22	2	67	14	14	3	4	38	—	4	—	439
Other Cases ...	1	7	1	4	—	4	10	21	17	5	34	1	38	21	24	11	2	3	4	208
Totals ...	131	372	264	118	64	61	311	992	705	227	1058	673	748	275	290	225	68	148	330	7060

Number of Deaths.																				
Sick (Acute and Chronic) ...	14	51	68	17	5	13	52	71	98	49	159	116	153	44	47	28	10	25	71	1091
Infirm ...	6	23	4	2	6	—	7	45	38	—	12	48	—	12	7	2	8	10	12	242
Mental ...	—	—	2	—	2	—	6	16	6	—	—	—	—	—	1	—	—	—	—	33
Maternity ...	—	—	—	—	—	—	—	4	1	—	2	2	—	—	—	3	—	—	—	12
Other Cases ...	—	1	1	1	—	—	6	—	3	1	2	—	5	2	3	1	—	2	1	29
Totals ...	20	75	75	20	13	13	71	136	146	50	175	166	158	58	58	34	18	37	84	1407

\*The figures shown in respect of these two Institutions are up to the 3rd July, 1937, i.e., the date of appropriation.

During the year the sick wards at Batley and Wakefield County Institutions were appropriated by the Public Health Committee for administration under the Public Health Acts (see separate report on the work of these two institutions now known as the Staincliffe County Hospital, Dewsbury, and the White Rose County Hospital, Wakefield).

#### Casual Wards.

The casual wards at the Settle and Wakefield County Institutions were closed during the year 1937.

#### Staffing.

Difficulties were experienced during the year in obtaining probationers and particularly since the General Nursing Council, with the co-operation of the Ministry of Health, ceased to recognise the sick wards of the Clayton County Institution and the Keighley County Hospital as training schools for nurses. It has been necessary to employ an increasing proportion of trained and untrained staff from outside nursing homes and similar bodies. In this connection the report of the Inter-departmental Committee on the Recruitment, Training and Conditions of Service of persons engaged in the nursing profession is awaited.

### Public Assistance Medical Services.

A list of District Medical Officers will be found on pages 8 to 10 of this report. Many of these officers were transferred from the former Poor Law Authorities under the Local Government Act, 1929, on the 30th April, 1930, but all appointments made subsequently by the County Council are in the nature of temporary appointments from year to year. When the Review of County Districts has been completed and the final decisions of the Ministry are known, the present system of making appointments will be subject to review.

Each District Medical Officer is required by the regulations of the Ministry of Health to make a fortnightly return of work done in connection with medical out-relief and the following tabular statement gives a summary of the services rendered during the year. The returns show that 157,874 home visits and consultations were recorded during 1937. This figure is an increase of 12,462 over that of 145,412 for the preceding year. In certain parts of the County there was a diminution in the number of requests for medical out-relief, and this was most marked in the Skyrack, East Morley, Calder and Lower Agbrigg districts.

On the other hand an increased number of services was recorded in the following districts:—Barkston Ash, Spen Valley, Upper Agbrigg, Osgoldcross, Goole and Selby, Don Valley and Rother Valley.

TABLE XXXV.

#### Work of the Public Assistance District Medical Officers, 1936.

Guardians Committee Area.	Acreage.	Population.	No. of District Medical Officers.	No. of attendances on assisted persons.		
				At home.	At surgery.	Total Visits.
1. Ewecross ... ..	288,079	23,006	11	1,188	235	1,423
2. Staincliffe ... ..	159,261	53,721	8	3,991	1,568	5,559
3. Claro ... ..	212,662	83,395	13	2,575	1,676	4,251
4. Barkston Ash ... ..	142,409	53,334	9	4,287	1,826	6,113
5. Skyrack ... ..	63,336	74,848	5	939	602	1,541
6. Worth Valley ... ..	39,443	83,876	6	1,864	1,461	3,325
7. East Morley ... ..	12,551	63,956	8	414	220	634
8. Calder ... ..	78,253	121,685	14	2,570	1,617	4,187
9. Spen Valley ... ..	22,177	134,845	10	3,900	3,216	7,116
10. Lower Agbrigg ... ..	41,345	92,383	14	9,985	7,221	17,206
11. Osgoldcross ... ..	88,853	159,220	16	15,000	19,744	34,744
12. Goole and Selby ... ..	76,229	45,043	4	2,853	1,175	4,028
13. Don Valley ... ..	137,061	182,614	20	14,766	20,530	35,296
14. Staincross ... ..	115,309	139,588	19	7,613	5,307	12,920
15. Upper Agbrigg ... ..	76,687	89,182	15	1,560	735	2,295
16. Rother Valley ... ..	61,143	112,622	13	7,677	9,559	17,236
Totals ...	1,614,798	1,513,378	185	81,182	76,692	157,874

TABLE XXXVI.

Vaccination of Children whose Births were registered from 1st January to 31st December, 1936, inclusive.

Name of Vaccination Officer	Vaccination District	Number of Births returned in the "Birth List Sheets" as registered from 1st January to 31st December 1936	Number of these Births duly entered by 31st January, 1937, in Columns I, II, IV, and V of the "Vaccination Register" (Birth List Sheets), viz.				Number of these Births which on 31st January, 1937, remained unentered in the "Vaccination Register" on account (as shown by "Report Book") of			Number of these Births remaining on 31st Jan. 1937, neither duly entered in the "Vaccination Register" (columns 3, 4, 5, 6 and 7 of this Return) nor temporarily accounted for in the "Report Book" (columns 8, 9 and 10 of this Return)	Total number of Certificates of Successful Primary Vaccination of Children under 14 received during the Calendar Year 1937	Number of Statutory Declarations of Conscientious Objection actually received by the Vaccination Officer irrespective of the dates of birth of the children to which they relate, during the Calendar Year, 1937.	Number of Children vaccinated after declaration of Conscientious Objection had been made.	Total number of Certificates of Successful Vaccination for year 1937 sent to other Vaccination Officers.	
			Column I Successfully Vaccinated	Column II Inaccessible to Vaccination	Column IV Number in respect of whom Statutory Declarations of Conscientious Objection have been received.	Column V Died Unvaccinated	Postponement by Medical Certificate	Removal to Districts, the Vaccination Officers of which have been duly apprised	Removal to places unknown, or which cannot be reached, and Cases not having been found						
W. Roberts ...	Bowland Rural ...	38	6	—	—	28	2	—	1	1	15	30	—	—	1
G. Kayley ...	Garsdale (Sedburgh) ...	4	1	—	—	3	—	—	—	—	—	4	—	—	—
W. Batty ...	Sedburgh ...	42	10	—	—	27	2	—	—	1	18	20	—	—	—
W. Slinger ...	Bentham (Settle) ...	75	17	—	—	53	3	2	—	—	18	51	—	—	3
C. Parker ...	Settle and Long Preston	106	50	—	—	52	1	2	—	—	45	57	—	—	4
E. J. Harker ...	Grassington (Skipton) ...	26	12	—	—	11	2	—	—	—	14	8	—	—	—
S. H. Day ...	Kettlewell (Skipton) ...	5	4	—	—	1	—	—	—	—	6	3	—	—	—
G. D. Hunt ...	Gargrave (Skipton) ...	18	10	—	—	7	—	—	—	—	11	4	—	—	—
D. Slater ...	Barnoldswick, etc. (Skipton) ...	423	49	—	—	331	17	3	5	5	13	69	278	1	—
T. C. Crawhall ...	Gt. Ouseburn ...	665	263	—	—	289	31	1	57	2	22	153	112	—	6
J. Clark ...	Knarsborough ...	126	50	—	—	51	13	1	4	2	5	67	50	—	10
Mrs. M. E. Bowes	Harrogate ...	603	212	1	—	334	32	4	6	1	—	295	331	—	13
G. E. Wilkinson ...	Pateley Bridge ...	176	31	—	—	87	4	2	1	2	5	98	111	—	5
F. S. Metcalfe ...	Ripon ...	141	92	1	—	34	2	—	8	4	25	121	26	—	26
W. Bortoft ...	Tadcaster ...	258	76	1	—	139	16	—	1	3	4	134	138	1	27
W. Wormald ...	Aberford ...	161	96	—	—	12	2	1	—	1	16	12	—	9	—
S. C. Mellor ...	Wetherby ...	28	11	—	—	209	16	6	15	3	8	77	188	1	25
R. A. Wilkinson ...	Dishophorpe ...	342	85	—	—	148	9	5	13	20	103	146	—	6	—
G. C. Clarke ...	Horsforth ...	354	146	2	—	180	4	4	2	6	10	209	—	5	—
H. Wood ...	Ilkley and Otley	234	19	—	—	607	43	2	6	4	11	580	—	—	—
G. C. Clarke ...	Yeadon ...	680	24	—	—	126	7	2	—	1	22	170	—	7	—
J. A. Sharp ...	Keighley ...	151	15	—	—	71	1	—	—	—	5	64	—	1	—
Miss A. Hartley ...	Bingley ...	77	5	—	—	36	—	—	—	2	2	31	—	—	—
W. H. Ogden ...	Hasworth ...	38	—	—	—	45	1	—	2	—	62	81	—	8	—
L. M. Greenwood ...	Willden ...	88	40	—	—	45	1	—	—	5	8	40	—	—	—
C. W. Calverley ...	Farsley ...	58	7	—	—	86	4	2	2	8	17	74	—	14	—
H. Darnbrough ...	Drighlington ...	161	59	—	—	142	3	2	—	2	11	123	—	2	—
A. Hotchin ...	Putley ...	567	30	2	—	464	32	1	7	14	55	469	—	8	—
L. Clough ...	Shipley ...	161	12	—	—	142	3	2	—	2	11	123	—	2	—
F. Higginson ...	Cleckheaton ...	371	50	—	—	300	11	—	3	1	6	76	319	—	21
P. Madders ...	Sowerby ...	288	31	—	—	235	11	1	—	1	9	46	225	1	20
A. Sutcliffe ...	do. ...	276	25	1	—	240	8	1	—	1	33	249	—	8	—
J. H. Hindle ...	Todmorden ...	618	62	—	—	453	27	4	11	—	61	466	—	—	—
W. H. Holt ...	Batley and Gomersal	28	6	—	—	21	1	—	—	—	9	21	—	2	—
Miss G. Wormald	Gildersome ...	292	47	1	—	228	13	—	2	1	44	244	—	5	—
H. Jackson ...	Liversedge ...	117	30	—	—	80	4	2	—	1	25	63	—	—	—
E. R. Breasley ...	Mirfield ...	333	63	1	—	249	11	2	6	1	56	246	—	4	—
Miss E. W. Haigh	Morley ...	189	24	—	—	143	6	—	—	16	23	131	—	1	—
J. T. Smith ...	Ouseley ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
W. Town ...	Horbury and Normanton	1,174	280	2	—	783	57	6	4	19	348	769	—	39	—
Mrs. L. I. Dodsworth	Hemsworth East	637	158	—	—	431	27	10	2	9	188	453	—	6	—
I. Scott ...	Do. West	565	252	—	—	255	21	3	—	34	270	299	2	13	—
W. Town ...	Pontefract ...	1,967	396	1	—	1,117	72	12	11	27	31	300	1,183	3	18
H. S. Miller ...	Goole ...	493	97	2	—	354	24	4	3	9	79	303	—	3	—
W. B. Weaver ...	Selby ...	252	95	—	—	140	10	2	—	5	96	115	—	4	—
F. Griedale ...	Bolton-upon-Dearne	1,349	273	3	—	869	72	10	41	14	28	323	915	—	34
A. J. Thorsby ...	Bawtry and Tickhill	542	216	—	—	289	32	—	10	55	—	156	250	—	12
J. Thurgood ...	Adwick-le-Street	736	131	1	—	436	39	2	—	40	87	137	801	—	27
H. E. Newton ...	Thorne ...	558	98	—	—	387	26	10	—	18	80	380	—	—	—
E. Hammerton ...	Darfield and Darton	1,118	254	—	—	734	54	4	4	7	57	267	854	3	7
W. Taylor ...	Worsborough ...	351	93	—	—	237	11	—	7	3	—	74	281	—	5
B. J. B. Marsden	Stocksbridge ...	297	65	—	—	131	7	1	—	2	—	61	132	—	10
F. Bailey ...	Worley ...	49	14	—	—	28	1	—	—	5	1	16	22	—	3
H. Dowson ...	Ecclefield ...	208	69	2	—	124	10	2	—	—	1	68	137	—	5
H. Redfearn ...	Penistone ...	296	41	—	—	148	6	1	—	10	—	39	123	—	5
E. Firth ...	Colne and Holme Valley	570	116	2	—	411	27	3	3	3	5	116	438	1	11
A. Smith ...	Sadlesworth ...	116	9	—	—	98	2	—	—	—	7	26	76	—	—
Miss J. Lees	Springhead ...	52	8	—	—	43	1	—	—	—	—	3	44	—	—
F. S. Butcher ...	Rotherham Rural	244	62	1	—	164	15	—	2	—	71	173	—	8	—
W. J. Blyth ...	Rawmarsh ...	307	41	3	—	236	8	4	1	1	13	25	237	—	2
G. C. Hearn ...	Maltby ...	534	78	2	—	396	21	1	4	5	94	397	—	4	—
T. H. Harrison	Wath-upon-Dearne	405	28	1	—	315	7	—	3	—	46	40	338	—	—
C. F. Airey ...	Anston ...	220	30	—	—	162	9	—	—	3	16	41	162	—	5
		20,988	4,759	30	—	13,965	908	130	251	399	546	4,973	13,807	18	489

During the year the sick wards at Bailey and Wakefield County Institutions were approp-  
 (see) the Public Health Committee for administration under the Public Health Act and the  
 the County Council the following were appointed to the Public Health Committee for administration under the Public Health Act and the  
 the County Council the following were appointed to the Public Health Committee for administration under the Public Health Act and the

Name of Vaccination Officer		Vaccination District		Number of children vaccinated in the year 1934		Number of children vaccinated in the year 1935	
Name of Vaccination Officer		Vaccination District		Number of children vaccinated in the year 1934		Number of children vaccinated in the year 1935	
D. Slater		Barnoldswick, etc.		18		10	
S. H. Day		Kettlewell (Shipston)		10		10	
G. J. Barker		Kettlewell (Shipston)		10		10	
C. Parker		Grassington (Shipston)		10		10	
W. Shillington		Smith and Long Preston		10		10	
W. Batty		Barnoldswick, etc.		10		10	
G. R. Barker		Barnoldswick, etc.		10		10	
W. Roberts		Barnoldswick, etc.		10		10	
T. C. Crawhall		Barnoldswick, etc.		10		10	
J. Clark		Barnoldswick, etc.		10		10	
Mrs. M. E. Brown		Barnoldswick, etc.		10		10	
G. E. Widdowson		Barnoldswick, etc.		10		10	
E. S. McClellan		Barnoldswick, etc.		10		10	
W. Batty		Barnoldswick, etc.		10		10	
W. Batty		Barnoldswick, etc.		10		10	
S. C. Mollat		Barnoldswick, etc.		10		10	
R. A. Widdowson		Barnoldswick, etc.		10		10	
G. C. Clarke		Barnoldswick, etc.		10		10	
H. Wood		Barnoldswick, etc.		10		10	
G. C. Clarke		Barnoldswick, etc.		10		10	
J. A. Sharp		Barnoldswick, etc.		10		10	
Miss A. Harty		Barnoldswick, etc.		10		10	
W. H. O'Connell		Barnoldswick, etc.		10		10	
L. M. Greenwood		Barnoldswick, etc.		10		10	
C. W. Claverley		Barnoldswick, etc.		10		10	
H. Darnley		Barnoldswick, etc.		10		10	
A. Harty		Barnoldswick, etc.		10		10	
L. Clough		Barnoldswick, etc.		10		10	
F. Higgins		Barnoldswick, etc.		10		10	
A. Madigan		Barnoldswick, etc.		10		10	
A. Smith		Barnoldswick, etc.		10		10	
J. H. Harty		Barnoldswick, etc.		10		10	
W. H. Harty		Barnoldswick, etc.		10		10	
Miss G. Widdowson		Barnoldswick, etc.		10		10	
H. Jackson		Barnoldswick, etc.		10		10	
E. R. Harty		Barnoldswick, etc.		10		10	
Miss E. W. Harty		Barnoldswick, etc.		10		10	
I. T. Smith		Barnoldswick, etc.		10		10	
W. Town		Barnoldswick, etc.		10		10	
Mrs. L. I. Dods		Barnoldswick, etc.		10		10	
I. Scott		Barnoldswick, etc.		10		10	
W. Town		Barnoldswick, etc.		10		10	
H. S. Miller		Barnoldswick, etc.		10		10	
W. B. Widdowson		Barnoldswick, etc.		10		10	
E. Giddings		Barnoldswick, etc.		10		10	
A. I. Thompson		Barnoldswick, etc.		10		10	
I. Thompson		Barnoldswick, etc.		10		10	
H. E. Newton		Barnoldswick, etc.		10		10	
E. Hamilton		Barnoldswick, etc.		10		10	
W. Taylor		Barnoldswick, etc.		10		10	
B. J. B. Mather		Barnoldswick, etc.		10		10	
B. J. B. Mather		Barnoldswick, etc.		10		10	
H. Dowson		Barnoldswick, etc.		10		10	
H. Redman		Barnoldswick, etc.		10		10	
E. Firth		Barnoldswick, etc.		10		10	
A. Smith		Barnoldswick, etc.		10		10	
Miss J. Lane		Barnoldswick, etc.		10		10	
F. S. Babbard		Barnoldswick, etc.		10		10	
W. J. Babbard		Barnoldswick, etc.		10		10	
G. C. Harty		Barnoldswick, etc.		10		10	
T. H. Harty		Barnoldswick, etc.		10		10	
C. R. Harty		Barnoldswick, etc.		10		10	
Total		Total		4,730		4,730	

## PUBLIC VACCINATION.

A summary of the yearly returns supplied by Vaccination Officers for the past five years gives the following information:—

TABLE XXXVII.

Year.	No. of Births in the Administrative County Area.	No. of Certificates of successful vaccination.	No. of Certificates of insusceptibility.	No. of Statutory Declarations of Conscientious Objection.	Others.
1932	22,848	6,243 (27.3%)	75	14,159 (61.95%)	2,371
1933	21,522	5,283 (24.54%)	53	14,051 (65.24%)	2,135
1934	21,660	5,251 (24.24%)	34	14,329 (66.15%)	2,046
1935	21,220	4,936 (23.26%)	28	13,992 (65.94%)	2,264
1936	20,988	4,759 (22.67%)	30	13,965 (66.54%)	2,234

There are 157 Public Vaccinators under contract to perform vaccinations and re-vaccinations in the 170 vaccination districts, and at the 15 County Institutions.

There are also 61 Vaccination Officers, 16 of whom are paid by salary and 45 by fees. Three hold appointments with neighbouring County Boroughs and 54 are Registrars of Births and Deaths, or have appointments under the Public Assistance Committee.

### REMUNERATION OF VACCINATION OFFICERS.

The County Council gave consideration to the remuneration of Vaccination Officers and decided that the minimum fees paid to these officers as from the 1st April, 1937, should be as follows:—

- (i) Not less than 9d. in respect of each child entered on the birth lists sent to him by the Registrar of Births and Deaths.
- (ii) Not less than 1s. 6d. in respect of the registration by him in his Vaccination Register of the successful vaccination of any child born in his district.
- (iii) Not less than 1s. 6d. in respect of the transmission by him to the Vaccination Officer of the district where the birth was registered of a copy, certified by him, of the certificate of successful vaccination in his district of any child not born in the district, a note of which he shall have entered in column 18 of his Report Book.

There are 11 Vaccination Officers who are receiving fees in excess of the above scale, but having regard to the rural character of the districts served, it was decided that no reduction should be made in the fees of the officers concerned.

When the re-arrangement of County Districts is completed, the areas and terms of service of Vaccination Officers will be reviewed.

The tables set out below indicate the work done under the Vaccination Acts in the Administrative County Area during the year ended 30th September, 1937.

TABLE XXXVIII.

	No. of successful primary vaccinations of persons.			No. of successful re-vaccinations.
	Under 1 year of age.	1 year and upwards.	Total.	
Performed by Public Vaccinators ... ..	3,956	241	4,197	108
Performed by Medical Officers of County Institutions ...	3	7	10	—
	3,959	248	4,207	108

Detailed figures relating to the vaccinations and re-vaccinations performed by each Public Vaccinator and Medical Officer of a County Institution are given below:—

TABLE XXXIX.

### VACCINATIONS PERFORMED IN COUNTY INSTITUTIONS, YEAR ENDED 30TH SEPTEMBER, 1937.

Name of County Institution.	Name of Medical Officer.	Primary Vaccinations			Re-vaccinations.
		Under 1 year.	1 year and upwards.	Totals.	
Grenoside ... ..	T. D. Norton ... ..	—	—	—	—
Hemsworth ... ..	T. C. A. Sweetnam ... ..	1	—	1	—
Keighley ... ..	T. L. Walker ... ..	—	—	—	—
Knarborough ... ..	C. H. Steinbach ... ..	—	—	—	—
Olley ... ..	J. T. Rhodes ... ..	—	—	—	—
Penistone ... ..	A. A. Masser ... ..	—	—	—	—
Pontefract ... ..	G. Burnett ... ..	1	—	1	—
Settle ... ..	B. S. Hyslop ... ..	—	—	—	—
Skipton ... ..	W. H. Robinson ... ..	—	1	1	—
Tadcaster ... ..	J. P. Scatchard ... ..	—	—	—	—
Todmorden ... ..	H. Thorp ... ..	1	6	7	—
Wetherby ... ..	E. R. Hargreaves ... ..	—	—	—	—
Goole ... ..	J. Crawford ... ..	—	—	—	—
Ripon ... ..	R. W. H. Anning ... ..	—	—	—	—
Selby ... ..	O. L. Scarborough ... ..	—	—	—	—
		3	7	10	—

TABLE XL.  
VACCINATIONS PERFORMED IN VACCINATION DISTRICTS, YEAR ENDED 30TH SEPTEMBER, 1937

Name of Vaccination District.		Public Vaccinator.	Primary Vaccinations.			Re-vaccinations.
			Under 1 year.	1 year and upwards.	Totals.	
Area No. 1.—Ewecross.						
Sedburgh	...	T. W. Rothwell	14	2	16	—
Dent	...	C. A. Allan	—	—	—	—
Slaidburn	...	J. T. Bleasdel	12	1	13	—
Gisburn	...	J. T. Bleasdel	—	—	—	—
Mitton	...	T. G. S. Harkness	—	—	—	—
Long Preston	...	H. M. Clegg	7	1	8	—
Austwick	...	T. Lovett	6	—	6	—
Arncliffe	...	G. D. G. Cameron	3	—	3	—
Bentham	...	T. L. Dowell	5	1	6	—
Malham	...	H. Wales	6	—	6	1
Ingleton	...	G. J. Marks	9	—	9	1
Settle	...	B. S. Hyslop	36	1	37	7
Area No. 2.—Staincliffe.						
Skipton	...	N. A. Macleod	19	13	32	4
Addingham	...	W. L. Crabtree	2	—	2	—
Barnoldswick	...	J. Pickard	3	—	3	2
Cowling	...	J. Renwick	1	3	4	—
Gargrave	...	H. Wales	22	—	22	—
Grassington	...	G. D. G. Cameron	12	—	12	—
Silsden	...	M. Purcell	4	—	4	—
Earby	...	A. McKay Niven	—	—	—	—
Area No. 3.—Claro.						
Green Hammerton	...	K. H. Martin	9	—	9	1
Boroughbridge	...	F. P. Rust	22	—	22	—
Acomb	...	J. S. Dudgeon	2	—	2	1
Great Ouseburn	...	J. M. Benson	10	—	10	—
Sharow	...	S. Hey	2	—	2	—
Ripon	...	P. A. Steven	52	—	52	1
Kirkby Malzeard	...	R. G. M. Harvey	11	—	11	—
Knarborough	...	D. F. Dobson	36	—	36	1
Harrogate (part)	...	S. Foskett	77	5	82	—
do. (Starbeck)	...	S. C. Wilkinson	8	5	13	1
Ripley	...	S. Foskett	16	1	17	1
Bishopside	...	C. A. Flintoff	21	—	21	—
Birstwith	...	E. G. Campbell	14	—	14	—
Area No. 4.—Barkston Ash.						
Bishopthorpe	...	T. H. Barton	15	2	17	1
Sherburn	...	Wm. Murphy	56	3	59	—
Kippax	...	C. C. Hargreaves	7	—	7	—
Aberford	...	J. B. Young	46	1	47	1
Tadcaster	...	J. P. Scatchard	32	—	32	1
Boston Spa	...	R. W. Lee	48	1	49	6
Harewood, Sicklinghall	...	H. B. Cook	14	2	16	—
Thorner	...	O. D. Beetham	27	1	28	1
Wetherby	...	J. A. Hargreaves	34	2	36	4
Area No. 5.—Skray.						
Baildon	...	E. G. Firth	4	1	5	—
Ilkley	...	T. B. Harder	23	2	25	2
Yeadon	...	A. J. I. Muschamp	16	3	19	1
Horsforth	...	D. W. E. Burridge	20	—	20	—
Otley	...	W. H. Galloway	46	3	49	3
Area No. 6.—Worth Valley.						
Krighley	...	F. Villy	4	2	6	—
Bingley (part)	...	W. A. Lochhead	—	—	—	—
Cullingworth	...	W. A. Lochhead	12	2	14	—
Haworth	...	J. E. Baird	5	1	6	2
Steton	...	J. Renwick	1	1	2	—
Wilsden	...	T. M. S. Findlater	1	—	1	—
Area No. 7.—East Morley.						
Hunsworth	...	J. A. Hope	—	—	—	—
Drighlington	...	H. D. Merrington	5	—	5	—
Calverley	...	N. A. A. Hughes	8	—	8	4
Farsley	...	T. H. Elmer	26	4	30	—
Shipley	...	J. G. Craig	10	2	12	—
Denholme	...	A. H. Stewart	—	2	2	1
Pudsey	...	E. T. Hyland	45	—	45	—
Area No. 8.—Calder.						
Sowerby Bridge	...	V. C. Meyer	9	1	10	2
Elland	...	A. G. Gamble	7	—	7	—
Stainland	...	W. J. L. Francis	2	4	6	1
Brighouse	...	C. M. Stallard	42	2	44	—
Shelf	...	J. J. Murphy	1	—	1	—
Queensbury	...	G. C. Sharp	10	—	10	—
Midgley	...	C. S. Ogilvy	4	2	6	1
Barkisland	...	A. J. W. Stephen	9	—	9	—
Todmorden	...	H. Thorp	8	3	11	3
Hebden Bridge	...	F. J. Dowdall	8	1	9	—
Mytholmroyd	...	S. T. Henderson	4	3	7	—

TABLE XL.—(continued).

Name of Vaccination District.	Public Vaccinator.	Primary Vaccinations.			Re-vaccinations.
		Under 1 year.	1 year and upwards.	Totals.	
<b>Area No. 9.—Spenn Valley.</b>					
Liversedge ... ..	R. M. Beatty ... ..	9	—	9	1
Birstal ... ..	A. Dick ... ..	15	4	19	—
Gildersome ... ..	H. D. Merrington ... ..	4	1	5	—
Batley ... ..	H. Keighley ... ..	40	—	40	1
Heckmondwike ... ..	H. W. Laing ... ..	14	—	14	—
Mirfield ... ..	J. E. H. West ... ..	28	—	28	—
Morley ... ..	W. S. Sykes ... ..	31	—	31	5
Birkenshaw ... ..	E. M. Whitehead ... ..	16	1	17	—
Ossett ... ..	S. B. Stoker ... ..	29	1	30	3
Cleckheaton ... ..	A. L. Mitchell ... ..	9	1	10	1
<b>Area No. 10.—Lower Agbrigg.</b>					
Horbury ... ..	J. N. U. Russell ... ..	18	4	22	—
Normanton ... ..	N. S. Twist ... ..	49	3	52	—
Criggilestone ... ..	K. S. Macdonald-Smith ... ..	24	—	24	—
Walton ... ..	D. Downie ... ..	10	2	12	1
Stanley ... ..	J. D. Bottomley ... ..	45	1	46	1
Emley ... ..	C. H. Smith ... ..	16	1	17	—
Crofton ... ..	T. E. Lister ... ..	27	2	29	—
Ardsley ... ..	T. Stephens ... ..	51	30	81	1
Rothwell ... ..	H. Stevenson ... ..	35	—	35	—
Oulton ... ..	C. H. Seville ... ..	19	6	25	—
<b>Area No. 11.—Osgoldcross.</b>					
Heck ... ..	F. G. Creaser ... ..	14	—	14	—
Knottingley ... ..	J. Kehelly ... ..	176	—	176	—
Pontefract ... ..	G. Burnett ... ..	54	4	58	—
Methley ... ..	E. W. L. White ... ..	23	—	23	—
Featherstone ... ..	Wm. Steven ... ..	47	—	47	—
Castleford ... ..	J. J. W. Campbell ... ..	82	1	83	—
Brotherton ... ..	B. H. Gillbanks ... ..	57	—	57	1
Kirkstall ... ..	J. Malloch ... ..	5	—	5	—
South Elmsall ... ..	E. J. H. Sullivan ... ..	145	5	150	1
Ryhill ... ..	S. Hodgkinson ... ..	65	—	65	—
Brierley ... ..	W. Ross Gardner ... ..	69	1	70	—
Great Houghton ... ..	J. W. Whitworth ... ..	8	2	10	—
Hemsworth ... ..	T. C. A. Sweetnam ... ..	66	3	69	3
Kinsley ... ..	M. B. Taylor ... ..	63	2	65	—
Ackworth ... ..	W. L. Gardner ... ..	15	4	19	3
<b>Area No. 12.—Goole and Selby.</b>					
Drax ... ..	F. G. Creaser ... ..	15	—	15	1
Selby ... ..	O. L. Scarborough ... ..	48	3	51	1
Snaith ... ..	F. G. Creaser ... ..	26	1	27	—
Swinefleet ... ..	W. Eardley ... ..	5	—	5	—
Goole ... ..	A. M. Erskine ... ..	15	1	16	3
Eastoft ... ..	J. C. T. Crowden ... ..	—	—	—	—
<b>Area No. 13.—Don Valley.</b>					
Bolton-on-Dearne ... ..	J. K. T. Mills ... ..	37	—	37	1
Mexborough ... ..	J. J. Huey ... ..	21	3	24	1
Tickhill ... ..	A. C. Lindsay ... ..	29	—	29	—
Bentley-with-Arksey ... ..	B. Lyons ... ..	36	1	37	—
Conisbrough ... ..	W. J. Maclure ... ..	148	12	160	3
Askern ... ..	J. Malloch ... ..	32	3	35	4
Adwick-le-Street ... ..	D. Malloch ... ..	59	1	60	—
Thurnscoe ... ..	F. J. Boyle ... ..	82	5	87	—
Brodsworth ... ..	J. Wylie ... ..	7	—	7	—
Armthorpe ... ..	H. F. Renton ... ..	41	—	41	—
Bawtry ... ..	W. F. Ward ... ..	36	4	40	—
Hatfield ... ..	C. D. Walker ... ..	25	—	25	—
Thorne ... ..	J. M. Taylor ... ..	26	7	33	—
Stainforth ... ..	R. M. L. Anderson ... ..	25	2	27	—
<b>Area No. 14.—Staincross.</b>					
Hoyland ... ..	H. R. L. Allott ... ..	23	2	25	1
Worsborough ... ..	H. A. L. Banham ... ..	57	—	57	—
Cudworth ... ..	T. F. Quigley ... ..	69	—	69	—
Darfield ... ..	J. W. Whitworth ... ..	8	—	8	—
Dodworth ... ..	J. Leishman ... ..	23	1	24	2
Darton ... ..	R. Millar ... ..	22	—	22	—
Wombwell ... ..	J. C. Pickup ... ..	35	1	36	—
Hoyland ... ..	P. Lewis ... ..	28	2	30	4
Royston ... ..	H. B. Pare ... ..	45	—	45	3
Bradfield ... ..	J. A. R. Thompson ... ..	23	—	23	—
Stannington ... ..	N. MacPhail ... ..	9	—	9	—
Loxley ... ..	T. A. H. Smith ... ..	2	—	2	—
Chapel-town ... ..	H. Sands ... ..	32	—	32	—
Grenoside ... ..	J. Smail ... ..	52	—	52	—
Stocksbridge ... ..	A. E. Goldie ... ..	19	—	19	—
Tankersley ... ..	P. Lewis ... ..	—	—	—	—
Wortley ... ..	T. H. Easton ... ..	3	—	3	—
Silkstone ... ..	F. L. Whincup ... ..	8	1	9	—
Clayton West ... ..	E. L. Mommens ... ..	—	—	—	—
Thurgoland ... ..	T. H. Easton ... ..	6	—	6	1
Fenistone ... ..	A. A. Masser ... ..	21	3	24	1

TABLE XL—(continued).

Name of Vaccination District	Public Vaccinator	Primary Vaccinations			Re-vaccinations
		Under 1 year	1 year and upwards	Totals	
<i>Area No. 15—Upper Agbrigg</i>					
Kirkburton ... ..	J. A. Stephens ... ..	15	2	17	—
Skelmanthorpe ... ..	D. Bell ... ..	5	—	5	1
Shepley ... ..	M. M. Dey ... ..	3	—	3	1
Holmfirth ... ..	W. D. Galloway ... ..	7	1	8	—
Scholes ... ..	E. Trotter ... ..	22	3	25	—
Honley ... ..	W. H. Smailes ... ..	14	2	16	—
Meltham ... ..	P. MacGirr ... ..	7	2	9	—
Slaithwaite ... ..	R. N. Kirk ... ..	9	1	10	—
Golcar ... ..	S. Hall ... ..	18	5	23	—
Marsden ... ..	G. R. Aspinwall ... ..	9	—	9	1
Kirkheaton ... ..	S. Prior ... ..	1	2	3	—
Springhead ... ..	J. G. Oliver ... ..	4	—	4	—
Saddleshworth ... ..	J. Loftus ... ..	13	—	13	—
<i>Area No. 16—Rother Valley</i>					
Brinsworth ... ..	R. G. Selby ... ..	33	1	34	—
Thurcroft ... ..	G. S. L. Kemp ... ..	28	—	28	—
Wentworth ... ..	H. M. Mills ... ..	1	—	1	—
Wath-on-Dearne ... ..	T. Crowley ... ..	—	1	1	—
Rawmarsh ... ..	D. P. K. Jockel ... ..	12	—	12	—
Maltby ... ..	W. L. Dibb ... ..	32	1	33	1
Swinton ... ..	C. J. H. Aitken ... ..	12	3	15	—
Thryberg ... ..	G. H. Sedgwick ... ..	46	—	46	1
Harthill, Anston ... ..	J. N. Clark ... ..	37	1	38	—
		3,956	241	4,197	108

#### MEDICAL EXAMINATION OF THE STAFF OF THE COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE.

In 1929 the Local Government and other Officers' Superannuation Act, 1922 was adopted by the County Council. Members of the staff holding designated posts at that time were not subjected to medical examination, but all newly appointed officers are required to submit a certificate of medical examination before appointment to a designated post or to the permanent establishment.

Prior to 1937 only certain officers of the County Council were regarded as holding designated posts under the Act, but as from the 1st October, 1937, the provisions of the Act were extended to cover nearly all officers and servants. The County Council has therefore anticipated by several years the position which will be made compulsory regarding whole-time officers as from the 1st April, 1939, by the Local Government Superannuation Act, 1937.

In view of the large number of officers and servants employed by the County Council there is necessarily a considerable volume of medical examinations to be carried out. In the West Riding all of these are not made by the medical staff of the County Council as certificates are accepted from the candidates' own medical practitioners. The form of the report on all medical examinations is one laid down by the County Medical Officer and each report and certificate are submitted to him for final approval.

The following table shows the number of medical examinations made during the last three years:—

	1935	1936	1937
Examinations by County Medical Officer's staff ... ..	152	185	280
Examinations approved by County Medical Officer but made by general practitioners ... ..	232	411	396
Special examinations by County Medical Officer's staff ... ..	6	7	12
	390	603	688

The special examinations are usually made at the request of the "Sickness" Sub-Committee on employees whom it is thought may have become incapable of discharging the duties of their office owing to ill health. Such examinations are made by two or more medical officers.

## PART II.

### THE WORK OF THE COUNTY LABORATORY.

DR. P. L. SUTHERLAND—Bacteriologist and Pathologist.

The total number of specimens examined in the County Laboratory during the year 1937, was 87,996.

This number includes 13,512 specimens received from the County Boroughs of Barnsley, Dewsbury, Doncaster, Halifax and Wakefield, and from the Dewsbury and Heckmondwike Joint Waterworks Board.

The following table shows the number of specimens of different kinds examined during each month of the year.

TABLE XLI.

Month.	Serum Reaction for Enteric Fever	Sputum for Tubercle Bacilli	Suspected Diphtheria	Venereal Disease	Miscel- laneous	Total
January ...	35	532	1,528	2,155	1,714	5,964
February ...	39	510	1,553	2,360	1,812	6,274
March ...	30	479	2,240	2,095	1,709	6,553
April ...	70	599	2,121	2,475	2,268	7,533
May ...	55	602	1,768	2,285	1,692	6,402
June ...	117	641	1,802	2,780	2,599	7,939
July ...	101	591	1,945	2,385	2,230	7,252
August ...	69	413	2,045	2,149	1,859	6,535
September ...	91	494	2,837	2,293	1,966	7,681
October ...	82	550	2,532	2,877	2,053	8,094
November ...	27	548	3,603	2,615	2,018	8,811
December ...	39	435	4,271	2,174	2,039	8,958
Total ...	755	6,394	28,245	28,643	23,959	87,996

The next table gives the figures for 1937, in comparison with those for the previous six years:—

TABLE XLII.

Year.	Serum Reaction for Enteric Fever	Sputum for Tubercle Bacilli	Suspected Diphtheria	Venereal Disease	Miscel- laneous	Total
1931	1,080	5,862	11,323	3,828	8,319	30,412
1932	1,545	5,983	14,750	4,132	11,128	37,538
1933	846	6,423	15,383	4,532	10,145	37,329
1934	522	6,399	25,136	4,964	11,472	48,493
1935	510	6,165	29,494	6,459	13,341	55,969
1936	676	6,216	24,383	9,715	17,359	58,349
1937	755	6,394	28,245	28,643	23,959	87,996

A more classified list of the specimens received during the whole year, showing results where possible, is given in the following table.

TABLE XLIII.

Type of Specimen.	Positive.	Negative.	Total.
<b>ENTERIC FEVER.</b>			
<i>Widal reaction (blood).</i>			
B. Typhosus ...	7	194	201
B. Paratyphosus A ...	—	194	194
B. Paratyphosus B ...	33	171	204
<i>Urines.</i>			
B. Typhosus ...	1	120	121
B. Paratyphosus A ...	—	121	121
B. Paratyphosus B ...	5	116	121
<i>Fæces.</i>			
B. Typhosus ...	3	177	180
B. Paratyphosus A ...	—	179	179
B. Paratyphosus B ...	17	162	179

TABLE XLIII.—(continued).

Type of Specimen.	Positive	Negative	Total
UNDULANT FEVER.	13	143	156
FOOD POISONING ... ..	—	35	35
DYSENTERY ... ..	1	38	39
HUMAN TUBERCULOSIS			
<i>Sputa.</i>			
First examinations ... ..	1,461	4,037	5,498
Second examinations ... ..	25	529	554
Third examinations ... ..	11	331	342
<i>Urine.</i>	18	224	242
URINES ... ..	—	—	1,479
BOVINE TUBERCULOSIS.			
C.V.O. milks from single cows ... ..	75	742	817
C.V.O. group samples ... ..	18	401	419
Mixed milks from various sources ... ..	115	4,108	4,223
Milks from single cows received from County Boroughs ... ..	1	37	38
MILKS FOR BACTERIAL CONTENT. ... ..	—	—	4,697
WATERS FOR BACTERIOLOGICAL EXAMINATION ... ..	—	—	651
DIPHTHERIA.			
Swabs for diagnosis ... ..	1,062	4,422	5,484
Swabs from convalescents ... ..	2,363	14,503	16,866
Swabs from "contacts" ... ..	300	5,595	5,895
VIRULENCE TESTS.			
Cases for diagnosis ... ..	1	10	11
Convalescents ... ..	1	18	19
"Contacts" ... ..	9	28	37
CEREBRO-SPINAL FEVER ... ..	16	156	172
ANTHRAX.			
Human ... ..	2	3	5
Bovine ... ..	—	—	—
Wools ... ..	—	21	21
BIO-CHEMICAL EXAMINATIONS ... ..	—	—	2,537
ZONDEK ASCHHEIM TESTS ... ..	60	60	120
RINGWORM ... ..	82	90	172
OPHTHALMIA NEONATORUM ... ..	4	31	35
CYTOLOGICAL SPECIMENS ... ..	—	—	455
HISTOLOGICAL SPECIMENS (CLINICAL) ... ..	—	—	190
VACCINES ... ..	—	—	27
POST-MORTEM EXAMINATIONS ... ..	—	—	117
MEDICO-LEGAL HISTOLOGY EXAMINATIONS ... ..	—	—	371
EXAMINATIONS FOR THE POLICE ... ..	—	—	35
VENEREAL DISEASE.			
SYPHILIS.			
Wassermann reaction ... ..	798	5,468	6,266
Pallida reaction ... ..	1,180	4,560	5,740
Meinicke reaction M.K.R. II ... ..	1,268	4,886	6,154
Ballungs reaction ... ..	1,499	5,486	6,985
Mastic reaction ... ..	76	142	218
Lange gold sol test ... ..	—	—	—
Slides for Spirochaetes ... ..	—	2	2
GONORRHOEA.			
Gonococcal complement fixation test ... ..	176	789	965
Ballungs gonococcal test ... ..	158	800	958
Slides for gonococci ... ..	261	1,094	1,355
SILICOSIS ... ..	—	—	31
OTHER SPECIMENS ... ..	—	—	6,033

# EXAMINATIONS MADE FOR OTHER AUTHORITIES.

The following table gives the number of examinations made for other Authorities, exclusive of Venereal Diseases examinations, which are given in detail in Table XLVIII on page 72.

TABLE XLIV.

Authority	No. of Specimens	Cost to Authority		
		£	s	d.
Barnsley C.B. ... ..	185	87	8	0
Dewsbury C.B. ... ..	390	107	3	0
Doncaster C.B. ... ..	23	5	11	6
Halifax C.B. ... ..	8	2	1	0
Wakefield C.B. ... ..	1,754	280	19	0
Dewsbury and Heckmondwike Joint Waterworks Board ...	28	14	0	0
	2,388	497	2	6

## ENTERIC FEVER.

**Examination for Widal reaction.**—During the year, 599 specimens of blood were tested for the Widal reaction for the diagnosis of typhoid fever and paratyphoid fever. In the majority of cases the blood was tested against *B. typhosus*, *B. paratyphosus* A, and *B. paratyphosus* B. 7 specimens gave a positive agglutination with *B. typhosus*, and 33 with *B. paratyphosus* B.

It has been mentioned in recent reports that the improvement in the quantity of blood sent to the Laboratory for this examination permitted of the macroscopic test being carried out in the majority of cases.

This improvement has been maintained during 1937 to such an extent, that an additional test for *B. Abortus* has been carried out on a large number of specimens received primarily for examination for enteric fever.

**Examination for *B. typhosus* and *B. paratyphosus* A. and B.**—The number of specimens examined for organisms of the typhoid group was 901. These consisted chiefly of samples of urine and faeces from convalescent cases and from suspected "carriers." Of these, 3 specimens of faeces and 1 of urine were found to contain *B. typhosus*, and 17 of faeces and 5 of urines contained *B. paratyphosus* B.

## UNDULANT FEVER.

156 specimens of blood were examined for undulant fever, and 13 specimens proved positive.

## DYSENTERY.

30 specimens of faeces, 8 of blood, and 1 of urine, were examined during the year for *B. Dysenteriae*, and 1 specimen of faeces showed the presence of *B. Sonne*. The positive case was an isolated one residing at Fitzwilliam.

## FOOD POISONING.

35 specimens were received during the year for examination for food poisoning organisms. These comprised 31 specimens of faeces and 1 specimen each of tinned crab, vomit, potted meat and tinned salmon. In every case the result was negative.

## HUMAN TUBERCULOSIS.

**Sputum.**—The specimens examined microscopically for the tubercle bacillus numbered 5,498 and in 1,461 or 26.5 per cent. the bacillus was found.

554 specimens which had been previously examined twice microscopically with negative result were re-examined by the sedimentation method, and 25 or 4.5 per cent. were found to be positive.

342 specimens which had been previously examined three times microscopically and once by sedimentation with negative result, were again re-examined by the sedimentation method, and by culture. Of these, 11 or 3.2 per cent. were found by one or other, but chiefly by the cultural method, to be positive.

By the sedimentation and cultural methods, 4.0 per cent. of specimens were found to be positive, after two or three microscopic examinations had failed to show the presence of the tubercle bacillus.

**Urine.**—Of the 1,479 specimens of urine which were received for examination, for various reasons, 242 were examined for tubercle bacilli to exclude the presence of tuberculosis of the bladder or kidney. Of these, 18 were found to contain *B. tuberculosis*.

**Other specimens.**—The remaining 150 specimens of human origin examined for the tubercle bacillus were pus 39, pleural fluids 40, faeces 14, cerebro-spinal fluids 52, fluid from knee 5. In 2 specimens of pus, 1 of faeces, and 10 of cerebro-spinal fluid, tubercle bacilli were found.

## BOVINE TUBERCULOSIS.

**Milk.—Veterinary Samples.**—1,236 specimens (817 from individual cows, and 419 group samples) were examined by the biological test. Of these, 75 from single cows or 9.1 per cent., and 18 group samples or 4.2 per cent., were found to contain the tubercle bacillus.

In addition, 802 of the above samples of milk from individual cows, were examined culturally for tubercle bacilli, and 90 or 11.2 per cent., proved positive. Forty-five of these cultural positive results were confirmed by the biological test. In 29 cases, where the cultural result was negative, the biological test proved positive.

**Mixed Milks.**—During the year, samples of milk of all grades were examined by the inoculation test for tubercle bacilli.

The specimens included samples of school milk, and graded milk submitted by the central staff, samples from local sanitary inspectors, and a few sent by the sanitary inspectors of other authorities, *viz.*, Barnsley, Dewsbury and Wakefield County Boroughs.

The following table gives the result of the examination of these milks:—

TABLE XLV.  
Mixed Milks examined for *B. Tuberculosis*.

Class of Milk.	West Riding Administrative Area.									From County Boroughs.			Total.		
	Milk supplied to Schools.			Milks collected by County Central Staff.			Other Mixed Milks.								
	No. Examined.	Positive.	% Positive.	No. Examined.	Positive.	% Positive.	No. Examined.	Positive.	% Positive.	No. Examined.	Positive.	% Positive.	No. Examined.	Positive.	% Positive.
Tuberculin Tested	—	—	—	173	4	2.3	9	—	—	8	—	—	190	4	2.1
Accredited ...	—	—	—	1574	36	2.2	29	—	—	49	4	8.1	1652	40	2.4
Pasteurised	186	8	4.3	—	—	—	107	4	3.7	20	—	—	313	12	3.8
Ordinary ...	362	10	2.7	186	2	1.0	1291	39	3.0	229	8	3.4	2068	59	2.8
	548	18	3.2	1933	42	2.1	1436	43	2.9	306	12	3.9	4223	115	2.7

Thirty-eight samples of milk, taken from single cows, were received from various County Boroughs, and examined with positive result in 1 case.

It was not possible, during 1937, to carry out the biological test on 917 samples of milk, owing to lack of room in the animal house.

The total number of milks examined was 4,223, of which 115 or 2.7 per cent. were found to be tuberculous. It will be observed that, as in previous years, a designated milk is not necessarily free from tubercle.

Of the 18 positive school milks, 4 also failed to fulfil the requirements of the standard set up as regards cleanliness.

Following the practice carried out during previous years, the result of each positive milk was immediately notified by telephone to the Chief Veterinary Officer, who at once instituted investigations for the detection and destruction of the tuberculous animal.

As a result of these investigations, 30 cows were slaughtered during the year. It was ascertained that two other cows showing suspicious symptoms were disposed of, between the sample being taken and the biological result being known. In 61 cases the offending animal could not be found.

In addition, 3 positive cases were referred to the Barnsley Medical Officer of Health, 1 to Brighouse, 6 to Dewsbury, 3 to Keighley, 1 to Leeds, 1 to Sheffield, 2 to Wakefield and 1 each to the County Medical Officers of Health of Lancashire, Nottinghamshire and Staffordshire respectively.

## EXAMINATION OF MILK FOR BACTERIAL CONTENT.

4,697 specimens of milk were examined for bacterial content, and of these, 1,255, or 26.7 per cent. were unsatisfactory.

These samples include the milk supplied to schools, designated milk, and the milk of applicants for licences, collected by the County Central Staff, and milk sent by other Authorities.

The following table gives the details of examinations made:—

TABLE XLVI.  
Mixed Milks examined for Bacterial Content.

Designation.	West Riding Administrative Area.									From County Boroughs			Total		
	Supplied to Schools			Milks collected by County Central Staff			Other								
	Total	Unsatisfactory		Total	Unsatisfactory		Total	Unsatisfactory		Total	Unsatisfactory		Total	Unsatisfactory	
		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage
Tuberculin Tested	—	—	—	227	51	22.4	11	—	—	7	—	—	245	51	20.8
Accredited ...	—	—	—	2060	433	21.0	28	8	28.5	43	9	20.9	2131	450	21.1
Pasteurised	187	41	21.9	—	—	—	105	14	13.3	19	2	10.5	311	57	18.3
Ordinary ...	450	97	21.5	238	57	23.9	1252	519	41.4	70	24	34.2	2010	697	34.6
	637	138	21.6	2525	541	21.4	1396	541	38.7	139	35	25.1	4697	1255	26.7

The instructions contained in the Ministry of Health's Memorandum No. 139/Foods (Jan., 1937) as to method of collection and tests to be applied to samples of milk, was brought into operation from the 1st January, 1937. This Memorandum lays down that milks of all designations (with the exception of pasteurised milk) must be examined by the methylene blue reduction test, and that examination for the coliform bacillus is optional on the part of the bacteriologist. Examination of Tuberculin Tested (Pasteurised) and Pasteurised Milks must be for bacterial content.

#### WATER.

651 samples of water were examined, of which 264 drinking waters were pure, 244 polluted, and 37 of doubtful purity. The remaining 106 were samples of swimming bath waters, of which 65 proved satisfactory, 40 unsatisfactory, and 1 doubtful.

There has been some improvement in the number of satisfactory drinking waters compared to 1936, although the technique employed and the standard applied is still the same, i.e., as laid down by the Ministry of Health in their memorandum No. 71, "The Bacteriological Examination of Water Supplies." The drinking waters received for examination were again mainly from rural springs and wells.

In the investigation of water supplies a careful topographical examination should be made in every case and use should be made of both chemical and bacteriological methods of examination. There is a tendency to neglect chemical in favour of bacteriological examination and to omit topographical examination. Water supplies should only be judged after a careful consideration of the results obtained by all three methods.

#### DIPHThERIA.

During the year, 28,245 swabs were examined for the diphtheria bacillus.

**Swabs for Diagnosis.**—The number of swabs submitted by practitioners for diagnosis was 5,484, of which 1,062 or 19.3 per cent. were positive.

**Swabs from convalescents.**—The number of swabs examined in order to determine if convalescents were free from infection and ready for discharge from isolation, was 16,866, and of these, 2,363 or 14.0 per cent. were found to be positive. The swabs were received chiefly from the medical superintendents of isolation hospitals.

**Swabs from "contacts."**—The number of swabs from "contacts" was 5,895, of which 300, or 5.0 per cent. were positive. The swabs were collected from persons, mostly children, known to have been in contact with cases of diphtheria, from suspected "carriers," and from children attending schools where diphtheria was prevalent. These specimens were sent by local medical officers of health, or collected by members of the central staff.

**Virulence tests.**—The total number of strains of diphtheria bacilli isolated and tested for virulence was 67. As far as possible in all positive cases the type of *B. Diphtheriae* is determined. When the organism is of the gravis type it is considered unnecessary to make a virulence test as these are almost invariably virulent. As the gravis type is the prevalent type of *B. Diphtheriae* very few virulence tests are therefore necessary and they are reserved for cases in which doubtful organisms are found and cases in which the test is requested by the Practitioner.

TABLE XLVII.  
Virulence Tests.

	Positive	Negative	Total
Cases for diagnosis ...	1	10	11
"Convalescents" ...	1	18	19
"Contacts" and "Carriers" ...	9	28	37
	11	56	67

#### VENEREAL DISEASES.

The number of pathological examinations performed under the Public Health (Venereal Diseases) Regulations, 1916, was 28,643. Of these, 11,124 were made on behalf of the County Boroughs of Barnsley, Dewsbury, Doncaster, Halifax and Wakefield.

TABLE XLVIII.  
Nature of Test.

District	Specimens examined for										Total	Cost to Authority
	SYPHILIS							GONORRHOEA				
	Wassermann Reaction	Pallida Reaction	Meinicke Reaction M.K.R. II.	Ballungs Reaction	Mastic Reaction	Lange Gold Sol Test	Slides for Spirochaetes	Gonococcal Complement Test	Ballungs Gonococcal Test	Slides for Gonococci		
West Riding ...	3820	3657	3881	4396	153	—	2	524	524	562	17519	£ s. d. —
Barnsley C.B. ...	1	—	—	—	—	—	—	—	—	—	1	0 7 0
Dewsbury C.B.	293	261	276	261	1	—	—	5	5	188	1290	118 8 0
Doncaster C.B.	529	464	508	781	1	—	—	309	302	572	3466	393 8 0
Halifax C.B. ...	1168	946	1050	1035	56	—	—	33	33	7	4328	421 11 6
Wakefield C.B.	455	412	439	512	7	—	—	94	94	26	2039	194 2 0
	6266	5740	6154	6985	218	—	2	965	958	1355	28643	1127 16 6

**CEREBRO-SPINAL FEVER.**

103 specimens of cerebro-spinal fluid were examined for the presence of meningococci. In 4 specimens of fluid the meningococcus was found, which confirmed the diagnosis of cerebro-spinal fever, and 2 showed the presence of pneumococci (pneumococcal meningitis).

52 fluids which were negative as regards meningococci, were examined culturally to exclude tuberculosis, and in 10 the tubercle bacillus was found, which proved the disease was tuberculous meningitis. In 87 specimens the result was negative.

In addition, 17 swabs from persons who had been in contact with cases of cerebro-spinal fever were examined with negative results. Two of these swabs contained organisms giving reactions similar to the meningococcus, but subsequent examinations from these cases proved negative.

**HUMAN ANTHRAX.**

5 specimens were received during the year for examination for *B. Anthracis*. In 2 cases the result was positive, particulars of which are as follows:—

Male; Heckmondwike; Woolworker.

Male, age 20; Mirfield; Woolworker.

**EXAMINATION OF WOOL, etc., FOR ANTHRAX.**

21 samples of wool were examined for the presence of *B. Anthracis*, with negative result in each case.

**RINGWORM.**

The number of specimens of hairs and scales examined was 172, and 82 or 47.6 per cent. gave a positive result.

**OPHTHALMIA NEONATORUM.**

35 specimens of pus from the eyes of infants suffering from ophthalmia, suspected to be of gonorrhoeal origin, were examined, 4 of which proved positive.

**CYTOLOGICAL EXAMINATIONS.**

455 examinations were made, including examinations of blood films and determination of the number of white cells, red cells and hæmoglobin.

**SILICOSIS.**

Material from 31 post-mortem examinations was examined for suspected cases of silicosis. The lungs were examined by the naked-eye, microscopically and chemically, and were chiefly from men employed in stone (masons and quarrymen). The cause of death in these cases was usually silicosis and/or tuberculosis, but other causes of death included two cases of carcinoma, two ruptured duodenal ulcers, bronchitis, pneumonia and septicæmia. Chemical examination showed that the ash of the lung contained silica to the extent of:—1.48, 0.52, 1.06, 0.38, 0.64, 0.08, 0.32, 0.16, 0.82, 0.54, 0.42, 1.12, 0.92, 0.26, 0.54, 0.78, 2.02, 0.58, 1.28, 0.40, 0.06, 0.38, 0.80, 2.30, 1.18, 0.06, 0.66, 0.74, 0.36, 0.88, 0.58 respectively.

**BIO-CHEMICAL EXAMINATIONS.**

During the year, 2,537 bio-chemical examinations were made. The chief items amongst these examinations comprised blood sugar and blood urea estimations, the examination of samples of pasteurised milk for pasteurisation efficiency (phosphatase test), and the examinations of blood and urine in connection with a special ante-natal investigation for the Ministry of Health.

## VACCINES.

27 autogenous vaccines were prepared during the year, from the following material:— 8 sputa, 9 swabs from boils or carbuncles, 6 throat or nasal swabs, 3 discharges from teeth, and 1 hairs from beard.

## ZONDEK ASCHHEIM TESTS.

120 specimens of urine were received for the Zondek Aschheim test; 60 of these proved positive.

## POST-MORTEM EXAMINATIONS AND INQUESTS.

During the year, 117 examinations were made by Dr. Sutherland, at the request of West Riding Coroners, and evidence was given at 109 inquests. Evidence was also given at Leeds Assizes (7 cases), at Barnsley (3 cases), Doncaster (6 cases), Halifax, Harrogate, Holmfirth, Pontefract, Selby (2 cases), Sherburn, Tadcaster and Wakefield West Riding Magistrates' Courts and at Wakefield Quarter Sessions (2 cases).

Details of the cases examined were as follows:—

TABLE XLIX.

No.	Age.	Sex.		No.	Age.	Sex.	
1	39	F.	Aneurysm of aorta with rupture into pericardium.	57	43	M.	Myocarditis, due to coronary artery atheroma.
2	New born	M.	Cerebral hæmorrhage.	58	34	F.	Acute pleurisy.
3	6 days	M.	Asphyxia.	59	64	M.	Silicosis and pericarditis.
4	30	M.	Acute suppurative appendicitis, thrombosis of portal vein, and abscesses in liver.	60	57	M.	Silicosis and atheroma of coronary arteries.
5	28	F.	Shock; cause unknown.	61	9 months	M.	Shock of anaesthetic and operation for circumcision.
6	63	M.	Injuries to mouth and face. Alleged manslaughter.	62	57	M.	Gastro enteritis.
7	39	M.	Sudden cardiac failure due to aortic stenosis.	63	12	M.	Septicæmia following septic arthritis.
8	63	M.	Silicosis, bronchitis, and broncho-pneumonia.	64	71	M.	Carcinoma of orbit.
9	36	M.	Death due to anaesthetic and fatty heart.	65	57	M.	Silicosis and tuberculosis.
10	56	M.	Nephritis.	66	40	F.	Sepsis following abortion.
11	5 months	M.	Capillary bronchitis and asphyxia.	67	68	M.	Carcinoma of stomach and silicosis.
12	47	M.	Carcinoma of liver, spleen, pancreas and supra-renals.	68	74	F.	Nephritis; arterial degeneration and sub-dural hæmorrhage.
13	50	M.	Cystitis and nephritis following spinal paralysis.	69	2 days	F.	Congenital heart disease.
14	3 days	F.	Prematurity and icterus neonatorum.	70	32	M.	Coronary artery thrombosis and stenosis of coronary artery orifices.
15	7 months	M.	Asphyxia and capillary bronchitis.	71	26	F.	Endothelioma of pleura.
16	2 days	M.	Asphyxia; atelectasis.	72	60	M.	Silicosis and gangrene of the right lung.
17	15	M.	Acute meningitis following otitis media.	73	62	M.	Carcinoma of rectum.
18	69	M.	Chronic valvular disease of the heart and silicosis.	74	26	M.	Pulmonary tuberculosis.
19	53	M.	Morphine poisoning.	75	3 months	M.	Endothelioma.
20	35	F.	Chronic nephritis and labour.	76	53	M.	Suppurative osteo-arthritis and broncho-pneumonia.
21	14	F.	Acute gastritis.	77	New born	—	Still born.
22	28	F.	Acute pancreatitis.	78	60	M.	Silicosis and tuberculosis.
23	60	M.	Drowning. Suicide.	79	16	F.	Septicæmia.
24	New born	F.	Lack of attention at birth. Case of concealment.	80	29	M.	Broncho-pneumonia. Suicide—cut throat.
25	80	M.	Enlarged prostate; chronic nephritis and uræmia.	81	3	F.	Coal gas poisoning.
26	3 months	F.	Fracture of vault and base of skull. Murder.	82	52	M.	Fracture of skull.
27	31	F.	Salpingitis; pelvic abscess, purulent bronchitis, and shock from operation and anaesthetic.	83	52	M.	Acute lobar pneumonia.
28	15 months	F.	Drowning. Murder.	84	2 days	M.	Hæmophilia neonatorum.
29	4 days	F.	Hæmophilia neonatorum.	85	35	F.	Hæmorrhage following abortion.
30	63	M.	Silicosis and carcinoma of right lung.	86	2 days	M.	Hæmophilia neonatorum.
31	5 weeks	M.	Bronchitis.	87	36	M.	Tuberculosis and silicosis.
32	21	M.	Electrocution.	88	26	F.	Sepsis following abortion.
33	60	M.	Silicosis and tuberculosis.	89	46	M.	Myocarditis.
34	54	M.	Septic pharyngitis.	90	33	M.	Tuberculosis and silicosis.
35	New born	M.	Strangulation. Infanticide.	91	4 days	F.	Asphyxia.
36	5 months	M.	Atelectasis; congenital heart disease and anaesthesia.	92	2	M.	Septic tonsillitis.
37	New born	F.	Lack of attention at birth.	93	23	M.	Pulmonary tuberculosis.
38	24	F.	Drowning. Suicide.	94	14	F.	Drowning.
39	23	M.	Tuberculosis.	95	8 months	F.	Miliary tuberculosis.
40	61	M.	Pneumonia and pericarditis.	96	6	M.	Appendicitis; acute peritonitis.
41	44	F.	General peritonitis following abortion.	97	61	M.	Cerebral tumour. Epileptiform fit.
42	6 weeks	M.	Intestinal hæmorrhage.	98	71	F.	Exposure.
43	38	M.	Shock of operation for duodenal ulcer (ruptured) and anaesthetic.	99	50	F.	Fracture of skull.
44	4 days	M.	Icterus neonatorum.	100	50	M.	Cerebral tumour.
45	38	M.	Myocarditis.				Chronic valvular disease of heart (aortic obstruction).
46	43	M.	Silicosis and tuberculosis.	101	53	M.	Tuberculosis of spine and pulmonary tuberculosis.
47	64	M.	Silicosis and pneumonia.	102	New born	F.	Lack of attention at birth. Case of concealment.
48	18	F.	Septicæmia.	103	New born	M.	Hæmophilia neonatorum.
49	54	M.	Pyelo nephritis, paraplegia and silicosis.	104	6 weeks	M.	Broncho-pneumonia.
50	53	M.	Shock from operation for appendicitis and anaesthetic.	105	43	M.	Pulmonary tuberculosis.
51	57	M.	Tuberculosis.	106	34	M.	Silicosis and myocarditis.
52	20	F.	Fractures of lower jaw; hæmorrhage, etc. Motor accident.	107	32	F.	General peritonitis and acute endometritis following a premature confinement.
53	43	M.	Silicosis.	108	New born	M.	Congenital defects.
54	New born	—	Body decomposed. Cause of death not ascertainable.	109	50	M.	Silicosis.
55	23	M.	Electrocution.	110	53	F.	Death from burns.
56	64	M.	General peritonitis; ruptured duodenal ulcer; silicosis.	111	48	M.	Carbon dioxide poisoning.
				112	46	M.	Pulmonary tuberculosis.
				113	25	M.	Hæmorrhage following re-amputation of leg.
				114	11 weeks	F.	Capillary bronchitis.
				115	62	M.	Atheroma of coronary arteries. Myocarditis.
				116	4	M.	Gastro-enteritis.
				117	3 months	F.	Capillary bronchitis.

## EXAMINATIONS MADE FOR THE POLICE.

35 examinations were carried out for the Police (31 for the West Riding, 3 for Wakefield City and 1 for Barnsley Borough), and as was the case last year, the majority of the examinations were of clothing for spermatozoa, in connection with cases of alleged criminal assault. In addition, examinations were made of clothing and materials in two motor car accident cases, 2 cases of alleged infanticide, 3 cases of assault, the malicious wounding of a dog, bestiality, unlawful wounding and attempted murder. Other cases comprised the estimation of the alcohol content of a sample of lime juice in a case of alleged drinking out of hours, the determination of a specimen of slippery elm bark, and the contents of a bottle in cases of alleged abortion, the examination of a sack for blood in a case of fowl robbery, and the examination of the contents of a bottle in a case of misrepresentation.

## BIOLOGICAL EXAMINATIONS.

During the year, 6,005 specimens were examined biologically, involving the use of 12,356 animals (guinea-pigs) for diagnostic purposes. The tests were simple subcutaneous inoculations for the detection of tubercle bacilli chiefly in samples of milk, for the determination of the virulence of *B. diphtheriæ* and for the detection of anthrax bacilli.

Since February of 1937, the biological test for the tubercle bacillus has been replaced by cultural examination in the case of sputa, pus, cerebro-spinal fluids and other routine samples unless a biological examination is specially requested by the sender.

The cultural method has proved superior to biological examination in these cases and has resulted in a considerable saving of guinea-pigs. An attempt is made, however, to confirm the diagnosis by animal inoculation in the case of every positive culture.

These tests were made not only for the West Riding County Council, but also on behalf of the County Boroughs of Barnsley, Dewsbury, Doncaster, Halifax, Wakefield, and the Government Wool Disinfecting Station at Liverpool.

TABLE L.

List of Sanitary Districts in the West Riding showing the Number of Specimens received from each during 1937.

Urban Districts.		Urban Districts.		Rural Districts.	
Adwick-le-Street	158	Maltby	123	Barnsley	19
Aireborough	109	Meltham	70	Bowland	75
Altofts	31	Mexborough	41	Doncaster	370
Baildon	47	Midgley	13	Goole	127
Barnoldswick	409	Mirfield	77	Great Ouseburn	53
Batley B.	1,052	Morley B.	750	Hemsworth	248
Bentley-with-Arksey	127	New Mill	8	Keighley	160
Bingley	521	Normanton	174	Kiveton Park	56
Brighouse B.	652	Oakworth	10	Knaresborough	11
Castleford	331	Ossett B.	142	Penistone	32
Clayton West	10	Otley	70	Pontefract	65
Colne Valley	118	Oxenhope	—	Ripon and Pateley Bridge	40
Conisborough	63	Penistone	41	Rotherham	225
Cudworth	12	Pontefract B.	220	Sedburgh	42
Darfield	16	Pudsey B.	60	Selby	6
Darton	44	Queensbury and Shelf	171	Settle	46
Dearne	284	Rawmarsh	16	Skipton	90
Denby and Cumberworth	25	Ripon C.	45	Tadcaster	316
Denholme	5	Ripponden	23	Thorne	18
Dodworth	10	Rothwell	65	Todmorden	13
Earby	47	Royston	22	Wakefield	231
Elland	94	Saddleworth	31	Wetherby	142
Emley	—	Selby	343	Wharfedale	85
Featherstone	327	Shelley	9	Wortley	143
Flockton	—	Shepley	3		
Garforth	24	Shipley	1,124	County Boroughs:—	
Goole B.	221	Silsden	8	Barnsley	185
Gunthwaite and		Skelmanthorpe	6	Dewsbury	390
Ingbirchworth	—	Skipton	68	Doncaster	23
Harrogate B.	529	South Crosland	10	Halifax	8
Haworth	63	Sowerby	116	Wakefield	1,754
Hebden Royd	49	Spensborough	61		
Heckmondwike	37	Stanley	101	Hospitals, etc.	
Hemsworth	103	Stocksbridge	36		27,573
Holme	—	Swinton	143	School Medical Inspection	
Holmfirth	57	Thurstonland	7	and Child Welfare Staff	2,085
Honley	18	Thurstonland and Farnley	—	County Central Staff	5,919
Horsbury	42	Tyas	—	Tuberculosis Staff	3,153
Horsforth	506	Tickhill	4	Veneral Specimens	28,643
Hoyland Nether	406	Todmorden B.	293	Specimens from Chief	
Hoylandswaine	3	Wath-upon-Deane	152	Veterinary Officer and	
Ilkley	121	Whitley Upper	—	Staff	2,094
Keighley B.	1,689	Whitwood	4	Government Wool Disin-	
Kirkburton	18	Wombwell	140	fecting Station, Liverpool	24
Kirkheaton	6	Worsborough	18	Staff Appointments	503
Knaresborough	6			Total No. of Specimens	
Knottingley	58			examined bacteriologic-	
Lepton	3			ally	87,996

## PART III.

## MATERNITY AND CHILD WELFARE.

DR. R. LAWRENCE.—Chief Assistant Medical Officer for Child Welfare and School Medical Inspection.

DR. J. WOOD WILSON—Assistant County Medical Officer.

## Statistics, 1937.

	Whole of Administrative County.	County Council's Maternity and Child Welfare Area.
Estimated Population, 1937 ... ..	1,506,110	990,432
No. of Live Births (registered) ... ..	22,978	15,680
No. of Illegitimate Births ... ..	855	568
No. of Stillbirths ... ..	1,081	759
Birth Rate ... ..	15.2	15.8
Deaths under one year ... ..	1,368	944
Infantile Mortality Rate ... ..	60	60
<i>*Infantile Mortality Rate, average for 10 years, 1927-36</i>	69	69
Notified cases of Ophthalmia Neonatorum ... ..	133	95
Notified cases of Puerperal Pyrexia ... ..	245	174
Maternal deaths from Sepsis ... ..	21	15
Maternal deaths from Other Causes ... ..	69	48
Maternal Mortality Rate (Per 1,000 Live and Still births)	3.74	3.83
" " " (Per 1,000 Live births) ... ..	3.92	4.02
<i>*Maternal Mortality Rate, average for 10 years, 1927-36</i>	5.42	5.48

\* Per 1,000 live births.

## Midwives Acts, 1902 to 1936.

The County Council is the Local Supervising Authority under the Midwives Acts for the whole of the Administrative County.

The present position of the midwifery service is as follows:—

During the year 1937, 605 midwives notified their intention to practise, and out of the total number of births, including still-births, *i.e.*, 24,059, they reported their attendance upon 16,297 cases in the capacity of midwives and 2,697 in the capacity of maternity nurses—a total of 18,994 cases or an average of approximately 31.9 cases each.

These 605 midwives are classified as follows:—

Employed by County Council ... ..	181
District Nurse-midwives ... ..	179
Employed in Institutions ... ..	73
Independent Midwives ... ..	172

The supervision is carried out by the County Medical Officer, his Assistants, two non-medical Supervisors and four Inspectresses. During the year, 1,058 visits of inspection were made. One midwife was cautioned by the County Medical Officer for minor infringements of the Rules; and two midwives were reported to the Committee for unsatisfactory practice. Two midwives died and 15 surrendered their C.M.B. certificates under Section 5 of the Midwives Act, 1936.

## Number of Births attended by Certified Midwives.

Midwives attended 16,297 births and 2,697 cases of confinement as Maternity Nurses, out of a total of 24,059 live and still births registered, or 78.9 per cent.

The following table shews the number of births attended by midwives, and the percentage to the total births registered, compared with previous years:—

TABLE LI.

Year.	Births attended by midwives.	Total Births registered in County Area.			Percentage attended by midwives.
		Live	Still	Total	
1932	17,198	24,319	1,239	25,558	67.2
1933	17,284	23,084	1,143	24,227	71.3
1934	17,836	23,393	1,183	24,576	72.5
1935	18,409	23,077	1,136	24,213	76.0
1936	19,007	22,995	1,071	24,066	79.0
1937	18,994	22,978	1,081	24,059	78.9

The following table shews the number of cases attended by individual midwives during the years 1933-37:—

TABLE LII.

Year	No. of Cases attended by Independent Midwives				No. of Cases attended by Midwives employed in Institutions				No. of Cases attended by Midwives employed by Nursing Associations				No. of Cases attended by Salaried Midwives (including Cases when in independent practice)			
	100 to 200	50 to 100	Under 50	Nil	100 to 200	50 to 100	Under 50	Nil	100 to 200	50 to 100	Under 50	Nil	100 to 200	50 to 100	Under 50	Nil
1933	21	77	213	29	—	5	57	6	—	5	164	17	—	—	—	—
1934	24	74	232	15	—	10	71	3	—	9	160	1	—	—	—	—
1935	16	89	206	25	—	4	77	15	—	6	158	6	—	—	—	—
1936	31	86	223	25	—	5	79	14	—	9	152	1	—	—	—	—
1937	2	21	121	28	—	24	44	5	—	14	163	2	16	70	95	—

#### Medical Aid Records.

The following table summarises the records received from midwives during the year 1937 and compares them with similar records for previous years:—

TABLE LIII.

	1933	1934	1935	1936	1937
Records of sending for Medical aid ...	5,953	6,385	6,398	6,596	7,731
Deaths of (a) Mother ...	17	14	15	5	17
(b) Child ...	123	126	122	105	157
Still-births ...	322	327	216	294	332
Laying out the dead ...	27	35	47	31	51
Liability to be a source of infection ...	107	157	155	185	190
Substitution of artificial feeding for breast-feeding ...	174	180	193	232	361

The number of copy medical aid records received from midwives during the year was 7,731 or 40.7 per cent. of the cases attended.

The following table shows the nature of the cases in which medical aid was sought, classified according to the Rules of the Central Midwives Board:—

TABLE LIV.

#### RULE E 12(1).

Nil.

#### RULE E.12(2)—PREGNANCY.

Hysteria ...	14	Post Maturity ...	10	Toxaemia ...	19
Ante-Partum Haemorrhage ...	303	Oedema ...	67	Hydramnios ...	10
Abortion or Miscarriage ...	262	Ante-natal Examination ...	154	Miscellaneous ...	261
Threatened Abortion ...	139	Purulent Discharge ...	16	Hyperemesis ...	82
Eclampsia ...	16	Varicose Veins ...	32	Contracted Pelvis ...	24
Albuminuria ...	253	Hæmorrhoids ...	22	Insanity ...	1
High Blood Pressure ...	31	Anæmia ...	26	Sugar in Urine ...	5
Heart Condition ...	27	Pyelitis ...	13	Nephritis ...	3

#### RULE E.12(3)—LABOUR.

Adherent Placenta ...	85	Contracted Pelvis ...	41	Eclampsia ...	9
Retained Placenta or Membrane ...	82	Rigid Cervix or Perineum ...	45	Miscellaneous ...	132
Placenta Prævia ...	31	Collapse ...	46	Prolapse ...	12
Ruptured Perineum ...	1,631	Breech Presentation ...	178	Albuminuria ...	24
Prolonged Labour ...	602	Undefined do. ...	79	Foetal Distress ...	23
Obstructed Labour ...	166	Transverse do. ...	21	Debility ...	16
Precipitate Labour ...	20	Funis do. ...	27	Anæsthetic ...	8
Uterine Inertia ...	314	Face do. ...	17	Deformity of Mother ...	26
Laceration of Cervix ...	11	Hand do. ...	16	Heart Trouble ...	8
Premature Labour ...	73	Foot do. ...	22	Hysteria and Distress ...	25
Hydramnios ...	5	Occipito-Posterior Presentation ...	113		

TABLE LIV—(continued).

## RULE E.12(4)—LYING-IN.

Post-Partum Hæmorrhage... 148	Miscellaneous ... 172	Pyrexia ... 213
White Leg ... 4	Phlebitis ... 44	Mastitis ... 56
Oedema ... 21	Eclampsia ... 2	Albuminuria ... 10
Prolapse of Uterus ... 4	Debility ... 40	Sub-involution of Uterus ... 7
Thrombosis ... 7	Varicosity ... 14	Collapse ... 18
Anæmia ... 6	Post-natal Examination ... 29	Pyelitis ... 2
Purulent Discharge ... 7	Rigor ... 7	Weak Heart ... 9
		Puerperal Insanity ... 1

## RULE E.12(5)—THE CHILD.

Injuries at Birth ... 3	Unsatisfactory umbilicus ... 11	Tongue Tied ... 23
Twins and Triplets ... 12	Icterus Neonatorum ... 38	Inflammation of Eyes ... 263
Other Malformations ... 57	Miscellaneous ... 93	Prematurity ... 104
Pemphigus ... 5	Hare Lip and Cleft Palate... 18	Phimosis ... 68
Convulsions ... 21	Spina Bifida ... 27	Rash ... 55
Dangerous Feebleness ... 251	Still-birth ... 58	Hæmorrhage from mouth ... 5
Talipes ... 10	Melæna ... 13	Asphyxia ... 54
Imperforate anus ... 2	Bronchitis ... 10	Deaths of Infants ... 4
		Macerated Fœtus ... 7

**Still-Births notified by Midwives.**

The number of still-births notified by midwives was 332 or 1.75 per cent. of the total births attended by them.

The following table gives the number of still-births attended by midwives, and the percentage to total births attended by them, compared with previous years:—

TABLE LV.

Year	Number of Births attended by Midwives	Number of Still-births notified.	Percentage of Still-births to Births attended
1933	17,284	322	1.86
1934	17,836	337	1.89
1935	18,400	316	1.72
1936	19,007	294	1.55
1937	18,994	332	1.75

**Liability to be a Source of Infection.**

The number of notifications of liability to be a source of infection received from midwives was 190 compared with 185 for the previous year.

The following table shows the cases of infection with which midwives came into contact:—

Puerperal Pyrexia ...	115
Scarlet Fever ...	20
Diphtheria ...	7
Pemphigus Neonatorum ...	22
Erysipelas ...	2
Dermatitis ...	6
Typhoid Fever ...	2
Tonsillitis ...	4
Pneumonia ...	2
Other cases of infection ...	10
	<b>190</b>

During the year 2 midwives were suspended from midwifery practice for a period exceeding 24 hours owing to contact with cases of infectious disease.

**Provision of Midwives.**

At the present time the County Council is not training midwives, but in accordance with circular 559, dated 27th February, 1925, of the Ministry of Health, a sum of £30 is paid to the West Riding Nursing Association in respect of each newly trained midwife placed in districts in the West Riding Administrative Area; these average 7 yearly.

During 1937, a sum of £180 was paid to the West Riding Nursing Association for the provision of 6 newly trained midwives to serve the areas of Yeadon (Aireborough U.), Greetland (Elland U.), Killinghall and Hampsthwaite (Nidderdale R.), Bramley (Rotherham R.), and Ulleskelf (Tadcaster R.).

**Payment of Midwife's Fee in Necessitous Cases.**

Prior to the County Council's Scheme under the Midwives Act, 1936, coming into operation on the 1st of July, 1937, 888 applications for assistance towards the payment of the midwives' fees were granted and 166 refused on the grounds that after verification the net income was found to exceed the scale of payment.

**Payment of Doctors called to the Assistance of a Midwife.**

This is a statutory obligation under the Midwives Act, 1918, and during 1937, midwives practising in the West Riding issued 7,731 medical aid notices, and a sum of £8,760 was paid to medical practitioners called by midwives in emergency.

**Compensation of a midwife when suspended from practice on account of infection, not being herself in default.**

This is a statutory obligation under the Midwives Acts, and during 1937 one midwife was paid the sum of £2 4s. 0d.

### Compensation of Midwives for loss of cases sent to a Maternity Hospital.

This scheme is carried out by the County Council and the sum of 15/- is paid for each patient booked by the midwife and sent to hospital by the medical officer to an ante-natal clinic or a medical practitioner, on account of some abnormality.

During 1937, 300 cases were referred to a maternity hospital, and a sum of £225 0s. 0d. was paid in compensation to midwives. As from the 1st July, 1937, compensation under this heading is no longer paid to midwives employed by the County Council under the Midwives Act, 1936.

### Local Government Act, 1929.—Review of County Districts.—Maternity and Child Welfare Services.

#### (a) Nursing Associations.

In accordance with the provisions of the County of York, West Riding Review Order, 1937, which took effect on the 1st April, 1937, the areas set out in column 2 of the following schedule were amalgamated with the districts shown in Column 3 thereof and the grants paid by the County Council in respect of the health visiting and school nursing duties undertaken by the Nursing Associations mentioned in Column 1 terminated on the dates set out in Column 5.

Nursing Association.	Areas.	Transferred to	Amount of grant.	Date of termination of grant.
(1)	(2)	(3)	(4)	(5)
Hartshead-cum-Clifton District Nursing Association ... ..	Hipperholme U.D. Southowram U.D. (part) Clifton P. (part) Hartshead P. (part) Norwood Green and Coley P.	Brighouse B.	£ s. d. 40 0 0	1937. 31st May
	Hartshead P. (part) Clifton P. (part)	Spenborough U.D.		
Gildersome Nursing Association ... ..	Gildersome U.D.	Morley B.	34 16 0	30th June
Acomb Nursing Association ... ..	Acomb P. (part)	York C.B.	56 0 0	30th June

#### (b) Medical Officers of Centres.

The appointments of the following part-time Medical Officers of Centres in districts transferred to areas autonomous for maternity and child welfare services were terminated on the 1st April, 1937.

CENTRE.	MEDICAL OFFICER.
Ardsley E. and W. Child Welfare ... ..	Dr. B. G. Ewing
Ardsley West Ante-Natal ... ..	Dr. Dorothy Summers
Birkenshaw Child Welfare ... ..	Dr. J. G. Bremner
Birstall Child Welfare ... ..	Dr. A. Dick
Drighlington Child Welfare ... ..	Dr. Dorothy Summers
Farsley Child Welfare ... ..	Dr. T. H. Elmer
Hipperholme Child Welfare ... ..	Dr. Elizabeth Thompson
Methley Child Welfare ... ..	Dr. C. C. Hargreaves
Oulton Child Welfare ... ..	Dr. C. W. Goldsborough

#### (c) Child Welfare Nurses.

Six child welfare nurses were concerned in areas affected by the provisions of the Order but none of the Authorities concerned desired the transfer of their services and accordingly arrangements were made for their retention on the staff.

#### (d) Ilkley Urban District.

A communication was received from the Ilkley Urban Council asking the County Council to allow their Child welfare nurse to continue to carry out the health visiting work in Burley-in-Wharfedale and Menston, which districts were added to the Ilkley Urban District under the provisions of the County of York, West Riding Review Order, 1937, on the 1st April 1937, pending the preparation of a scheme by the Urban Council to cover the enlarged Urban District.

The County Council continued to carry out the maternity and child welfare services in the Burley-in-Wharfedale and Menston areas from the 1st April to 11th August, 1937, on payment by the Ilkley Urban Council at the rate of £140 per annum in respect of these services. The amount paid in respect of the nurses' services was £51 0s. 3d.

### Local Government Act, 1929.—Section 101.—Grants to Voluntary Associations.

Under the County Council's scheme for the establishment of a domiciliary midwifery service, which came into operation on the 1st July, 1937, the grants to nursing associations under Section 101 of the Local Government Act, 1929, were cancelled with the exception of the sum of £8 per annum paid to the Denaby Main Nursing Association. The Hebden Bridge, Lepton and Upton District Nursing Associations declined to participate in the County Council's scheme under the Midwives Act, 1936, and will therefore continue to receive the grants payable under this Section.

The following grants were paid under this Section during the financial year 1937-38:—

(a) <b>Midwifery—</b>	£	s.	d.
West Riding County Nursing Association ...	294	13	7
57 Nursing Associations ...	221	4	9
Denaby Main Nursing Association ...	8	0	0
(b) <b>Infant Welfare Centre—</b> Bentham ...	5	4	7
(c) <b>Maternity Home—</b> Heckmondwike ...	214	4	11
(d) <b>Babies' Home—</b> St. Agnes Babies' Home, Harrogate	206	6	5
	<b>£949</b>	<b>14</b>	<b>3</b>

The amount previously paid under the scheme made under this Section was £1,933 1s. 8d.

### Notification of Puerperal Pyrexia.

Beds are not specially reserved for the treatment of puerperal sepsis, but cases are transferred to any of the following hospitals with which the County Council has an arrangement.

#### ISOLATION HOSPITALS.

Colne and Holme Joint Hospital, Meltham.	Skipton Joint Hospital, Skipton.
Leeds City Fever Hospital, Seacroft.	Keighley and Bingley Joint Hospital,
Wharfedale Joint Hospital, Menston.	Morton Banks.
	Goole Joint Hospital.

#### VOLUNTARY GENERAL HOSPITALS.

Jessop Hospital for Women, Sheffield.	Leeds Maternity Hospital.
Huddersfield Royal Infirmary.	York County Hospital.
Harrogate and District General Hospital.	

#### MUNICIPAL HOSPITALS.

Staincliffe County Hospital, Dewsbury.	Halifax General Hospital (St. Luke's).
White Rose County Hospital, Wakefield.	

#### PRIVATE NURSING HOMES.

St. George's Nursing Home (attached to the Edenfield Maternity Home at Doncaster) is set aside chiefly for the treatment of cases of puerperal sepsis.

#### Isolation Wards connected with Maternity Units.

An observation ward with one bed is used for obscure cases of pyrexia at the Skipton and District Hospital. At the County Maternity Home, Montagu Hospital, Mexborough, two isolation wards containing one bed each are available. At the Listerdale Maternity Home a separate unit containing two observation beds is provided.

The following table gives details of the special services provided by the County Council in connection with cases of Puerperal Pyrexia, together with the cost of such services to the County Council, during the year 1937.

	Cases	Amount	£	s.	d.
Hospital Treatment ...	150	2,145	10	5	
*Consultant Obstetrician (10 cases)		50	8	0	
Ambulance (4 cases)		5	5	10	
Domiciliary Nurse ...	1	9	0	4	
	<b>151</b>	<b>£2,210</b>	<b>4</b>	<b>7</b>	

\*The services of the Consultant Obstetricians were requested in 10 cases, which were removed to hospital, and are included in the list of hospital cases.

### The Public Health (Ophthalmia Neonatorum) Regulations, 1926-1937.

On the 21st January, 1937, The Public Health (Ophthalmia Neonatorum) Amendment Regulations, 1937, were made by the Minister of Health.

The effect of these Amendment Regulations is that the Authority for maternity and child welfare is the Authority for the administration of the Regulations.

The following table shows the number of cases of ophthalmia neonatorum reported in the whole of the Administrative County during the last five years:—

1933	1934	1935	1936	1937
87	105	100	112	133

The details of the cases reported upon in the County Notification of Births Area, are shown in the following table, in accordance with the instructions issued by the Ministry of Health (Circular 648, p. 12, dated December, 1925).

Cases.			Vision Unimpaired.	Vision Impaired.	Total Blindness.	Removed from Area.	Died.
Notified.	Treated.						
	At Home.	In Hospital.					
103	80	23	98	1	—	—	4

## Public Health Act, 1936.

### Registration of Nursing Homes—Sections 187-195.

The Nursing Homes Registration Act, 1927, which came into force on the 1st July, 1928, repealed Part II. of the Midwives Act, 1926. It is now incorporated in the Public Health Act, 1936.

Under this Act, certain types of Nursing Homes are required to be registered by the Local Supervising Authority. There is a penalty not exceeding £50 on summary conviction for non-compliance with this requirement.

The number of registered Nursing Homes in existence at the end of the year was 56 classified as follows:—

Type of Case.	No. Registered.
Medical, Surgical and Maternity ...	16
Medical and Surgical ...	5
Medical and Maternity ...	3
Medical and Care ...	1
Medical only ...	1
Maternity and Care ...	3
Maternity only ...	18
Care cases only ...	9
	<hr/> 56

Below are given particulars of the number and classification of Homes registered by the County Council during the year.

Type of Case.	No. Registered.
Medical, Surgical and Maternity ...	3
Maternity only ...	1
Care cases only ...	1
	<hr/> 5

During the year three applications for Registration were refused.

The cancellation of the Registration of 25 of the undermentioned Homes during the year was mainly due to the provisions of the Midwives Act, 1936, and the Registration of one Maternity Home was cancelled, after investigations into complaints regarding the treatment of patients.

Type of Case.	No. Cancelled.
Medical, Surgical and Maternity ...	3
Medical and Maternity ...	1
Maternity and Care ...	1
Maternity only ...	19
Care cases only ...	2
	<hr/> 26

### Midwives Act, 1936.

Details of the County Council's Scheme under the above Act were printed in the Annual Report for 1936. The Scheme then provided for the direct employment of 177 whole-time midwives, and 12 midwives for emergency and relief duties, together with the incorporation of 161 nurse-midwives employed by 124 District Nursing Associations.

The Scheme was put into operation on the 1st July, 1937, and up to the time of writing this Report, has been subject to various amendments.

On the 1st April, 1938, the establishment as amended was as follows:—

- 179 Whole-time midwives already employed.
- 5 Emergency midwives already employed.
- 7 Relief midwives, to be appointed when the post certificate training Rules are in operation.
- 1 Reserve vacancy.

192

together with 158 Nurse-midwives employed by 119 District Nursing Associations, and 6 Relief Nurses employed by the West Riding County Nursing Association.

The following table shows the position of the midwifery service in the administrative county area on 1st April, 1938:—

TABLE LVI.

County Council's Scheme.								Independent.	
	Salaried Midwives.	District Nurse Midwives.	Midwives.	District Nurse Midwives.	Employed in Institutions	Total.	Resignations under Sect. 5, Midwives Act, 1906.	Remarks.	
Non-County Boroughs.									
Batley ... ..	4	—	2	—	6	12	1		
Brighouse ... ..	4	1	3	2	—	7½	2		
Goole ... ..	3	1	1	—	3	8	1		
Harrogate ... ..	3	3	4	2	2	14	1		
Keighley ... ..	4	3	3	—	5	15	1		
Morley ... ..	6	—	—	—	3	9	1		
Ossett ... ..	2	—	1	—	—	3	1		
Pontefract ... ..	3	—	2	—	3	8	—		
Pudsey ... ..	3	1	3	—	2	9	—		
Ripon ... ..	—	3	—	—	2	5	—		
Todmorden ... ..	1	2	1	2	4	10	2		
Urban Districts.									
Adwick-le-Street ... ..	3	—	4	—	—	7	—		
Aireborough ... ..	1	4	1	—	5	11	—		
Baildon ... ..	1	—	3	—	—	4	—		
Barnoldswick ... ..	2	—	—	—	—	2	—		
Bentley-w-Arksey ... ..	3	—	—	—	—	3	—		
Bingley ... ..	2	1	1	—	—	4	—		
Castleford ... ..	9	—	1	—	6	16	—	1 Emergency Midwife.	
Colne Valley ... ..	3	2	—	—	—	5	—		
Conisborough ... ..	4	—	—	2	—	6	1		
Cudworth ... ..	2	—	1	—	—	3	—		
Darfield ... ..	1	—	—	—	—	1	1		
Darton ... ..	3	—	1	—	—	4	—		
Dearne ... ..	6	—	1	—	—	7	2		
Denby Dale ... ..	—	5	1	—	—	6	—		
Denholme ... ..	—	1	—	—	—	1	—		
Dodworth ... ..	1	—	2	—	—	3	—		
Earby ... ..	1	—	—	—	—	1	—	1 Emergency Midwife.	
Elland ... ..	2	2	1	—	—	5	—		
Featherstone ... ..	2	—	1	—	—	3	1		
Garforth ... ..	—	1	—	—	—	1	—		
Hebden Royd ... ..	1	1	—	2	1	5	—		
Heckmondwike ... ..	—	2	1	—	2	5	—		
Hemsworth ... ..	2	—	2	—	1	5	—		
Holmfirth ... ..	—	3	1	—	4	8	—		
Horbury ... ..	2	—	—	—	—	2	1	1 Emergency Midwife.	
Horsforth ... ..	—	2	2	—	—	4	—		
Hoyland Nether ... ..	3	—	2	—	—	5	—		
Ilkley ... ..	—	4	2	—	3	9	—		
Kirkburton ... ..	1	2	1	1	—	5	—		
Knaresborough ... ..	—	2	—	—	1	3	—		
Knottingley ... ..	2	—	1	—	—	3	—		
Maltby ... ..	1	3	1	—	—	5	—		
Meltham ... ..	—	2	1	—	—	3	—		
Mexborough ... ..	2	—	1	—	6	9	—		
Midgley ... ..	—	1	—	—	—	1	—		
Mirfield ... ..	—	3	—	—	—	3	1		
Normanton ... ..	2	2	2	—	—	6	4		
Otley ... ..	—	3	2	—	1	6	—		
Penistone ... ..	—	—	—	—	—	—	—	See Penistone R.	
Queensbury and Shelf ... ..	1	1	1	—	—	3	—		
Rawmarsh ... ..	2	2	1	2	—	7	—		
Ripponden ... ..	1	—	—	—	—	1	—		
Rothwell ... ..	4	1	1	—	—	6	—		
Rovston ... ..	2	—	1	—	—	3	4		
Saddleshworth ... ..	1	3	2	—	—	6	2		
Selby ... ..	2	—	1	—	2	5	—		
Shipley ... ..	3	—	3	—	7	13	—		
Silsden ... ..	—	1	—	1	—	2	—		
Skipton ... ..	2	—	—	—	6	8	—		
Sowerby Bridge ... ..	1	3	1	—	—	5	—		
Spensborough ... ..	5	½	1	—	—	6½	—		
Stanley ... ..	3	—	—	—	—	3	1		
Stocksbridge ... ..	1	2	—	—	—	3	—		
Swinton ... ..	2	2	2	—	—	6	1	1 Emergency Midwife.	
Tickhill ... ..	—	1	—	—	—	1	—		
Wath-on-Deane ... ..	3	—	—	—	—	3	1		
Wombwell ... ..	3	—	2	—	—	5	1		
Worsborough ... ..	2	—	—	—	—	2	1		

TABLE LVI—(continued).

County Council's Scheme.									Independent.	
	Salaried Midwives.	District Nurse Midwives.	Midwives	District Nurse Midwives	Employed in Institutions	Total.	Resignations under Sect. 5, Midwives Act, 1936.	Remarks.		
Rural Districts.										
Bowland ... ..	—	3	—	—	—	3	—	1 Emergency Midwife.		
Doncaster ... ..	8	3	3	—	—	14	—			
Goole ... ..	1	2	—	—	—	3	—			
Hemsworth ... ..	5	6	5	1	3	20	1			
Kiveton Park ... ..	3	—	1	—	—	4	1			
Nidderdale ... ..	1	9	—	—	—	10	—			
Osgoldcross ... ..	1	2	—	—	—	3	—			
Penistone ... ..	—	3	1	—	—	4	1			
Ripon & Pateley Bridge ... ..	1	6	3	—	—	10	—			
Rotherham ... ..	6	6	6	—	7	25	1			
Sedbergh ... ..	—	2	1	—	—	3	—	See Hebden Royd U.		
Selby ... ..	2	1	1	—	—	4	—			
Settle ... ..	3	4	2	—	2	11	—			
Skipton ... ..	2	6	4	—	—	12	—			
Tadcaster ... ..	3	10	4	—	—	17	—			
Thorne ... ..	7	1	2	—	—	10	1			
Todmorden ... ..	—	—	—	—	—	—	—			
Wakefield ... ..	2	5	—	—	—	7	1			
Wetherby ... ..	—	9	1	—	1	11	—			
Wharfedale ... ..	2	1	—	2	—	5	—			
Wortley ... ..	4	3	2	—	1	10	—			
W.R. County Nursing Assocn. (Relief Nurses)	—	6	—	—	—	6	—			
County Boroughs ... ..	—	—	—	—	—	—	6			
TOTALS ...	184	164	109	15	89	561	44			

The following tables give a monthly summary of the cases attended by midwives directly and indirectly employed by the County Council under the Midwives Act, 1936.

TABLE LVII.

## (a) Whole-time Midwives.

Month	No. of midwives employed	Patients awaiting confinement	Patients attending ante-natal clinic	Patients referred to Doctor for ante-natal supervision	Patients attended in confinement		Patients removed to Hospital
					As midwife	As maternity nurse	
1937.							
July ... ..	116	2,042	861	296	456	33	49
August ... ..	141	2,626	1,175	333	616	45	58
September ... ..	151	2,495	1,207	261	605	67	68
October ... ..	167	2,722	1,342	337	608	34	87
November ... ..	175	3,027	1,499	355	550	29	75
December ... ..	179	2,852	1,279	318	701	40	93
1938.							
January ... ..	181	3,143	1,524	341	784	59	88
February ... ..	181	3,258	1,511	337	800	82	82
March ... ..	183	3,198	1,421	393	887	72	90
April ... ..	184	3,135	1,575	355	963	82	99
Total ... ..	—	—	—	—	6,970	543	789

TABLE LVIII.

## (b) Part-time District Nurse-Midwives.

Month	No. of Nurse midwives	Patients awaiting confinement	Patients attending ante-natal clinic	Patients referred to Doctor for ante-natal supervision	Patients attended in confinement		Patients removed to Hospital
					As midwife	As maternity nurse	
1937.							
July ... ..	158	947	276	31	217	66	21
August ... ..	158	976	272	64	211	65	16
September ... ..	158	944	307	71	234	71	26
October ... ..	158	958	272	88	261	81	26
November ... ..	158	1,014	277	72	183	55	26
December ... ..	158	1,027	231	73	268	82	18
1938.							
January ... ..	158	1,185	325	102	220	60	23
February ... ..	158	1,174	331	88	235	69	12
March ... ..	158	1,167	347	91	238	80	22
April ... ..	158	1,138	332	93	321	93	35
Total ... ..	—	—	—	—	2,388	722	225

During the 10 months under review the midwives reported 63,787 visits to patients during the ante-natal period, and 159,795 visits to patients during labour and the puerperium.

These visits are summarised as follows:—

	Whole-time midwives	District Nurse-midwives
Ante-natal patients ... ..	42,258	21,529
Labour and the puerperium ... ..	113,079	46,716

In the County Council's scheme, it was estimated that approximately 13,455 confinements per annum would be attended by the whole-time midwives when the service had time to get thoroughly established, but although Table LVII shows a gradual monthly increase, the total number of cases falls short of the number that could reasonably have been expected.

Enquiries were made as to the reasons for this, and the results were as follows:—

- (1) Independent midwives in some areas are attending cases at reduced fees.
- (2) Many independent midwives have arranged a system for the payment of their fees by instalments during the ante-natal period.
- (3) Mothers are preferring the independent midwife who is not as exacting in her requirements as the whole-time midwife.

With reference to No. (3) it is evident that the midwifery service prior to the inauguration of the salaried service was not undertaken in a highly satisfactory manner, and as a high standard of efficiency is required of the whole-time midwives some mothers prefer to engage independent midwives, many of whom are more lax in their methods and requirements.

#### Necessitous Cases.

From the commencement of the salaried midwifery service on the 1st July, 1937, to the end of December, 1937, 1,061 applications were received towards the payment of a midwife's fee and 27 in respect of a maternity nurse's fee.

The financial circumstances of these applicants were investigated and in 146 cases the net family income exceeded the scale of payment and no financial assistance was given.

These applications are summarised as follows:—

	Whole-time service. Cases attended as—		Part-time service. Cases attended as—		Totals.
	Midwives.	Mat. Nurses	Midwives.	Mat. Nurses	
Applications approved ... ..	748	17	171	6	942
Applications refused ... ..	122	—	20	4	146
	870	17	191	10	1,088

### Marriage of Midwives.

The Minister of Health in Circular 1569 dated the 18th September, 1936, regarding the employment of married midwives states:—

"The Minister trusts that any Authority whose rules would prevent their employment will so revise the rules so as to enable the Authority, **when first selecting** midwives for salaried posts, to have regard only to their efficiency."

This suggestion of the Minister was adhered to by the County Council, but in consequence of several midwives reporting their marriage after appointment, the following resolution was approved:—

"Child Welfare Sub-Committee—12th January, 1938 (1077). That midwives be required to resign their appointment on marriage subsequent to appointment, subject to this condition being waived in any case where the County Medical Officer reports that a midwife's retention is desirable in the interests of the service, and that in any such case, the position be reviewed annually."

### Supervisors of Midwives.

In accordance with Section 9 (2) of the Midwives Act, 1936, the Minister of Health issued The Midwives (Qualifications of Supervisors) Regulations, 1937, which came into operation on the 1st day of June, 1937.

The County Council appointed the under-mentioned Nurses to act as non-medical Supervisors of Midwives in the Administrative County.

NAME.	PLACE OF TRAINING AND QUALIFICATIONS.
Miss G. M. Harvey	St. Bartholomew's Hospital, E.C.1. (1916-1920). S.R.N. No. 1328. City of London Maternity Hospital. C.M.B. No. 52418. Sister in charge, County Maternity Home, Montagu Hospital, Mexborough.
Miss E. M. Taylor	Adelaide Hospital, Dublin (1916-1919) (Honours Cert.) S.R.N. No. 22689. C.M.B. No. 61118. Battersea Polytechnic Cert. 1929. Midwives Inst. Teacher's Cert. No. 8, 1926.

The Supervisors of Midwives took up duties with the County Council on the 7th September, 1937, and during the course of the establishment of the whole-time midwifery service were instructed to call and inspect midwives and familiarise themselves with the County area allocated to them.

Up to the end of December, 1937, they made 288 visits of inspection to midwives, 4 attendances at confinements with midwives, and 30 attendances upon lying-in women with midwives.

### Resignations of Midwives.

In accordance with Section 5 of the Midwives Act, 1936, under certain conditions a midwife may voluntarily surrender her Central Midwives Board certificate and receive compensation to the value of three times the net average income derived from her practice during the previous 3 years, and a midwife may be directed to surrender her Central Midwives Board certificate when she is incapable, by reason of age or infirmity of mind or body, of efficiently performing her duties as a midwife. In such cases a midwife is entitled to payment of compensation amounting to five times the average net income calculated as above.

The Minister of Health makes a grant of 50% of this expenditure.

At the time of writing (May, 1938) 46 applications from midwives were received for the payment of compensation in respect of the surrender of their C.M.B. certificates. Of this number, 27 voluntarily surrendered their certificates, 17 were compulsorily surrendered, one application was not admitted and one application was refused.

The amount of compensation paid to the 44 midwives is £6,145 1s. 6d. made up as follows:—

(1)	Amount of Compensation paid			Proportion payable by other Authorities to C.C. (included in Col. 2)			Proportion payable by C.C. to other Authorities (included in Col. 2)		
	(2)			(3)			(4)		
	£	s.	d.	£	s.	d.	£	s.	d.
27 Voluntary surrenders	3,594	0	0	54	13	5	72	11	8
17 Compulsory surrenders	2,551	1	6	—			—		

## Ante-Natal Services.

### Domiciliary Ante-natal Service.

Prior to 1936 the domiciliary ante-natal scheme in the West Riding was divided into two main parts:—

- (a) In urban and populous rural areas ante-natal clinics were established at convenient centres where expectant mothers could receive ante-natal supervision.
- (b) In remote rural areas arrangements were made for a local medical practitioner, on receipt of a request from the certified midwife booked by a patient, to carry out two examinations prior to the confinement, for which a fee of 5/- per examination plus motor car mileage allowance was paid to the doctor.

By these and other arrangements it was estimated that of the 17,000 live and still births which took place each year in the County Council Child Welfare Area, two-thirds were examined by a doctor during the ante-natal period, leaving a total of approximately 5,500 births per annum which did not come within the scope of the ante-natal scheme.

During the year 1936 the County Council approved of an extension of the scheme mentioned in (b) above, whereby in addition to the remote rural areas these arrangements were extended to the whole of the urban and populous rural districts in the County Council Child Welfare area.

The new arrangement commenced on the 1st April, 1937, and 2,055 expectant mothers were examined ante-natally under arrangements made by the County Council with private medical practitioners at a total cost to the County Council of approximately £1,000.

Under all schemes, the percentage of expectant mothers examined ante-natally by a doctor was 72.3.

### Services of Consultants.

The Minister of Health is urging Local Authorities to take all possible steps to reduce the amount of illness and number of deaths among women following upon childbirth, and with this object in view the West Riding Public Health Committee has approved a scheme under which consultant obstetricians may be called in by medical practitioners in cases of abnormality occurring during pregnancy, labour or lying-in in the homes of patients. Under this scheme the County Council defrays the whole of the cost of the consultant's fee, and there is no financial liability upon the patient.

Hitherto there has been a wide gap between the hospital and domiciliary consultant services, and it is considered that this gap has been reduced considerably and the services much improved by the introduction of the domiciliary consultant scheme.

The fees approved are as follows:—

- (a) For consultation—£3 3s. 0d. up to 10 miles.  
£4 4s. 0d. 10 to 15 miles.  
£5 5s. 0d. 15 to 20 miles.  
£6 6s. 0d. 20 miles or over.

plus operative fee when such is necessary.

This scheme applies only to those areas where the County Council is the Authority under the Maternity and Child Welfare Act, thus the following districts, which are autonomous for maternity and child welfare services, are excluded:—the Boroughs of Batley, Brighouse, Goole, Harrogate, Keighley, Morley, Ossett, Pontefract, Pudsey and Todmorden; the Urban Districts of Bingley, Castleford, Heckmondwike, Ilkley, Rothwell, Shipley, Spensborough and Wombwell, and the Rural District of Hemsworth.

## Ante-Natal Clinics.

The following table gives particulars of the ante-natal clinics established by the County Council, shewing their location, days and times of sessions, name of Medical Officer and qualifications, nursing staff in attendance and the average attendance of expectant mothers at each clinic.

Further progress has been made in this branch of the service and the number of these special clinics increased from 91 in 1936 to 102 at the end of 1937, an increase of 11 clinics, of which 8 are held in conjunction with the following centres:— Armthorpe, Golcar, Hoyland Common, Luddendenfoot, Middlestown, Ripponden, Swinesfleet and Wrenthorpe. In addition, under the Dearne, Featherstone and Mexborough Urban Districts (Transfer of Maternity and Child Welfare Services Order, 1937), the ante-natal clinics attached to the Child Welfare Centres at Goldthorpe (Dearne U.), Featherstone and Mexborough were taken over by the County Council on the 1st July, 1937.

Additional sessions were also arranged at the ante-natal clinics at Askern, Cudworth, Dalton, Dinnington, Ferrybridge, Hoyland Common, Moorends, Stainforth, Thorne, West Melton, Whitwood and Woodlands.

TABLE LIX.—Ante-Natal Clinics.

Location	Day and Hours of Attendance	Medical Staff—Names and Qualifications	Number of		Total attendances at clinic during year		Total number of women who attended during year		Total number of Sessions		Average attendance per Session	
			Health Visiting Staff	Nursing Staff (Midwives)	Ante-natal	Post-natal	Ante-natal	Post-natal	Ante-natal	Post-natal	Ante-natal	Post-natal
1 Adwick-le-Street U.D., Woodlands Wesleyan Chapel ...	Every Tuesday, 2 to 5 p.m.	Dora Chapman, M.B., Ch.B.	2	3	189	67	765	67	43	4	4	3
2 Airedale (Pontefract R.D.), Holy Cross Hut ...	Every Thursday, 2 to 5 p.m.	Christina M. Hawick, M.B., Ch.B.	1	2	550	—	114	—	4	23	23	5
3 Allerton Bywater (Tadcaster R.D.), Methodist Sunday School ...	Third Thursday, 2 to 4.30 p.m.	Dorothy Summers, M.B., Ch.B.	1	1	82	19	45	19	12	7	7	2
4 Ardsley E. and W. U.D., House, No. 1, Syke Lane, W. Ardsley	Second Thursday, 2 to 4.30 p.m.	Dorothy Summers, M.B., Ch.B.	1	3	37	—	18	19	3	12	12	6
5 Armitage (Doncaster R.D.), Welfare Institute ...	Second and fourth Tuesday, 2 to 4 p.m.	Mary Allen, B.A., M.R.C.S., L.R.C.P.	1	1	49	5	21	5	12	4	—	—
6 Askern (Doncaster R.D.), Wesleyan Sunday School ...	Every Thursday, 2 to 5 p.m.	D. Malloch, M.B., Ch.B.	1	2	218	3	95	3	14	16	—	—
7 Barnoldswick U.D., Bethesda Baptist Chapel ...	Second Friday, 2 to 4 p.m.	Annie V. Neilson, M.B., B.S.	2	2	50	6	20	6	12	4	—	—
8 Bentley U.D., Welfare Pavilion ...	First and third Fridays, 2 to 6 p.m.	Bessie Cook, M.B., Ch.B.	2	3	430	4	166	4	20	21	—	—
9 Birstall U.D., St. John's School, Chapel Lane ...	Second Friday, 2 to 4 p.m.	Katherine M. Hick, M.R.C.S., L.R.C.P.	1	2	31	—	15	—	3	10	5	—
10 Bolton on Dearne (Dearne U.D.), Welfare Hall, Goldthorpe ...	Second and Fourth Thursday, 2 to 4 p.m.	J. W. K. Morris, M.B., Ch.B.	2	3	316	—	144	—	12	26	—	—
11 Brampton Bierlow (Rotherham R.D.), Cortonwood Methodist Church ...	First and third Wednesday, 2 to 4 p.m.	Dora Chapman, M.B., Ch.B.	1	1	285	28	70	28	24	20	1	1
12 Carcroft (Adwick-le-Street U.D.), Presbyterian Sunday School ...	First and third Mondays, 2 to 5 p.m.	Bethia M. Newlands, M.B., Ch.B.	1	2	143	18	70	18	24	6	1	1
13 Catcliffe (Rotherham R.D.), Church Mission Hall ...	Alternate Mondays, 2 to 5.30 p.m.	Rosie B. Becker, M.D., M.B., Ch.B., D.P.H.	1	1	120	10	38	14	26	5	—	—
14 Chapeltown (Wortley R.D.), Miners' Welfare Institute ...	First Friday, 2 to 4.30 p.m.	Muriel K. Powell, M.B., Ch.B.	1	3	12	1	12	1	3	4	—	—
15 Conisbrough U.D., Army Hut, Balby Street Council School ...	First and third Wednesdays, 9.30 a.m.—all day.	Bethia M. Newlands, M.B., Ch.B.	2	4	441	50	173	45	24	18	2	2
16 Griggstone (Wakefield R.D.), Village Institute ...	First Friday, 2 to 4 p.m.	Katherine M. Hick, M.R.C.S., L.R.C.P.	2	2	141	15	52	15	12	12	1	1
17 Gt. Garton (Wakefield R.D.), United Methodist Church ...	First Thursday, 2 to 4 p.m.	Doris M. Ringrose, M.B., Ch.B., D.P.H.	1	1	146	19	62	17	12	12	1	1
18 Gidworth U.D., Wesley Hall ...	Weekly, Friday, 2 to 6 p.m.	Jean J. Smith, M.B., Ch.B.	2	2	396	4	119	4	37	11	—	—
19 Dalton (Rotherham R.D.), Primitive Methodist Chapel ...	Second and Last Thursday, 2.30 to 5 p.m.	Barbara Denaine, M.B., Ch.B., D.P.H.	1	2	350	140	121	48	13	21	11	11
20 Darfield U.D., Wesleyan Sunday School ...	Second Friday, 2 to 5.30 p.m.	Mary Boyd, M.B., Ch.B.	1	1	146	2	58	2	12	12	—	—
21 Darton U.D., Station Road, Darton ...	First and Third Monday, 2 to 5 p.m.	Doris M. Ringrose, M.B., Ch.B., D.P.H.	2	3	249	14	78	14	15	17	1	1
22 Denby and Cumberworth U.D., Victoria Memorial Hall ...	First Tuesday, 2 to 4 p.m.	Jean V. Kirkwood, M.B., D.P.H.	2	2	129	10	46	4	12	11	1	1

\* Areas transferred to Autonomous Authorities, figures given to 31/3/37 only.

TABLE LIX.—Ante-Natal Clinics—(continued).

Location	Day and Hours of Attendance	Medical Staff—Names and Qualifications	Number of		Total attendances at clinic during year		Total number of women who attended during year		Total number of Sessions	Average attendance per Session	
			Health Visiting Staff	Nursing Staff (Midwives)	Ante-Natal	Post-Natal	Ante-Natal	Post-Natal		Ante-Natal	Post-Natal
23 Dinnington (Kiveton Park R.D.), Wesleyan Sunday School ...	Weekly, Friday, 2 to 4 p.m.	Marjorie T. Jago, M.B., Ch.B.	2	2	242	306	98	102	27	9	11
24 Dodworth U.D., Wesleyan Chapel ...	Fourth Thursday, 2 to 5 p.m.	Joan Gumpert, M.B., Ch.B.	1	2	25	1	12	1	3	8	—
25 *Drighlington U.D., Wesleyan Sunday School ...	Last Thursday, 2 to 4 p.m.	Dorothy Summers, M.B., Ch.B.	2	1	36	—	12	—	3	12	—
26 Dunscoft (Thorne R.D.), Church Hall ...	Second and fourth Friday, 2 to 6 p.m.	Bessie Cook, M.B., Ch.B.	1	1	441	15	122	15	22	20	1
27 Earby U.D., Old Grammar School ...	Fourth Friday, 2 to 4 p.m.	Annie V. Neilson, M.B., B.S.	1	1	64	9	26	7	12	5	1
28 Ecclefield (Wortley R.D.), Gatty Memorial Hall ...	First Thursday, 2 to 4 p.m.	Barbara Demaine, M.B., Ch.B., D.P.H.	1	1	103	3	27	3	12	9	—
29 Edlington (Doncaster R.D.), United Methodist Church ...	First and Third Thursday, 2 to 4 p.m.	Marjorie Rushbrooke, M.B., B.S.	1	1	300	15	98	13	23	13	1
30 Featherstone U.D., Gospel Hall ...	Second Tuesday, 2 to 4 p.m.	William Steven, M.B., C.M.	—	2	232	296	140	145	17	14	18
31 Ferrybridge (Knottingley U.D.), Wesleyan Church ...	First Friday and Third Tuesday, 2 to 4 p.m.	Marjorie Steven, M.B., Ch.B.	1	1	269	41	98	38	21	13	2
32 Fitzwilliam (Hemsworth U.D.), Church Hut ...	First Wednesday, 2 to 4-30 p.m.	M. S. Ross, M.B., Ch.B.	1	1	487	16	121	16	12	41	1
33 Garforth U.D., St. Mary's Hall ...	Third Friday, 2 to 4 p.m.	Dorothy Summers, M.B., Ch.B.	2	2	145	50	62	50	12	12	4
34 Gawber (Darton U.D.), Adult School ...	Fourth Monday, 2 to 4-30 p.m.	Doris M. Ringrose, M.B., Ch.B., D.P.H.	1	1	64	16	23	12	12	5	1
35 Glasshoughton (Pontefract R.D.), St. Paul's Institute ...	Second and Fourth Wednesday, 2 to 5 p.m.	Emily E. Johnson, M.B., Ch.B.	1	2	249	18	106	13	24	10	1
36 Golcar (Colne Valley U.D.), Council Offices ...	First and fourth Monday, 2 to 4 p.m.	Annabella Rennie, M.B., Ch.B.	2	1	33	4	22	4	3	11	1
37 Grassington (Skipton R.D.), Church House ...	First Thursday, 10 to 12 noon.	J. M. Anderson, M.R.C.S., L.R.C.P.	1	1	27	—	11	—	12	2	—
38 Greetland U.D., Clay House ...	Second Wednesday, 9-30 to 11-30 a.m.	Hilda Leake, M.B., Ch.B.	2	1	66	39	58	39	11	6	4
39 Guiseley Baptist Church, (Aireborough U.D.) ...	First Wednesday, 10 to 12 noon.	Dorothy Summers, M.B., Ch.B.	2	2	137	18	69	18	12	11	1
40 Hobden Bridge (Hebden Royd U.D.), Old Secondary School, Pitt Street ...	Second and fourth Friday, 2 to 4 p.m.	Elizabeth Thompson, M.B., Ch.B.	1	2	173	4	53	4	16	11	—
41 Hemsworth U.D., Army Hut, West End Council School ...	First Tuesday, 2 to 5-30 p.m.	Jean J. Smith, M.B., Ch.B.	2	3	156	—	55	—	12	13	—
42 High Green (Wortley R.D.), Methodist Sunday School ...	First Wednesday, 2 to 4 p.m.	Barbara Demaine, M.B., Ch.B., D.P.H.	1	2	106	7	40	4	12	9	1
43 *Hipperholme U.D., Wesleyan Sunday School ...	First Friday, 2 to 4 p.m.	Elizabeth Thompson, M.B., Ch.B.	2	2	30	9	10	5	3	10	3
44 Holmfirth U.D., Town Hall ...	Fourth Wednesday, 2 to 4 p.m.	Hilda Leake, M.B., Ch.B.	1	2	153	—	52	—	12	13	—
45 Horbury U.D., Wesleyan Sunday School ...	Third Thursday, 2 to 4 p.m.	Annabella Rennie, M.B., Ch.B.	1	2	320	9	118	9	22	14	—

\* Areas transferred to Autonomous Authorities figures given to 31/3/37 only.

TABLE LIX.—Ante-Natal Clinics—(continued).

Location	Day and Hours of Attendance	Medical Staff—Names and Qualifications	Number of		Total attendances at clinic during year		Total number of women who attended during year		Total number of Sessions		Average attendance per Session	
			Health Visiting Staff	Nursing Staff (Midwives)	Ante-Natal	Post-Natal	Ante-Natal	Post-Natal	Ante-Natal	Post-Natal	Ante-Natal	Post-Natal
46 Horsforth U.D., St. Margaret's Hall ...	First Monday, 3 to 4 p.m.	C. W. Dudley, M.B., Ch.B.	—	1	67	15	26	15	10	7	1	1
47 Hoyland Common (Hoyland Nether U.D.), Wesleyan Chapel ...	Every Monday, 2 to 4 p.m.	Jean V. Kirkwood, M.B., D.P.H.	1	2	85	6	32	3	12	7	—	—
48 Hoyland U.D., 8, Kirk Balk ...	Every Monday, 2 to 5 p.m.	Enid F. Cook, M.B., Ch.B.	2	6	1061	132	289	34	35	30	4	4
49 Kirk Sandall (Doncaster R.D.), Assembly Hall ...	First Monday, 2-30 to 4 p.m.	Joseph Graham, M.B., Ch.B.	1	1	85	1	28	1	12	7	—	—
50 Knaresborough U.D., Fysche Hall Cottage ...	Every Monday, 2 to 4 p.m.	L. Allison Thomas, M.R.C.S., L.R.C.P.	1	2	188	9	72	9	24	8	—	—
51 Knottingley U.D., Old Secondary School ...	Second and fourth Tuesday, 2 to 4 p.m.	Marjorie Steven, M.B., Ch.B.	1	2	191	40	59	39	23	8	2	2
52 Lepton U.D., Ashfield Liberal Club ...	Third Thursday, 2 to 4 p.m.	Hilda Leake, M.B., Ch.B.	1	2	112	21	33	20	12	9	1	1
53 Linthwaite (Colne Valley U.D.), Conservative Club ...	First Monday, 2 to 4 p.m.	Annabella Rennie, M.B., Ch.B.	1	3	326	3	97	3	21	15	—	—
54 Listerdale (Rotherham R.), Maternity Home, Wickersley Road ...	Every Monday, 2 to 4 p.m.	Barbara Demaine, M.B., Ch.B., D.P.H.	—	—	*	*	*	*	*	*	*	*
55 Luddendenfoot (Sowerby Bridge U.D.), The Institute ...	First and Third Fridays, 2 to 4 p.m.	Elizabeth Thompson, M.B., Ch.B.	1	1	32	—	12	—	11	3	—	—
56 Malby U.D., Congregational Chapel ...	Alternate Tuesdays, 2 to 5 p.m.	W. Land Dibb, M.B., Ch.B.	1	2	206	—	103	—	12	17	—	—
57 Marsden U.D., Conservative Club ...	Third Monday, 2 to 4 p.m.	Annabella Rennie, M.B., Ch.B.	1	1	152	11	46	8	12	13	1	1
58 Melham U.D., Baptist Church ...	First Thursday, 2-30 to 5 p.m.	Hilda Leake, M.B., Ch.B.	2	1	184	4	60	4	12	15	—	—
59 Mexborough U.D., Montagu Hospital ...	Weekly, Tues. 10-30 a.m. to 12-30 p.m. Friday, 2 to 4 p.m. First Tuesday, 10 a.m. to 1 p.m. Third Tuesday, 2 to 5 p.m.	Kathleen Winterton, M.B., Ch.B.	1	2	29	—	7	—	15	2	—	—
60 Micklefield (Tadcaster R.), Wesleyan Chapel ...	First Tuesday, 10 a.m. to 1 p.m. Third Tuesday, 2 to 5 p.m.	Marjorie Brown, M.B., Ch.B.	—	1	48	13	19	19	11	4	1	1
61 Middlestown (Wakefield R.D.), Church School ...	Second and fourth Wednesday, 11 a.m. to 1 p.m. and 2 to 5 p.m.	Annabella Rennie, M.B., Ch.B.	1	2	31	—	26	—	2	17	—	—
62 Mirfield U.D., Ings Grove ...	Second and fourth Wednesday, 11 a.m. to 1 p.m. and 2 to 5 p.m.	Hilda Leake, M.B., Ch.B.	2	1	178	3	56	2	12	15	—	—
63 Moorends (Thorne R.D.), Wesleyan Chapel ...	First Monday, 2 to 4 p.m.	Helen Lindsay, M.B., Ch.B.	1	2	420	42	150	36	32	13	1	1
64 Metholnroyd (Hebden Royd U.D.), Methodist Chapel Sunday School ...	First Monday, 2 to 4 p.m.	Stella Brown, M.B., Ch.B.	1	1	49	—	17	—	12	4	—	—
65 Normanton U.D., Park Pavilion ...	Second and fourth Thursday, 10 a.m. to 12-30 p.m. First Tuesday, 2 to 4-30 p.m.	Gertrude M. Mayhall, M.R.C.S., L.R.C.P.	2	2	404	60	103	60	24	17	2	2
66 Otley U.D., Primitive Methodist Chapel ...	Second Wednesday, 2 to 4 p.m.	Herman Wolfe, M.D., M.B., B.S.	1	2	145	12	47	6	12	12	1	1
67 Outwood (Stanley U.D.), Church Institute ...	First Friday, 2 to 4 p.m.	J. D. Bottomley, M.B., Ch.B.	1	1	52	10	52	10	12	4	1	1
68 Penistone U.D., Shrewsbury Methodist Chapel ...	First Friday, 2-30 to 4-30 p.m.	Muriel Wilby, M.R.C.S., L.R.C.P.	1	2	100	4	59	4	11	9	—	—
69 Queensbury (Queensbury and Shelf U.D.), Cricket Pavilion ...	First Friday, 2-30 to 4-30 p.m.	George C. Sharp, M.B., Ch.B.	2	1	96	40	34	26	12	8	3	3

\* Established in May, 1938.

TABLE LIX.—Ante-Natal Clinics—(continued).

Location	Day and Hours of Attendance	Medical Staff—Names and Qualifications	Number of		Total attendances at clinic during year		Total number of women who attended during year		Average attendance per Session	
			Health Visiting Staff	Nursing Staff (Mid. wives)	Ante-Natal	Post-Natal	Ante-Natal	Post-Natal	Ante-Natal	Post-Natal
70 Rawmarsh U.D., Spiritual Temple, Parkgate	Every Thursday, 2 to 6 p.m.	Doris Findar, M.B., Ch.B.	1	6	520	213	204	195	10	4
71 Ripon U., Alma House	Alternate Wednesdays, 2 to 4 p.m.	Gladys Kay, M.D., M.B.	1	4	412	28	117	28	19	1
72 Ripponden U.D., Zion Congregational Church	First Monday, 2 to 4 p.m.	Constance Dickson, B.A., M.B., B.Ch., L.M.	1	1	67	—	25	—	8	—
73 Rossington (Doncaster R.D.), United Methodist Church	First and Third Wednesdays, 2 to 5 p.m.	Helen Lindsay, M.B., Ch.B.	1	2	397	4	149	3	16	—
74 Royston U.D., Wesleyan Sunday School	First and third Tuesday, 2 to 5 p.m.	Marian Jones, M.B., Ch.B.	1	2	290	28	119	1	15	1
75 Saddleworth U.D., Mechanics' Institute, Uppermill	Fourth Thursday, 2 to 4 p.m.	Annabella Rennie, M.B., Ch.B.	1	3	112	4	46	4	9	—
76 Selby U., Museum Hall	Alternate Mondays, 2 to 4 p.m.	Phyllis Eardley, M.B., Ch.B.	1	4	61	—	33	—	5	—
77 Settle (Settle R.D.), Wesleyan Sunday School	Second Tuesday, 2-30 to 4-30 p.m.	Elizabeth B. Dowell, M.B., Ch.B.	1	2	40	2	16	2	3	—
78 Sharlston (Wakefield R.D.), St. Luke's Hall	Third Friday, 2 to 4 p.m.	Doris M. Ringrose, M.B., Ch.B., D.P.H.	1	1	95	14	40	12	8	1
79 Shelf (Queensbury and Shelf U.D.), Witchfield Methodist Sunday School	First Wednesday, 2 to 4 p.m.	Katherine M. Hick, M.R.C.S., L.R.C.P.	2	1	71	120	20	30	7	12
80 Skipton U.D., Methodist Sunday School	First and Third Monday, 2 to 4 p.m.	Henrietta Frost, M.B., B.Ch.	2	2	270	6	95	6	14	—
81 South Milford (Tadcaster R.D.), St. Mary's Sunday School	Third Friday, 2 to 4 p.m.	Katherine M. Hick, M.R.C.S., L.R.C.P.	1	1	56	4	40	4	5	—
82 Sowerby Bridge U.D., Allan House	First Tuesday, 2 to 4-30 p.m.	Janet M. Macmillan, M.B., Ch.B.	2	2	220	20	62	10	18	1
83 Springhead (Saddleworth U.D.), Congregational Chapel	Second Monday, 2 to 4 p.m.	Constance Dickson, B.A., M.B., B.Ch., L.M.	2	1	202	—	61	—	17	—
84 Sprotborough (Doncaster R.)	Second and fourth Friday, 2 to 4 p.m.	Mary Allen, B.A., M.R.C.S., L.R.C.P.	1	1	89	7	35	7	4	—
85 Stainforth (Thorne R.D.), New Wesleyan Chapel	First and Third Friday, 2 to 4-30 p.m.	Helen Lindsay, M.B., Ch.B.	1	2	328	6	116	6	27	—
86 Stanley U.D., Zion Congregational Chapel	First Friday, 2 to 4 p.m.	Dorothy Summers, M.B., Ch.B.	1	1	239	16	69	16	20	1
87 Swallownest (Rotherham R.D.), Church Hall	Second Thursday, 2 to 4 p.m.	Dora Chapman, M.B., Ch.B.	1	1	104	112	26	69	9	9
88 Swillington (Tadcaster R.D.), Hut, near Church	First Thursday, 2 to 5 p.m.	Dorothy Summers, M.B., Ch.B.	1	1	139	56	36	38	12	5
89 Swinefleet (Goole R.), Prospect House	After C.W. session every Tuesday.	Phyllis Eardley, M.B., Ch.B.	1	2	156	57	58	19	3	1
90 Swinton U.D., Rock House	First and third Friday, 2 to 5 p.m. (B.C. advice second and fourth Fridays).	Mary Boyd, M.B., Ch.B. Margaret M. Owen, M.B., Ch.B.	2	2	300	10	300	10	23	—

TABLE LIX.—Ante-Natal Clinics—(continued).

Location	Day and Hours of Attendance	Medical Staff—Names and Qualifications	Number of		Total attendances at clinic during year		Total number of women who attended during year		Total number of Sessions		Average attendance per Session	
			Health Visiting Staff	Nursing Staff (Midwives)	Ante-Natal	Post-Natal	Ante-Natal	Post-Natal	Ante-Natal	Post-Natal	Ante-Natal	Post-Natal
91 Tadcaster (Tadcaster R.), Shann House ... ..	Second and fourth Fridays, 2 to 4 p.m.	Katherine M. Hick, M.R.C.S., L.R.C.P.	1	1	115	18	51	18	12	10	1	1
92 Thorne (Thorne R.), Temperance Institute ... ..	Alternate Mondays, 9 a.m. to 4 p.m.	Margaret M. Creaser, M.B., Ch.B.	1	3	491	41	127	41	30	16	1	1
93 Thurncroft (Rotherham R.D.), Methodist Church ... ..	First and third Thursdays, 2 to 5 p.m.	Dora Chapman, M.B., Ch.B.	1	2	105	8	35	8	12	9	1	1
94 Thurnscoe (Dearne U.D.), Central Hall ... ..	Alternate Fridays, 2 to 5 p.m.	Barbara Demaine, M.B., Ch.B., D.P.H.	1	3	515	26	140	26	26	20	1	1
95 Wales (Kiveton Park R.D.), Methodist Chapel ... ..	Second and fourth Thursdays, 2 to 4 p.m.	Marjorie Rushbrooke, M.B., B.S.	1	1	150	22	41	18	24	6	1	1
96 Wath-upon-Deane U.D., ... ..	First and third Friday, 2 to 5 p.m.	Dora Chapman, M.B., Ch.B.	1	3	208	12	56	12	24	8	—	—
97 West Melton (Wath-upon-Deane U.D.), Wesleyan Chapel ... ..	Second and fourth Wednesday, 2 to 5 p.m.	Dora Chapman, M.B., Ch.B.	1	2	328	35	92	35	23	14	2	2
98 Wetherby (Wetherby R.D.), Methodist Chapel ... ..	First Friday, 2 to 3 p.m.	Osra M. Phillips, M.B., Ch.B.	1	3	18	—	8	—	12	2	—	—
99 Whitwood U.D., Memorial Hall ... ..	First and third Mondays, 3 to 5 p.m.	Marjorie Steven, M.B., Ch.B.	1	1	209	16	94	12	14	15	1	1
100 Worsborough Bridge (Worsborough U.D.), Ambulance Hall ... ..	Alternate Tuesdays, 2 to 5 p.m.	Joan Gumpert, M.B., Ch.B.	1	3	81	4	19	4	23	3	—	—
101 Worsborough Dale (Worsborough U.D.), Wesleyan Sunday School ... ..	Alternate Tuesdays, 2 to 5 p.m.	Joan Gumpert, M.B., Ch.B.	1	3	121	3	28	3	23	5	—	—
102 Wrenthorpe (Stanley U.D.), Church Sunday School ... ..	Second Friday.	Emily E. Johnson, M.B., Ch.B.	1	1	3	—	3	—	1	3	—	—
103 Yeasdon U., Town Hall ... ..	Third Wednesday, 10 to 12 noon.	Dorothy Summers, M.B., Ch.B.	2	2	157	4	58	4	12	13	—	—
Totals ... ..			—	—	19,281	2,613	7,581	1,785	1,679	—	—	—

TABLE LX.  
ANTE-NATAL CLINICS.

The following table shews the distribution of Ante-natal Clinics in days and weeks.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
<b>First</b>	Carcroft Darton Golcar Horsforth Kirk Sandall Linthwaite Mytholmroyd Ripponden Skipton Whitwood	Denby and Cumberworth Hemsworth †Micklefield Otley Royston Sowerby Bridge	Brampton Bierlow *Conisborough Fitzwilliam †Guiseley High Green Rossington Shelf	Crofton Ecclesfield Edlington †Grassington Meltham Middlestown Swillington Thurcroft	Bentley Chapelton Crigglestone Elland Featherstone Ferrybridge Luddendenfoot Penistone Queensbury Stainforth Stanley Swinton Wath Wetherby
<b>Second</b>	Springhead	Armthorpe Featherstone Knottingley Settle	Glasshoughton †Greetland *Moorends Outwood West Melton	Bolton-on- Dearne Dalton Kiveton Park †Normanton Swallownest	Barnoldswick Darfield Dunscoft Hebden Bridge Sprotborough Swinton (Birth Control) Tadcaster Wrenthorpe
<b>Third</b>	Carcroft Darton Marsden Skipton Whitwood	Ferrybridge Mirfield Royston	Brampton Bierlow *Conisborough Doncaster (Birth Control) Rossington †Yeadon	Allerton Bywater Edlington Horbury Lepton Thurcroft	Bentley Featherstone Garforth Luddendenfoot Sharlston South Milford Stainforth Swinton Wath
<b>Fourth</b>	Gawber Golcar	Armthorpe Featherstone Knottingley	Glasshoughton Holmfirth †Moorends West Melton	Bolton-on- Dearne Kiveton Park †Normanton Saddleworth	Dunscoft Earby Hebden Bridge Sprotborough Swinton (Birth Control) Tadcaster
<b>Last</b>				Dalton	
<b>Alternate</b>	Catcliffe Selby *Thorne	Maltby Worsborough Dale Worsborough Bridge	Ripon		Thurnscoe
<b>Weekly</b>	Hoyland Hoyland Common Knaresborough Listerdale Maternity Home	Adwick-le- Street Montagu Hospital (Mexborough)	†Leeds (Birth Control)	Airedale Askern Rawmarsh	Cudworth Dinnington Leeds Consultant Clinic

† Sessions held in morning. \* Sessions held in morning and afternoon. All other sessions held in afternoon only.

#### Consultant Ante-Natal Clinics.

In furtherance of the scheme to combat the high rate of maternal mortality in the Riding, progress has been made by the establishment of consultant ante-natal clinics in connection with the County Maternity Home at Montagu Hospital, Mexborough, and the Listerdale Maternity Home at Wickersley, in addition to those at Leeds, Sheffield and Doncaster.

These clinics serve 80 child welfare centres and ante-natal clinics in the Riding, and consultations are held once a month or more often if required. A suitable date is fixed for expectant mothers to attend the consultant clinics, and patients, nurses and midwives are notified of the times and dates of the consultations. A report of the examination is supplied to each medical officer. In urgent cases where the confinement is imminent and any abnormality is suspected, the patient is sent into the maternity hospital for immediate examination. If the patient is unable to travel, arrangements are made to remove her to hospital by ambulance or taxi and in necessitous cases travelling expenses are defrayed by the County Council.

During 1937, 242 patients were referred to consultant clinics.

**DONCASTER.** This clinic serves the County Area around Doncaster to which exceptional maternity cases from centres, ante-natal clinics, etc., are referred.

During 1937, 55 consultant clinics were held and 146 patients were examined.

**LEEDS.** In September, 1935, a consultant clinic was established and arrangements were made with the Leeds Maternity Hospital for the use of accommodation in the Hospital for this purpose. There is a panel of consultants appointed, all of whom are honorary obstetric surgeons to the Leeds Maternity Hospital.

During the year 1937, 47 patients were referred to this clinic.

**SHEFFIELD.** In October, 1935, a consultant clinic was established in Sheffield to serve at least 18 ante-natal clinics within a reasonable distance of Sheffield, to which cases are referred by the ante-natal officers for consultant opinion. It has been arranged that such patients should not be seen at the Jessop Hospital (where the work of these consultants is "honorary") but at their consulting rooms by appointment. In Sheffield there are four consultants who have been appointed by the County Council for this service and a rota operates for a period of three months each.

During 1937, 49 patients were referred to the several consultants in Sheffield.

The Consultant Clinics established at Mexborough and Listerdale are in charge of Mr. L. B. Patrick, F.R.C.S., one of the consultants attached to the Jessop Hospital for Women at Sheffield.

### Maternal Mortality.

Below are tables giving comparative statistics as to maternal mortality. It will be observed that the total maternal or puerperal mortality rates for 1937, both for England and Wales and the Administrative County, show a decrease on those of the previous year. Comments on this will be found in the foreword to this report at page 2.

TABLE LXI.

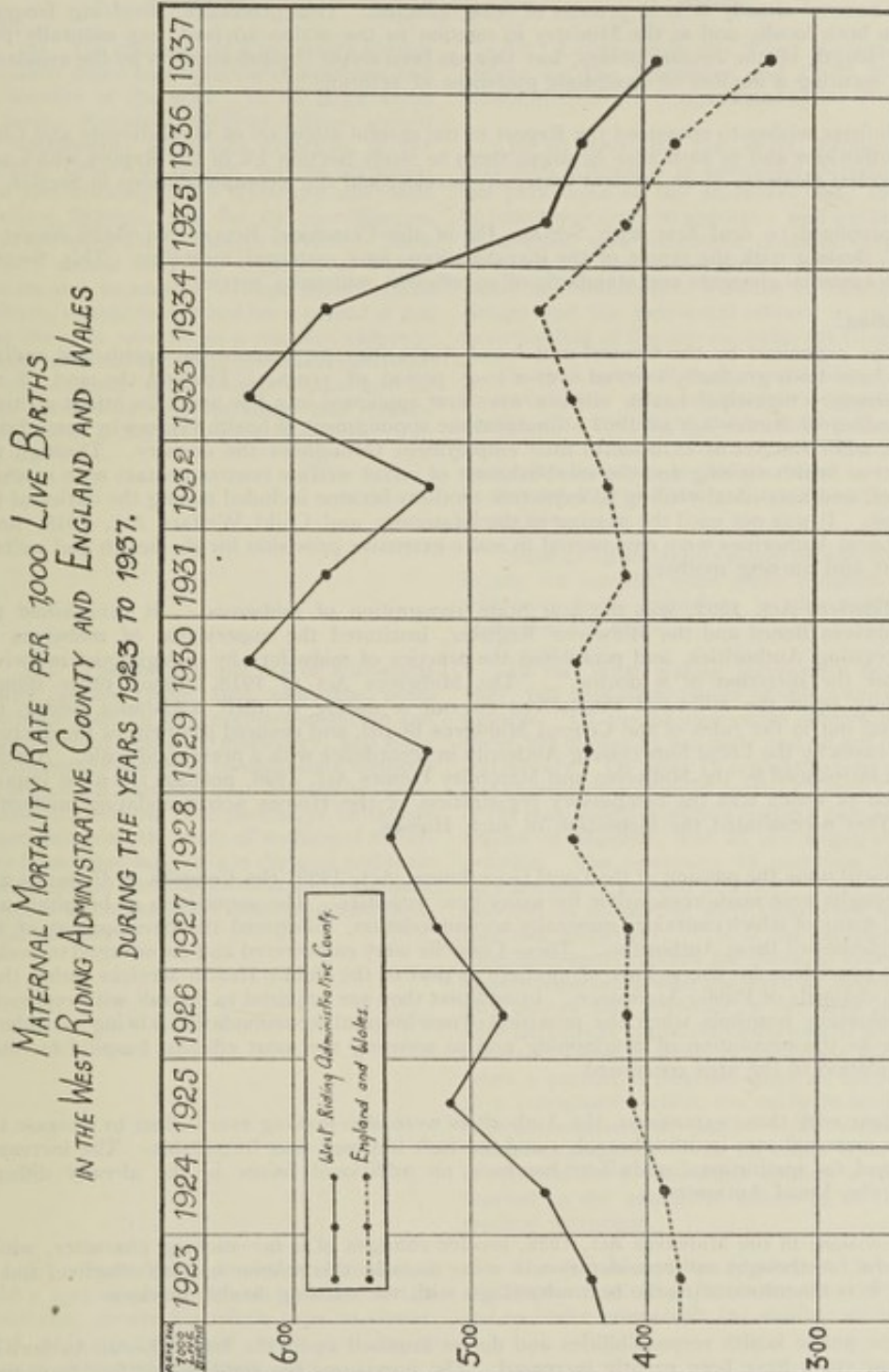
Year	Deaths of mothers per 1,000 live births						Infant Mortality Rate	
	Puerperal Sepsis		Other Puerperal Causes		Total Puerperal Mortality			
	England and Wales	Admin. County	England and Wales	Admin. County	England and Wales	Admin. County	England and Wales	Admin. County
1927	1.57	1.71	2.54	3.47	4.11	5.18	70	79
1928	1.79	2.11	2.63	3.34	4.42	5.45	65	62
1929	1.80	2.27	2.53	2.97	4.33	5.24	74	89
1930	1.92	2.43	2.48	3.82	4.40	6.25	60	65
1931	1.66	2.29	2.45	3.53	4.11	5.82	66	74
1932	1.61	2.05	2.60	3.17	4.21	5.22	65	70
1933	1.83	2.08	2.68	4.16	4.51	6.24	64	70
1934	2.03	2.31	2.57	3.50	4.60	5.81	59	58
1935	1.68	1.86	2.42	2.69	4.10	4.55	57	58
1936	1.40	1.70	2.41	2.65	3.81	4.35	59	63
Average for 10 years 1927-36	1.73	2.08	2.53	3.34	4.26	5.42	64	69
1937	0.97	0.92	2.26	3.00	3.23	3.92	58	60

As from the year 1931, there has been a revision in the classification of deaths, and this has affected the figures relating to Maternal Mortality. As a result, the figures for 1931 and following years are not strictly comparable with those for the previous years which are shown in the above table; however, the discrepancy is so slight as barely to affect either the figures or rates, and for all practical purposes comparisons can be made.

TABLE LXII.

Year.	Deaths of mothers per 1,000 live and still births.					
	Puerperal Sepsis.		Other Puerperal Causes.		Total Puerperal Mortality.	
	England and Wales.	Administrative County.	England and Wales.	Administrative County.	England and Wales.	Administrative County.
1929	1.73	2.16	2.43	2.83	4.16	4.99
1930	1.84	2.32	2.38	3.64	4.22	5.96
1931	1.59	2.19	2.35	3.37	3.94	5.56
1932	1.55	1.96	2.49	3.01	4.04	4.97
1933	1.71	1.98	2.52	3.96	4.23	5.94
1934	1.95	2.20	2.46	3.33	4.41	5.53
1935	1.61	1.78	2.32	2.56	3.93	4.34
1936	1.34	1.62	2.31	2.54	3.65	4.16
1937	0.94	0.87	2.17	2.87	3.11	3.74

Columns 16-18 of Table IV, headed "Births, Deaths, Annual Rates, etc., 1937," folded in at page 18 contain the maternal mortality rates for the year 1937 and the average rates for the five years 1932-36 for each county district. It should be mentioned, however, that the majority of the districts in the Administrative County have too small a number of births for satisfactory comparisons to be made of their maternal mortality rates, for example, in a district with 250 births, one maternal death gives a rate of 4.0 per thousand births which is a comparatively favourable rate. Should there be two maternal deaths the rate will be 8.0 which compares unfavourably with those for England and Wales and the Administrative County.



**Ministry of Health Report on an Investigation into Maternal Mortality.**

In May, 1937, the Minister of Health issued Circular 1622 on the question of Maternal Mortality.

In this Circular the Minister draws attention of the Authority to an exhaustive report on Maternal Mortality recently presented to Parliament. This report is the outcome of special investigations into maternal mortality which were announced in Circular 1433 of the 10th October, 1934.

The special investigations were made in 45 areas in which the maternal mortality rate over a period of years has been in excess of the average rate for the whole country and, also, for purposes of comparison, included 24 areas in which the average rate is below the national rate. A comprehensive survey was made of the maternity services in each of the areas visited, and the Minister was continuously informed throughout the investigations of any circumstances calling for his attention. Subsequently, an official letter was addressed to each Authority in which any necessary suggestions were made for improvement or extension of their maternity services. The response has, upon the whole, been most satisfactory, and there is every reason to believe that substantial improvement in the scope and efficiency of these services in many of the areas has either been secured already or is in process of being effected. This procedure, involving frequent consultation both locally and at the Ministry in relation to the action advised, has naturally protracted the length of the investigations, but this has been amply compensated for by the avoidance of delay in securing a number of immediate measures of reform.

The Minister wishes to commend the Report to the careful attention of all Maternity and Child Welfare Authorities and in particular he urges them to study Section IX of the Report which sets out the essential elements of an efficient maternity service, and the recommendations in Section X.

It is proposed to deal first with Section IX of the Command Report No. 5422 issued in April, 1937, dealing with the report of the investigations into maternal mortality. This Section sets out the essential elements and standards of an efficient maternity service.

### 1. Legislation.

Activities organised by the Central and Local Authorities to promote the health and welfare of mothers have been gradually evolved over a long period of years. Toward the end of the nineteenth century municipal health visitors were first appointed in a few areas for infant visiting. The Notification of Births Act of 1907 stimulated the appointment of health visitors by some Local Authorities, while the Act of 1915 led to their employment throughout the country. Through the development of health visiting and the establishment of infant welfare centres contact with mothers was attained, and ante-natal visiting of expectant mothers became included among the duties of the health visitor. It was not until the passing of the Maternity and Child Welfare Act, 1918, however, that Local Authorities were empowered to make extensive provision for the health and welfare of expectant and nursing mothers.

The Midwives Act, 1902, was the first State recognition of midwives. It established the Central Midwives Board and the Midwives' Register, instituted the supervision of midwives by Local Supervising Authorities, and prohibited the practice of midwifery by unregistered midwives except under the direction of a doctor. The Midwives Act of 1918, among other things, placed a duty upon the midwives themselves to call a doctor to their assistance under the conditions set out in the rules of the Central Midwives Board, and ensured payment of the doctor's fee in such cases by the Local Supervising Authority in accordance with a prescribed scale. Amendments were introduced by the Midwives and Maternity Homes Act, 1926, perhaps the most important provision of which was the compulsory registration of the Homes accommodating maternity patients. This necessitated the inspection of such Homes.

Consequent upon the passing of the Local Government Act, 1929, the Councils of Counties and County Boroughs were made responsible for many new activities. The acquisition of hospitals and institutions, many of which contained maternity accommodation, influenced the development of the maternity schemes of these Authorities. These Councils were empowered and encouraged to undertake certain provisions for the welfare of mothers as part of the Public Health services rather than through the channels of Public Assistance. In addition they are required to consult with representatives of voluntary hospitals when the provision of new hospital accommodation is being considered with a view to the prevention of overlapping and to securing the most efficient hospital facilities for the population of the area concerned.

Coincident with these extensions, the Authorities were also making every effort to increase the facilities for maternal care in other branches and the task imposed was formidable. The increased public demand for institutional midwifery has been an additional factor in the already difficult problem of the Local Authority.

The provisions of the Midwives Act, 1936, involve changes of a far-reaching character, which call for careful forethought and consideration in order to make this scheme in itself effective, and to ensure that it is co-ordinated to the best advantage with the existing health services.

Thus the public health responsibilities and duties imposed upon the larger Local Authorities during recent years have been greatly increased. The provisions for maternal welfare form only a relatively small part of their health organisation. There has been marked extension and development of Local Authorities' maternity schemes throughout the country, but it is a matter of experience that results are not immediately attained on the introduction of reform, and that considerable time is necessary to allow them to develop to their full measure of usefulness.

In the past, circumstances have tended to direct attention, perhaps unduly, to maternity organisation as represented by the activities of Local Authorities. It is easy to understand how this official emphasis has arisen, as the encouragement of public and of certain voluntary activities by Government grants in aid were of necessity along lines delimited by regulation.

Through these and other changes the range of health services in general, and of maternity services in particular, has become widened. The latter should now be regarded as embracing all the agencies in the area which provide facilities for maternal care. It was therefore necessary, in undertaking an intensive investigation into the complex problem of maternal mortality, to survey all the various agencies which contribute to the maternal welfare of a district, whether provided by private individuals, through voluntary effort, or by the Local Authority.

## 2. Recommendations of the Ministry of Health.

### Staff.

(a) The efficiency of a maternity service is mainly dependent upon the competence and personality of the staff. In all large areas a Senior Assistant Medical Officer should be responsible, under the direction of the Medical Officer of Health, for the organisation and working of the Maternity and Child Welfare Scheme, and for its co-ordination with the other Public Health services. Such Officer should hold the Diploma of Public Health and, in addition to experience in child welfare, should have acted for a period of not less than six months as a resident obstetric officer, have had adequate practical experience in the conduct of ante-natal clinics and be fully conversant with the duties and responsibilities of a Supervisor of Midwives.

(b) The medical officers of ante-natal clinics should have had adequate post-graduate training in preventive medicine and experience in practical midwifery, and have a competent knowledge of up-to-date methods of ante-natal supervision. Wherever practicable, they should take part in, or be closely associated with, the work of municipal maternity homes and hospitals in the area and their duties should include attendance with their patients at consultative ante-natal and post-natal clinics.

(c) The consultant obstetrician should hold a special post-graduate qualification in obstetrics, devote his whole time to obstetrical and gynaecological work and be in clinical charge of maternity beds.

(d) The qualifications and experience of persons appointed by an Authority to exercise supervision over midwives practising in its area will be prescribed by the Minister of Health in regulations which he is empowered to make in accordance with the provisions of the Midwives Act, 1936, Section 9 (2).

## Applications to the West Riding.

Dr. Lawrence is the Chief Assistant Medical Officer for the Maternity and Child Welfare and School Medical services, assisted by Dr. Wood Wilson.

In an area like the West Riding, where an extensive scheme is in operation in connection with the provisions of the Midwives Act, 1936, it may be found necessary to appoint a well qualified Medical Supervisor with extensive obstetric experience to carry out the supervisory duties, and in addition there would be consultations with the 48 consultant obstetricians and the ante-natal officers in regard to the co-ordination of the service under the County scheme.

Such a medical man would also be available to investigate cases of puerperal sepsis, maternal deaths, etc., and might also be employed as a consultant at the special clinics to be attached to the maternity hospitals in the course of erection and to be erected by the County Council, and also County Hospitals.

Such an appointment might receive consideration in say six months' time when sufficient experience will have been gained as to the working of the Midwives Act, 1936.

In the West Riding there were at the end of 1937, 102 ante-natal clinics attached to child welfare Centres. Of the 53 ante-natal officers employed at these 102 clinics 11 are male and 42 are female medical officers. Of these 12 are whole-time school medical inspectors employed by the County Council (one of the male medical officers is also a part-time Medical Officer of Health), and 26 are engaged in private practice. The remaining 15 part-time Medical Officers are not in general practice. They have all been selected on account of their experience in child welfare and midwifery. It is not possible with part-time ante-natal officers for them to take part or be closely associated with the work of municipal maternity homes and hospitals in the area or to attend with patients at consultative ante-natal and post-natal clinics. The practice in the West Riding is that when a patient is referred from an ante-natal clinic to a consultative clinic the midwife booked for the case accompanies the patient to the consultant clinic wherever possible. In all cases where a patient is referred for a consultant opinion a report is forwarded to the ante-natal officer or to the patient's medical attendant.

The question of the appointment on the staff of the Department of a consultant obstetrician is referred to under paragraph (a) dealing with staff.

These regulations known as the Midwives (Qualifications of Supervisors) Regulations, 1937, were made by the Minister of Health on the 29th April, 1937, and came into operation on the 1st June, 1937. These new regulations apply only to persons appointed as Supervisors of Midwives and the Minister suggests that Authorities should review their arrangements for the supervision of midwives and should

take the earliest opportunity of effecting any changes which may be desirable, having regard to the qualifications prescribed by the regulations. This is of particular importance at the present time as the new service of salaried midwives under the Act of 1936 has recently been established throughout the County.

The regulations prescribe qualifications for a medical supervisor and a non-medical supervisor. It is stated that in large areas it appears to the Minister that the most desirable arrangement would generally be to appoint a medical supervisor, acting under the direction of the Medical Officer of Health, to exercise general supervision over the midwives practising in the area, and non-medical supervisors to work under the instructions of the medical supervisor and perform the routine duties of supervision.

**Medical Supervisor.** This question is referred to under the heading of "Staff"—paragraph (a).

**Non-Medical Supervisors.** This matter has been disposed of by the appointment of two well-qualified supervisors, who took up their duties early in September. It is not certain that two non-medical supervisors will be sufficient in an area of the size of the West Riding, where nearly 600 midwives have to be kept under observation, but if it is found, after the scheme has had a fair trial that additional supervision is required, a further report on the matter will be submitted.

(e) It is important that the health visitors responsible for the domiciliary visiting of expectant mothers, or for duties at ante-natal clinics, should be competent to give advice on the hygiene and dietetic requirements of pregnancy.

### 3. Ante-natal Services.

Supervision of expectant mothers should be preventive in outlook and educative, and ought to be instituted at as early a stage as practicable, and regularly maintained throughout pregnancy.

These services include:—

- (a) Domiciliary visits by the health visitor.
- (b) Ante-natal supervision by the doctor or midwife.
- (c) Ante-natal clinics for the routine examination and education of pregnant women and to sift the abnormal from the normal.
- (d) Consultative ante-natal clinic.
- (e) Education of the expectant mother by the health visitor.

(a) Out of the 16,248 births occurring in the County Maternity and Child Welfare area, the health visitors made 4,872 first visits and 8,819 subsequent visits to expectant mothers. It will thus be seen that the health visitors became informed of pregnancy in the ante-natal period in only about 30% of the expectant mothers.

(b) Prior to 1936 the domiciliary ante-natal scheme in the West Riding was divided into two main parts:—

(1) In urban and populous rural areas ante-natal clinics were established at convenient centres where expectant mothers could receive ante-natal supervision.

(2) In remote rural areas arrangements were made for a local medical practitioner, on receipt of a request from the certified midwife booked by a patient, to carry out two examinations prior to the confinement, for which a fee of 5/- per examination plus motor-car mileage allowance was paid to the doctor.

By these and other arrangements it was estimated that of the 17,000 live and still births which take place each year in the County Council's Child Welfare area, two-thirds were examined by a doctor during the ante-natal period, leaving a total of approximately 5,500 births per annum which did not come within the scope of the ante-natal scheme.

During the year 1936, the County Council approved of an extension of the scheme mentioned in (b) above, whereby in addition to the remote rural areas these arrangements were extended to the whole of the urban and populous rural districts in the County Council's Child Welfare area. The additional cost involved is estimated to be £1,500 per annum.

The new arrangement commenced on the 1st April, 1937.

(c) There are now 102 ante-natal clinics attached to child welfare centres and others are in process of being established.

(d) Consultative clinics are provided at Doncaster, Leeds and Sheffield and during 1937, 242 patients were referred to these clinics. The three clinics serve 60 child welfare centres and ante-natal clinics in the Riding and consultations are held once a month or more often if required. A suitable date is fixed for expectant mothers to attend the consultant clinic, and patients and nurses and midwives are notified of the times and dates of the consultations. A report on the examination is supplied to each medical officer. In urgent cases where the confinement is imminent and any abnormality is suspected, the patient is sent into the maternity hospital for immediate examination. If the patient is unable to travel, arrangements are made to remove her to hospital by ambulance or taxi and in necessitous cases travelling expenses are defrayed by the County Council.

Two additional consultative clinics have been provided in connection with the County Maternity Home at Mexborough and the Listerdale Maternity Home.

With the expansion of the ante-natal services, other consultative clinics will be established in the County if found necessary.

(e) The health visitors give simple advice on the hygiene of pregnancy and leaflets are also provided at all child welfare centres and ante-natal clinics giving advice to mothers during pregnancy, on how to secure health and safety for the mother and her baby.

#### 4. Services at the time of Confinement.

This includes:—

##### (a) DOMICILIARY SERVICE OF MIDWIVES.

The foundation of a sound midwives' service has been laid by the Midwives Act, 1936, which provides for the establishment of an adequate service of salaried midwives in the area of each Local Supervising Authority for attendance upon women in their homes, either as midwives or as maternity nurses. This is a legislative measure of great potential value which is capable of achieving far-reaching results.

(a) In the scheme approved by the County Council provision has been made for the employment of 220 whole-time midwives and 164 district nurse-midwives.

On the 1st April, 1938, the establishment was as follows:—

179 whole-time midwives already employed.
5 emergency midwives already employed.
7 relief midwives to be appointed when the Post-certificate training rules are in operation.
1 reserve vacancy.

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192

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158 district nurse-midwives.
6 relief district nurse-midwives employed by County Nursing Association.

Of the 153 independent midwives in practice at the end of the year, 44 have surrendered their C.M.B. certificates under Section 5 of the Midwives Act, 1936. Arrangements will be made for increasing the whole-time service as the independent midwives cease to practice.

By this seeding out of midwives it is hoped to secure well trained women to maintain this work at a high standard. This Department is taking steps to ensure that the conditions under which midwives will carry on their work are such as will enable them to render efficient service. Two grades of midwives are employed.

GRADE 1. Certified midwives not in possession of the Certificate of General Nursing Training, at a salary of £170/£10/£200 per annum.

GRADE 2. Certified midwives who possess the three years General Training Certificate, at a salary of £200/£10/£240 per annum.

Each midwife has a telephone at hand, and thus is in immediate touch with patients, doctors, neighbouring midwives and the Department.

In the scheme provision is made for 92 midwives to use their own cars for this service, for which the County Council will give a grant of £50 per annum to a whole-time midwife and £25 per annum to a midwife employed by a nursing association, towards the maintenance costs of the car.

(b) SUPERVISION OF MIDWIVES.

The success of the new service will be influenced in a large measure by the competence with which the supervision is carried out.

(i) In May, 1937, the Child Welfare Sub-Committee appointed two non-medical Supervisors of Midwives at a salary of £350/£10/£400 per annum. Their qualifications and experience in midwifery work are of the first rank, therefore the work of the midwives will be under skilled supervision. The appointment of two non-medical Supervisors of Midwives is somewhat of an experiment and after the scheme has been working some six or twelve months we shall have a better idea as to whether the supervision is efficient. In all probability the establishment may have to be increased to four at a later date.

(c) MEDICAL AID.

A midwife is required, by the rules of the Central Midwives Board, to call in a registered medical practitioner "in all cases of illness of the patient or child, or of any abnormality during pregnancy, labour or lying-in." In calling in medical aid the midwife must, when possible, call in the doctor desired by the patient, or if the patient cannot be consulted, by the responsible representatives of the family. General practitioners called to the assistance of midwives should form an integral part of the maternity scheme, and should freely avail themselves of the consultant and other facilities provided by the Local Authority. It is only those practitioners who show special interest in, and have considerable practical experience of midwifery, who should be called to the assistance of a midwife.

(d) MATERNITY ACCOMMODATION.

Maternity accommodation should, wherever practicable, be associated with a general hospital, where facilities for diagnosis and treatment are readily available.

(c) In Circular 1622 of the Ministry of Health it is stated that the Local Supervising Authority, in consultation with the local medical profession, should in future be empowered to take steps to ensure that the best local obstetric skill is made available in all cases in which midwives are required, under the rules of the Central Midwives Board, to call in a doctor.

(d) The Ministry state that properly constructed, adequately equipped and suitably staffed maternity accommodation (including a sufficient number of beds allocated to and reserved for ante-natal patients) should be provided to meet the needs of every area.

The policy of the County Council is to provide wherever possible adequate maternity home accommodation in association with general hospitals, as instanced at Doncaster, Harrogate and Skipton.

The County Council has agreed in principle to the provision of 308 additional maternity beds (January, 1938).

5. Services for Puerperal Fever and Pyrexia.

Under this heading the matters referred to are:—

- (a) Notification.
- (b) Investigation.
- (c) Home Nursing.
- (d) Institutional Accommodation.

(a) When notifications of puerperal fever and pyrexia are received in the Department, they are carefully scrutinised and immediate action taken thereon.

(b) In the County Maternity and Child Welfare area 174 cases of puerperal pyrexia were notified during 1937, and in 16 cases special investigations were made by officials of this Department.

(c) The County Council has provided facilities for the home nursing (either by special nurses or through the district nursing association) of patients whose removal to hospital is considered inadvisable on medical grounds.

(d) Beds are not specially reserved for the treatment of puerperal sepsis but cases are transferred to hospitals with which the County Council has arrangements, i.e. :—

Isolation hospitals	...	6
Voluntary hospitals	...	5
Municipal hospitals	...	3
Private Nursing Home	...	1

An observation ward with one bed is used for obscure cases of pyrexia in the Skipton and District Hospital. At the County Maternity Home, Montagu Hospital, Mexborough, two isolation wards containing one bed each are available. During 1937, 150 cases of puerperal fever and pyrexia were removed to hospital and in 10 cases the services of consultants were requested, at a total cost to the County Council of £2,210 4s. 7d. Bacteriological facilities are provided at the County Laboratory.

**Post-natal clinics.** This work is carried out in conjunction with the existing child welfare centres and ante-natal clinics. During 1937, 1,785 mothers made 2,613 attendances in connection with post-natal examination. Similarly as for ante-natal work; any cases requiring consultant opinion are referred to one or other of the 48 consultants.

**Hospital Accommodation.** Whenever a request is received either from a clinic or through some other source, arrangements are made for in-patient treatment of post-natal cases at one or other of the hospitals approved under the County scheme.

#### Consultant Service.—

(a) In the West Riding there are 49 approved consultant obstetricians working under the County scheme. These consultants are provided during pregnancy, labour or lying-in at the request of the doctor in attendance, without any charge to the patient.

During 1937, 121 patients were examined at their homes.

(b) The County Council has also established consultant ante-natal and post-natal clinics at Doncaster, Leeds and Sheffield to which patients are continually referred. In 1937, 242 patients were referred to consultant clinics.

Further consultative clinics have been established at Mexborough and Listerdale.

(c) "To exercise clinical supervision over the in-patient treatment of the maternity patients for whom the Local Authority assumes responsibility" :—

The County Council has arrangements with 29 Municipal Authorities or Hospital Committees for the admission of patients into their maternity homes and of this number it can be said that in at least 15 homes there is no clinical supervision by an obstetrician.

At the County Maternity Home, Montagu Hospital, and the new maternity home at Wickersley, the work is under the supervision of Mr. L. B. Patrick, F.R.C.S.

(d) Very few hospitals or institutions treating cases of puerperal fever have a consultant in charge and only where cases are removed under the direction of a consultant is the supervision undertaken by an obstetrician.

#### 6. Post-Natal Services.

Post-natal examination and treatment form an important part of the complete maternity scheme. The services provided include post-natal and consultative clinics, and hospital accommodation.

#### 7. Consultant Service.

It is of fundamental importance that every maternity scheme throughout the country should include the provision of the services of one or more obstetric consultants. This is one of the most important recommendations designed to improve the standard of obstetrics, and the duties of consultants under the administrative supervision of the Medical Officer of Health should wherever practicable include :—

(a) Assistance to general practitioners in domiciliary cases of doubt or difficulty during pregnancy, at the time of confinement, or in the puerperium.

(b) Attendance at consultative ante-natal clinics, not only to advise on appropriate methods of treatment, but to take steps to ensure, so far as circumstances permit, that patients for whom hospital treatment is indicated, whether during pregnancy or at the time of confinement, will be admitted to the maternity unit under his charge. By this means it should be possible to secure continuity of supervision and treatment, and to reduce to a minimum the number of patients who cannot be adequately treated in their own homes and whose deaths at present contribute to maternal mortality.

(c) Clinical charge of the maternity department for the area.

(d) Clinical charge of the puerperal sepsis unit.

(e) Attendance at post-natal consultative clinics.

(f) The investigation of the circumstances associated with maternal deaths occurring in the area.

(e) Post-natal consultations are arranged with one or other of the 49 consultant obstetricians whenever requested.

(f) During 1937, 81 maternal deaths associated with pregnancy were investigated in the County Maternity and Child Welfare area by one or other of the 49 consultant obstetricians, and the result of these investigations was tabulated in detail and a commentary made thereon by Dr. Rhoda Adamson, one of the consultants attached to the Leeds Maternity Hospital. These are published in another part of this report.

## 8. Auxiliary Services.

### (a) Extra nourishment.

In every area extra nourishment, considered to be necessary on medical grounds, should be available for the women throughout pregnancy, at the time of confinement and during the puerperium.

(a) The County Council's scheme for the distribution of milk provides for the issue of dried or fresh milk to nursing and expectant mothers and is available at any time during pregnancy or lying-in.

One of the findings of the Special Committee set up by the Minister of Health to investigate the subject of maternal mortality was that malnutrition of mothers was a possible contributory factor to the high maternal death rate. It was estimated from enquiries made in the County that approximately 5% of expectant mothers who attended child welfare centres were suffering from malnutrition. In certain cases it was found, especially where the husband was unemployed, that the mother was unable to provide the necessary food. It was for this class of patient that a scheme to provide extra nourishment, in addition to the supplying of milk, was formulated.

- (1) The meals, e.g., mid-day dinner, are provided on week-days only and are in addition to milk.
- (b) During the year 1937, 176 expectant mothers received 2,233 meals.
- (3) The diet prescribed by the ante-natal officer varies according to the needs of the individual patient, but is usually:—vegetable soup, meat or fish, potato and other vegetable, milk puddings and stewed fruit.

The meals cover a period not exceeding four weeks and if it is desired to continue with these the ante-natal officer, after further examination of the patient, completes another certificate. The cost averages 1/5d. per meal per patient.

The meals are usually provided at some nearby cafe or restaurant and not at the patient's home. This arrangement ensures that the meals are consumed by the mother herself.

(4) Meals are only supplied to expectant mothers. Usually the average period of pregnancy when an expectant mother first attends an ante-natal clinic is  $4\frac{1}{2}$  months, and she continues to attend up to about  $8\frac{1}{2}$  months; if necessary, meals are supplied during the whole of this period.

(5) The ante-natal officer decides as to whether the mother is in need of the meals.

(6) Mid-day meals are only supplied in necessitous cases, i.e., where the total family income, after deducting the actual rent paid and 5/- for each child under 14 years of age and not working, does not exceed 34/- per week.

This revised scale of assistance was approved by the County Council in October, 1937.

### (b) Home Helps.

The services of suitable women provided by the Local Authority, to carry out domestic duties in the homes of the women during

(b) The County Council has introduced a scheme for the provision of home helps and this matter is dealt with fully on pages 102 and 103 of this report.

illness of pregnancy, at the time of confinement and throughout the puerperium may be of great benefit if satisfactory private arrangements cannot be made. When the mother has been removed to hospital the services of a help in the home may relieve her of domestic worry and enable her treatment to be continued for as long a period as may be considered desirable on medical grounds.

**(c) Dental Treatment.**

Arrangements should be made for conservative treatment, extractions of teeth and the provision of dentures. The services of an anaesthetist should be available.

The above three services should be provided at less than cost or free of charge if the means of the recipient, determined by the scale of income suitable to the local circumstances, do not permit of the payment of the whole cost.

**(d) Sterilised Dressings.**

Freshly sterilised dressings should be available at the time of labour and during the puerperium for every maternity case.

**(e) Laboratory Facilities.**

Adequate facilities should be provided for the expert examination of urine, blood and vaginal or other discharges, for domiciliary and institutional midwifery cases and for cases of puerperal sepsis. In the event of death, if permission is given for a post-mortem examination, it is desirable that it should, whenever practicable, be conducted by a pathologist. This is one of the means by which advance may be made in knowledge of the obscure problems of maternal morbidity and mortality.

**(f) Blood Transfusion.**

Facilities for blood transfusion should be readily available in connection with the treatment of both domiciliary and institutional maternity and puerperal sepsis patients. Those responsible should keep themselves informed of the developments in technique and procedure as they are modified in the light of experience.

**(g) Birth Control.**

Facilities for advice on the lines set out in the Ministry's Circulars should be available for the women of each area in those cases in which pregnancy would be detrimental to their health.

(c) Dental treatment is provided by the County Council for expectant and nursing mothers attending child welfare centres and ante-natal clinics, who are not eligible for dental treatment from any other service, provided that such treatment is certified by the medical officer of the child welfare centre or ante-natal clinic to be necessary.

Arrangements are made for treatment, including the provision of dentures, with dentists approved by the County Medical Officer. The patient is allowed the choice of dentist in the district where she resides, and the treatment is carried out and paid for by the County Council in accordance with the scale approved by the Dental Benefit regulations made by the Minister of Health and the National Health Insurance Joint Committee for the use of Approved Societies under the National Health Insurance Acts.

The cost of treatment is recovered from the patients, but in necessitous cases the cost is paid by the County Council.

During 1937, 496 expectant and nursing mothers received treatment under this scheme at a total cost to the County Council of £3,250.

(d) Sterilised maternity outfits are available at any child welfare centre and can be purchased at cost price, i.e., 5/1d.

(e) The County Laboratory is available for the examination of urine, blood and other specimens, in domiciliary, institutional and midwifery cases and for cases of puerperal sepsis.

(f) Facilities for blood transfusion are readily available at any maternity hospital and in certain cases the County Council has contributed a sum to the donor.

(g) The County Council has provided facilities and established special clinics where married women can receive advice but this is limited strictly to cases where further pregnancies would be detrimental to health. There are four clinics open in the County where advice and instruction in birth control methods are given. In 1937, 492 married women received advice at these clinics.

### (h) Health Education.

Reference has already been made to the need for education in the hygiene of pregnancy and the importance of dietetics. This can probably best be carried out through individual instruction of the mothers by doctors, midwives and health visitors in the home, and by medical officers and midwives at the ante-natal clinics. The interest of the public may also be directed to these subjects by means of lectures and films.

(h) This is being continually carried out at child welfare centres by lectures by doctors and nurses, and gramophone records are provided giving talks on various subjects connected with maternity, and child life.

Posters are displayed at clinics and literature is freely distributed.

### 9. Emergency Units ("Flying Squads").

Emergency Units ("Flying Squads") should be provided where members of the staffs of maternity departments will be available for the domiciliary treatment of maternity patients whose condition is too grave to justify their removal to hospital.

By arrangement with the Leeds Maternity Hospital, a maternity emergency service has been organised to serve areas within a reasonable distance of Leeds, to deal with cases of acute maternity emergency, such as hæmorrhage or shock, in the patient's own home. In brief, it means that the necessary equipment for dealing with these two severe maternity emergencies will always be on hand, together with a fully trained staff nurse, who will go out to any private house at the request of the consultant called in. In this way it is hoped to be able to render all the necessary assistance to the patient and to spare her the journey by ambulance which is apt to be instrumental in causing a tragic ending in such cases.

Similar arrangements have been made with the Honorary Consultant staff of the Jessop Hospital for Women at Sheffield, and the Barnsley and Burnley Corporations.

The County Council, during recent years, has extended considerably the maternity and child welfare services and their intensive efforts are now being rewarded by a reduction in the infantile and maternal mortality rates.

The Midwives Act, 1936, should prove to be a valuable measure in securing a still further reduction in the number of deaths among women in childbirth.

There are however several matters requiring consideration to improve the maternity and child welfare services in the County in the light of recent investigations carried out by medical officers of the Ministry of Health in the County.

- (1) Consideration of the future appointment on the central staff of a Senior Assistant Medical Officer with special qualifications in obstetrics, to devote his whole time to obstetrical and gynaecological work, who could also act as Medical Supervisor of Midwives, co-ordinating officer to the 48 consultant obstetricians and the ante-natal officers, investigation officer for cases of puerperal sepsis and maternal deaths, and consultant at special clinics to be attached to the maternity hospitals in course of erection by the County Council, and also at the County Hospitals.

In an area like the West Riding, where an extensive scheme is necessary in connection with the provisions of the Midwives Acts, 1936, such an appointment may become essential.

- (2) Consideration of the question of provision of home helps. This matter has been dealt with and a scheme approved by the County Council and full details are published on the following pages.
- (3) To make arrangements with other Maternity hospitals in the County staffed with consultants for the provision of emergency units—"Flying Squads."

### Home Helps.

The County Council has adopted a scheme for the provision of "home helps," which was brought into operation in the West Riding Maternity and Child Welfare area on the 1st April, 1938.

The services of home helps are primarily intended for maternity cases, where the patient is nursed at home or in hospital. They will also be available for any case of illness directly attributable to recent or approaching confinement. There has been no difficulty in obtaining suitable applicants and of the many hundreds of recommendations received from the health visitors and midwives, 225 women have signified their acceptance of the conditions of employment and their names have been placed on the register of home helps available for work in connection with this scheme.

Applications for the services of a home help are made through the County health visitors or midwives. A form is supplied for completion by the head of the household and a stamped undertaking is obtained in every case.

Although a stamped undertaking is obtained in every case, on completion of the verification of the family circumstances the amount recoverable from the applicant is assessed in accordance with the following scale of payment, on the average weekly income for the four weeks prior to the confinement.

## SCALE OF PAYMENT.

Where the total family income, after deducting the actual rent paid and 5/- for each child under 14 years of age and not working	Amount Payable by Applicant
Does not exceed 34/- per week	Nil.
Is between 34/- and 44/- per week	1/- per day
Exceeds 44/- per week	6/- per day

Each applicant is informed whether the request for a home help has been approved or otherwise and the home help is also notified at the same time.

With each approval a copy of the following rules is forwarded to the patient.

**Rules for the Guidance of Home Helps.**

1. (a) She must NOT attend cases of confinement, UNLESS A MIDWIFE IS IN ATTENDANCE.
- (b) SHE MUST NOT ASSIST at the confinement, but should be at hand to bring hot water, etc., to the doctor or midwife in attendance.
- (c) She must NOT interfere in any way with the instructions of the doctor or midwife, and must recognise that she is NOT a nurse, but simply a domestic help.
- (d) She must NOT wash the patient nor make her bed.
- (e) She must NOT attend upon her relatives at the expense of the County Council.
- (f) She must NOT make any charge to the patient.
- (g) She must NOT accept bus fares and/or present from the patient.
- (h) She must NOT give her services unless authorised by the County Medical Officer, otherwise the County Council will not be responsible for the payment of wages.
2. She must attend at the home to which she is sent from 8.0 a.m. to 6.0 p.m. (Sundays and Bank Holidays excepted, unless the patient's husband has Sunday duties, in which circumstances the Home Help will attend). The period for which she will be required for each case will not usually exceed fourteen days.
3. She must attend when required in the home during the confinement, even when this occurs between the hours of 6.0 p.m. and 8.0 a.m. At no other time shall she be in the home after 6.0 p.m.
4. She must:—
  - (a) Keep the house clean and tidy.
  - (b) Cook and prepare meals for the family.
  - (c) Care for any children there may be and see that those attending school do so punctually and are clean and tidy.
  - (d) She will undertake two weeks' family washing for not more than two adults and six children and also wash daily for the infant, and mother if necessary. Arrears of family washing should not be undertaken.
5. Cleanliness of person is essential and overalls and aprons must be worn whilst on duty.
6. She must supply and cook her own food, and not use the food provided by the family for whom she works.
7. Where a case of infectious disease occurs in the House of a Home Help, or in the family of a patient, or should the Home Help in any way come into contact with infection, she must report at once to the County Medical Officer for instructions.
8. Where the County Council has agreed to provide the services of a Home Help, a written order will be sent to her stating the name and address of the person requiring her services.  
WITHOUT SUCH WRITTEN ORDER NO PAYMENT WILL BE MADE.
9. Any conduct on the part of the Home Help which is contrary to the interests of the household where she is employed, if brought to the notice of the Department, will lead to her name being removed from the list.
10. Home Helps are specially warned that THEY MUST NOT GOSSIP under any circumstances about the affairs of the families to which they have been sent.
11. Home Helps are at liberty to obtain private employment when not engaged on County Council duties.
12. Fees. Home Helps will be paid at the rate of 6/- per day, which includes the cost of food to be provided by her, and will be payable on completion of her services to the patient.

A report is received from the Health Visitor or Midwife on the services of each Home Help which is also in the nature of an account form and the fees of the Home Help are paid through the West Riding Treasurer on the completion of her attendance on the patient.

## Maternal Deaths.

The following is a summary and report by Dr. Rhoda Adamson in respect of her analysis of the 81 deaths of women which were associated with pregnancy and reported in the County Council Maternity and Child Welfare area during 1937.

TABLE LXIII.

Case No.	Age	Occupation.	Circumstances.	Cause of death.		Where death occurred.			Might death have been prevented if there had been:—				Case No.
				Sepsis.	Other causes.	Hospital	N. Home	Own Home	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.	
1	20	Housewife	Poor	Septicæmia. Prolonged obstructed labour, failed forceps at home, craniotomy at nursing home.	—	—	1	—	Yes	—	Yes	Yes	1
2	19	do.	do.	—	Obstetric shock following manual placental removal.	—	—	1	Yes	—	—	—	2
3	22	Single	do.	—	Pulmonary T.B. Terminal abortion.	—	1	—	—	—	—	—	3
4	23	Housewife	—	Septicæmia following forceps delivery at home with laceration of perineum.	—	—	1	—	—	Yes	Yes	—	4
5	35	do.	do.	—	P.P.H. Retained placenta. Pulmonary embolism.	1	—	—	Yes	Yes	Yes, and Blood transf.	—	5
7	20	do.	Comfortable	Septicæmia after difficult Breech extraction.	—	—	—	1	Yes	Yes	Yes	—	7
8	21	do.	Poor	—	Lobar pneumonia. Premature birth.	1	—	—	—	—	—	—	8
9	30	do.	do.	Septicæmia following delivery for placenta prævia. Vaginal packing before and after delivery.	—	1	—	—	—	—	—	—	9
10	20	do.	do.	—	Toxæmia. Hyperemesis. Premature delivery.	—	1	—	Yes	—	Yes, earlier	Yes	10
11	28	do.	do.	—	Toxæmia, aplastic anæmia, delayed labour.	—	1	—	—	—	—	—	11
12	34	do.	?	—	Ruptured tubal pregnancy.	1	—	—	—	—	—	—	12
13	42	do.	Poor	—	Double pneumonia, labour.	—	—	—	Yes	Yes	Yes	Yes, or by husband	13
14	38	Single	do.	—	Eclampsia, 36 weeks pregnant.	—	1	—	Yes	—	—	Yes	14
15	36	Housewife	do.	—	Influenzal pneumonia following abortion.	—	1	—	—	—	—	—	15

TABLE LXIII.—(Continued.)

Case No.	Age	Occupation.	Circumstances.	Cause of death.		Where death occurred.			Might death have been prevented if there had been:—				Case No.
				Sepsis.	Other Causes.	Hospital	N. Home	O. Home	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.	
16	27	Housewife	Poor	Septicæmia following forceps delivery and manual removal of placenta. No gloves. Delivery at home.	—	1	—	—	Yes	Yes	Yes	—	16
17	42	do.	do.	—	Repeated pulmonary embolism. Caesarian section.	—	1	—	Yes	—	—	—	17
18	22	do.	Fair	Septicæmia. Peritonitis. Septic broncho-pneumonia, following early rupture of membranes and forceps delivery after long labour. At home.	—	1	—	—	—	—	—	—	18
19	32	do.	Poor	Bacillus coli septicæmia complicating pregnancy.	Toxæmia, pyelo-nephritis and paralytic ileus. Cæcostomy.	1	—	—	—	—	—	—	19
20	38	do.	do.	—	Post partum eclampsia. Single fit. Placenta not separated.	—	—	1	Yes	—	—	—	20
21	32	do.	Comfortable	—	Pulmonary embolism. Phlebitis of varicose veins of Right Leg. No sepsis.	—	—	1	—	—	—	—	21
22	37	do.	do.	—	Obstetric shock, hæmorrhage. Adherent placenta not removed.	—	1	—	Yes	Yes, earlier	—	—	22
23	35	do.	Poor	—	Severe toxæmia. A.P.H., accidental, treated by Caesarian hysterectomy. Anuria.	—	1	—	Yes	—	—	—	23
24	29	do.	Comfortable	—	Ruptured extra uterine pregnancy.	1	—	—	—	—	—	Yes, earlier medical aid	24
25	33	do.	do.	Septicæmia following forceps delivery after long labour.	Diabetes before onset of pregnancy.	1	—	—	—	—	—	—	25
26	32	do.	Poor	—	Lobar pneumonia. Old prolapse. Cervical discharge.	1	—	—	Yes, exam. refused	—	—	Yes	26
27	43	do.	do.	—	Chronic nephritis. Toxæmia, delivery.	1	—	—	Yes	—	—	Yes	27
28	37	do.	do.	—	Toxæmia. Opium deprivation in an addict. Abortion.	1	—	—	—	—	—	Yes	28
29	29	do.	do.	—	Toxæmia. Eclampsia at 24 weeks pregnancy with complicating rheumatic heart disease.	1	—	—	—	—	—	—	29

TABLE LXIII. — (Continued.)

Case No.	Age	Occupation.	Circumstances.	Cause of death.		Where death occurred.			Might death have been prevented if there had been:—				Case No.
				Sepsis.	Other Causes.	Hospital	N. Home	Own Home	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.	
30	30	Housewife	Poor	Forceps delivery, rupture of uterus following attempts at expression of the placenta. Hysterectomy. Peritonitis. Hamolytic streptococcus.	—	1	—	—	—	—	—	—	30
31	29	do.	do.	—	Old myocarditis, Influenzal pneumonia, terminal labour.	1	—	—	—	—	—	—	31
32	27	do.	do.	—	Lobar pneumonia, 7½ months pregnant.	—	1	—	—	—	—	—	32
33	18	Single	Comfortable	—	Broncho-pneumonia. Normal labour 3 days before onset.	—	—	1	—	—	—	—	33
34	34	Housewife	Poor	—	Albuminuria 5 months. Central placenta prævia severe A.P.H., treated by packing died undelivered.	1	—	—	Yes	Yes	Yes	Caesarian section and transfusion	34
35	35	do.	do.	Perinephritic abscess, pyelitis.	Ante partum hæmorrhage treated by external version and extraction by a leg.	1	—	—	Yes, refused by patient	—	—	Yes	35
36	43	do.	do.	?Sepsis.	Broncho-pneumonia after parturition.	1	—	—	Yes	—	—	Yes	36
37	37	do.	Comfortable	Puerperal sepsis. Venous thrombosis and abscess.	—	1	—	—	—	—	—	—	37
38	26	do.	do.	Pelvic peritonitis and septic endometritis following Classical section for placenta prævia. Infection present before operation.	—	1	—	—	—	—	Yes, with a lower segm. section and drainage	—	38
39	—	do.	do.	Septicæmia following abortion.	—	1	—	—	Yes	—	—	—	39
40	37	do.	Poor	—	Obstetric shock. Concealed A.P.H. 13 para.	1	—	—	Yes	—	Yes, earlier	—	40
41	37	do.	Comfortable	—	Obstetric shock. Ruptured uterus (no P.M.) 6 attempts at forceps delivery, at home.	1	—	—	—	Yes, earlier	Yes, earlier	—	41
42	41	do.	Poor	Puerperal septicæmia and pelvic cellulitis after normal delivery.	—	—	1	—	Yes	—	Yes, much sooner	—	42

TABLE LXIII.—(Continued.)

Case No.	Age	Occupation.	Circumstances.	Cause of death.		Where death occurred.			Might death have been prevented if there had been :—					Case No.
				Sepsis.	Other Causes.	Hospital	N. Home	Own Home	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.		
43	37	Housewife	Poor	Pyelitis and Right pulmonary embolism 22 days after delivery. Inquest because of a Black eye from a blow by husband.	—	1	—	—	—	—	—	—	43	
44	28	do.	do.	—	Bronchitis during labour, Acute pleurisy.	—	—	1	Yes	—	—	Yes	44	
45	21	do.	Comfortable	—	Eclampsia.	—	1	—	—	—	—	—	45	
46	34	do.	do.	—	A.P.H. Placenta prævia. Section followed by bleeding because of multiple uterine myomata. Shock.	—	1	—	—	—	—	—	46	
47	39	—	do.	—	Eclampsia. Under care of locum doctors and midwives ante-natally. Poor co-ordination.	—	—	1	Yes	Yes	Yes	—	47	
48	28	do.	do.	—	A.P.H. Placenta prævia. Version and extraction by foot.	—	—	1	—	Yes	Yes	—	48	
49	33	do.	—	—	Peritonitis. Instrumental delivery. Pregnancy.	1	—	—	—	—	—	—	49	
50	33	do.	?	—	Toxaemia, Eclampsia, Acute Yellow atrophy of liver.	1	—	—	—	—	—	—	50	
51	34	do.	Comfortable	—	Toxaemia. Eclampsia. Acute Yellow atrophy of liver.	1	—	—	—	—	—	—	51	
52	31	do.	?	—	Shock following tubal induction for breech presentation.	—	1	—	—	—	—	—	52	
53	34	do.	Poor	—	Lobar pneumonia, terminal abortion.	1	—	—	—	—	—	—	53	
54	41	do.	do.	—	Empyema and abscess of Buttock due to septic abortion. Patient syringed herself with lysol.	1	—	—	Yes	—	—	Yes	54	
55	37	do.	do.	—	Nephritis and myomatous uterus complicating early pregnancy. Termination of pregnancy followed by coma.	1	—	—	—	—	—	—	55	

TABLE LXIII.—(Continued.)

Case No.	Age	Circumstances.	Occupation.	Cause of death.		Where death occurred.			Might death have been prevented if there had been:—					Case No.
				Sepsis.	Other causes.	Hospital	N. Home	Own Home	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.		
56	24	—	Comfortable	Staphylococcal pyemia. Onset 10 days after unassisted delivery.	—	1	—	—	—	—	—	—	—	56
57	—	—	—	—	Heart disease complicating pregnancy. Undelivered.	1	—	—	—	—	—	—	—	57
58	27	?	Comfortable	—	Obstetric shock. Difficult Breech delivery followed by retained placenta which was removed manually.	1	—	—	—	—	—	Yes	—	58
59	36	Housewife	Poor	—	Cardiac myopathy due to secondary anaemia 2 months after normal delivery.	1	—	—	—	—	—	—	—	59
60	32	do.	do.	Peritonitis due to perforation of tuberculous ulcer of gut with extensive tuberculosis of abdomen. Pains mistaken for those of labour.	—	1	—	—	—	—	—	—	—	60
61	41	do.	do.	Peritonitis following incomplete abortion.	—	1	—	—	—	—	—	—	—	61
62	37	do.	Comfortable	—	Myocardial degeneration. Thyrotoxic goitre.	1	—	—	Yes	—	—	Yes	—	62
63	28	do.	Comfortable	Pyrexia following normal labour in obese patient with ante-natal vaginal discharge. Pulmonary embolism on 21st day of puerperium.	—	1	—	—	Yes	—	—	—	—	63
64	34	do.	—	—	General oedema. Mitral disease. Recent delivery.	—	—	1	—	—	Yes	Yes	—	64
65	—	—	—	—	Toxaemia of pregnancy. Difficult Breech delivery. Femoral thrombosis and pulmonary embolism.	—	—	1	Yes	—	Yes	Yes	—	65
66	25	Housewife	Poor	—	Acute cardiac dilatation.	—	—	1	—	—	—	—	—	66
67	32	do.	do.	—	Toxaemia. Undelivered. P.M. Inquest.	—	—	1	—	—	—	—	—	67
68	41	do.	Comfortable	—	Heart failure during and after labour.	—	—	1	Yes	—	—	Yes	Yes	68

TABLE LXIII.—(Continued).

Case No.	Age	Occupation.	Circumstances.	Cause of death.		Where death occurred.			Might death have been prevented if there had been :—				Case No.
				Sepsis.	Other causes.	Hospital	N. Home	Own Home	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.	
69	27	Housewife	Comfortable	—	Shock following manual removal of adherent placenta.	—	—	1	—	Yes	Yes	—	69
70	36	do.	Poor	—	Bilateral cortical necrosis of kidneys. Accidental hæmorrhage.	1	—	—	—	—	—	—	70
71	18	do.	do.	—	Cardiac failure. Pulmonary T.B. Normal labour 8 months before.	—	—	1	Yes	—	—	—	71
72	31	—	Comfortable	—	Shock. Forceps delivery. Hæmorrhage.	—	1	—	—	Yes	Yes	—	72
73	28	Housewife	do.	Septicæmia due to Perforated appendix. Terminal abortion.	—	1	—	—	Yes	—	Yes, earlier	Yes	73
74	27	do.	Well-to-do	—	Pulmonary embolism. Caesarian Section for obstructed labour. Mitral disease.	—	1	—	Yes	—	—	—	74
75	44	do.	Poor	—	Pulmonary embolism. Varicose veins.	—	—	1	—	—	—	—	75
76	35	do.	do.	—	Pulmonary embolism. Toxæmia of pregnancy. Birth of twins at term.	1	—	—	Yes	—	—	—	76
77	32	—	do.	—	Pneumonia. Recent delivery.	1	—	—	Yes	Yes	Yes, earlier	—	77
78	37	Housewife	—	—	A.P.H. Placenta prævia.	1	—	—	—	—	—	—	78
79	43	Winder	—	—	Abdominal hæmorrhage. Ectopic gestation.	1	—	—	—	—	—	—	79
80	38	Weaver	—	—	Shock. Hæmorrhage. Incomplete abortion. Natural causes. Married 17 years.	1	—	—	—	—	—	—	80
81	32	—	Comfortable	—	Broncho-pneumonia. Acute mania. Anæmia.	1	—	—	—	—	—	—	81

## REPORT BY DR. RHODA ADAMSON—continued.:—

During the year 1937, there were 81 cases of death in women who were pregnant at the time of death or had recently been pregnant. This shews a definite fall from the number of 96 in 1936 and 98 in 1935.

Of the total deaths 16 women died in their own homes and the remaining 65 died in hospitals or nursing homes. There were 6 cases of abortion of which only 2 were suspected of being the result of criminal interference, one was accidental and three aborted as a terminal event during a fatal illness. 3 women died from severe intra-abdominal hæmorrhage after rupture of a tubal pregnancy; in one case, before the patient suspected that she was pregnant.

2 patients died from general peritonitis of extragenital origin. The first had a ruptured gangrenous appendix for which surgical intervention was not sought until the third day of illness when her condition was practically hopeless and complicated by an abortion (73) and the second was thought to be in normal labour when she actually was suffering from a commencing peritonitis resulting from a perforation of a tuberculous ulcer in the small intestine. The condition was not recognised until after delivery the following day (60).

There were 2 cases of chronic renal disease who were in no way fit to stand the strain of pregnancy and whose defect was so great that it was hopeless for a pregnancy to be carried long enough to produce a viable foetus. (27, 55). Early careful investigation of the Renal efficiency with termination of the pregnancy on the adverse findings might have held out some hope of recovery to these two patients.

Two patients died of pulmonary tuberculosis. In the one case the patient contracted an illegitimate pregnancy when in an advanced stage of the disease and died when she was a few weeks pregnant, aborting just before death (3) and the other patient died of tuberculosis 8 months after the birth of a full time child which she fed herself without the chest disease being recognised at the time of her delivery (71).

There were 6 cases of organic Heart Disease which had called for medical care before pregnancy and which rendered child bearing definitely hazardous. In one case the patient and her husband took so little notice of her heart disease that the fact of her pregnancy was only casually mentioned by the husband when he had fetched the doctor to deal with an attack of syncope which resulted from the onset of labour and proved fatal (68).

There were 10 cases of Lobar or Broncho-pneumonia starting just before the onset of labour or being in the incubation period at the time of delivery. The seriousness of acute pulmonary infections as a complication of pregnancy and labour demands more recognition than it receives at present. Admission to hospital where a patient can be placed in an Oxygen Tent seems to be the only satisfactory means of dealing with cases of cardiac and respiratory embarrassment of this nature complicating labour and the early puerperium. The attention that a patient can receive in a working class home for such an illness falls far short of the minimum that is essential and beds should be available in hospitals with a resident medical staff and up to date equipment for their proper treatment. Case 78 died of Pneumonia on the 21st day of her puerperium having been in bed ever since delivery. She was sent in an ambulance the day before death and refused admission at the first two hospitals because of shortage of beds. It would have appeared better if earlier arrangements for hospital treatment had been made for this patient and the transfer not made when she was moribund.

One patient suffered from Diabetes with a supervening toxæmia and another patient was a drug addict taking large quantities of Laudanum daily (28). She was sent into hospital with toxæmia in the early weeks of pregnancy with no notification of her drug habit. Deprivation of her Opium caused alarming mental disturbance and death with a terminal abortion. Neither of these patients should have become pregnant.

There were 8 cases of death from pulmonary embolism following either operative delivery or previous varicosity of veins of the lower limbs. (5, 7, 17, 21, 65, 74, 75, 76.)

15 patients died of Toxæmia and of these there were several cases of unusual interest. Case (20) was apparently a normal case of pregnancy and labour who died with her only eclamptic fit immediately after the birth of the foetus and with an unseparated placenta. Case (23) was severely toxic and treated by Caesarian hysterectomy for an accidental hæmorrhage. After operation she developed complete anuria and died. Case (29) died of eclampsia when she was only 24 weeks pregnant. There were two cases (50 and 51) of acute yellow atrophy of the liver which died shortly after each other in the same hospital.

There were 18 cases of sepsis of puerperal origin and with the exception of one case of normal delivery and one normal delivery in a very fat woman with vaginal discharge, all followed delivery under most unsatisfactory conditions. Case (1) was delivered by craniotomy in a maternity home after she had suffered many hours from an obstructed labour for which forceps had been tried unsuccessfully at home. She was already grossly infected and hopeless when she came under the care of the Obstetric Specialist. Case (18) had her membranes ruptured many days before she was delivered by forceps in her own home. Case (38) had several vaginal examinations before she was treated for a placenta prævia by a classical Caesarian section without drainage. In her case the infection which led to a fatal general peritonitis was already present before operation. Case (16) followed forceps delivery and manual removal of the placenta, without gloves, in the patient's own home.

Of the cases that died from Hæmorrhage alone or Hæmorrhage and shock there were 6 cases of placenta prævia, 4 cases of Post partum bleeding, 1 case of bleeding from an abortion and 3 cases of Post partum bleeding with retained placenta, which was removed manually. While recognising that a case of obstetric hæmorrhage in the patient's own home can be a most alarming catastrophe calling for prompt treatment it must be pointed out that any measure of interference adopted should not expose the patient to a further risk. Bleeding from a partially separated placenta prævia is usually moderate at first and nearly always allows time for transfer of the patient to hospital, where she may be treated by modern methods under surgically aseptic conditions. Repeated vaginal examinations before transferring the patient to hospital is not a help towards ultimate recovery.

It is now well recognised in obstetric practice that Placenta accreta is a pathological rarity and that a placenta partly attached to a uterine septum does not occur with any frequency. These may call for operative removal. A placenta attached to the normal uterine wall if not spontaneously expelled within a reasonable time can be induced to separate by increasing its bulk by injecting the umbilical vein with a harmless sterile solution. The procedure is far more simple than that involved in attempts at manual removal and is entirely free from shock. It is to be strongly recommended in domiciliary midwifery practice in an attempt to reduce maternal mortality from this cause.

None of the cases of death from bleeding were treated by intravenous transfusion with gum saline solution or fresh blood. However desperate the condition of the patient may be it is always worth while to give her the benefit of the transfusion service which has been arranged by the Public Health Department as this treatment may just turn the scale in favour of recovery.

In conclusion there has been a noticeable decrease in the number of deaths following abortion and a rise in the deaths of cases of pneumonia which have been near term and gone into labour. In both these types of cases the practitioner is greatly handicapped in his efforts at treatment.

Cases of hæmorrhage have still been treated at home without the help of a specialist or transfusion service when they would have been better transferred to hospital and some cases of prolonged and difficult labour have been subjected to extensive operative interference with its consequent risk of sepsis.

A definite proportion of the cases that ended fatally were suffering from some organic disease which rendered pregnancy and labour especially dangerous. Here perfectly sound and careful medical treatment was not able to bring about a safe outcome.

In addition there were 4 cases of normal pregnancy and labour which died of some entirely unexpected puerperal complication.

R. H. B. ADAMSON.

### Maternity Homes.

The County Council has arrangements with 29 Municipal Authorities or Hospital Committees for the provision of lying-in accommodation for expectant mothers resident in the County Maternity and Child Welfare area. The total number of patients admitted to these hospitals was 3,677. This figure shows an increase of 403 over the previous year; the main increases occurred at:—Edenfield (private), Doncaster (31), Halifax General Hospital (111), Holmfirth, Holme Valley Memorial Hospital (45), Leeds Maternity Hospital (40), Sheffield, Jessop Hospital for Women (189), Skipton and District Hospital (23), Wakefield Municipal Hospital (56).

Statistics relating to these admissions are given in Table LXIV, page 115.

In addition to the above-mentioned accommodation there are 59 beds available in the County Public Assistance Institutions and information with regard to these is given in Table LXV, on page 116.

In accordance with suggestions contained in Circular 1622 dealing with maternal mortality issued by the Ministry of Health on the 7th May, 1937, the Public Health and Housing Committee considered a report of the County Medical Officer on the survey of maternity institutional accommodation already provided and required to serve the administrative County area for maternity and child welfare. The scheme provides for additional accommodation for maternity patients as follows:—

- (1) The provision in conjunction with the Doncaster Royal Infirmary, of a maternity unit for 70 beds in the grounds of the Doncaster Royal Infirmary.
- (2) The provision of an additional 8 beds at the maternity unit attached to the Skipton and District Hospital.
- (3) The erection of a maternity unit in conjunction with the Keighley Victoria Hospital by the Keighley Corporation and the County Council.
- (4) The provision of a maternity unit of 50 beds in conjunction with the proposed new general hospital for North-West Yorkshire.

- (5) The provision of a maternity unit of 60 beds in connection with the proposed extensions at the Staincliffe County Hospital.
- (6) The provision of a maternity unit of 80 beds in connection with the extensions at the White Rose Hospital, Wakefield.
- (7) The provision of a maternity unit of 20 beds in conjunction with the proposed new general hospital in South Yorkshire.
- (8) The provision, in conjunction with the Goole Borough Council, of a suitable maternity unit of 10 beds at Goole.

The average cost per patient per week in large maternity homes, based on the costing returns of the Ministry of Health, is £3 10s. 0d. or £182 per annum per bed; and on this basis the estimated total maintenance costs (including loan charges) in connection with this scheme will be £55,000, the income to be recovered from patients is estimated to amount to £10,000, leaving an approximate net cost on the rates of £45,000, including the estimated cost of maintenance of the beds at the Doncaster Royal Infirmary of £14,116 per annum.

With the exception of the Doncaster Royal Infirmary detailed proposals to give effect to each of the recommendations will be considered by the Public Health and Housing Committee in due course and further consideration may make it desirable that the location of certain of these beds can be varied in order to meet the local circumstances.

This matter was referred to in my annual report for 1936.

A maternity unit of 70 beds is to be provided in conjunction with the Doncaster Royal Infirmary at an estimated cost of £80,000 and for the maintenance of such unit the estimated cost is approximately £16,000 per annum.

The matter has been discussed with representatives of the Doncaster Royal Infirmary and it is proposed that a maternity unit of 70 beds should be provided in the grounds of the Doncaster Royal Infirmary. It is intended that the County Council shall have full control of the staff of the maternity unit, together with the right to appoint a medical officer of the unit. Control of the admission of cases to the hospital will rest with the County Council. It will be a condition of the grant that the County Council shall be represented on the Board of Governors.

The maintenance charges will be based upon the ascertained cost throughout the hospital during the preceding year.

#### **Wortley (Chapeltown) Maternity Home.**

Progress is now being made towards the erection of a maternity home of 22 beds at Wortley, between Penistone and Sheffield. Tenders have been received amounting to £24,130 for erection, and the furniture and equipment will cost an additional £3,500. A time limit clause of 15 months has been inserted in connection with the building of this home. The plan and lay-out is practically on similar lines to the one erected at Listerdale, near Rotherham.

#### **Harrogate General Hospital.**

In connection with the maternity unit of 14 beds now in course of erection to be attached to the Harrogate General Hospital, the County Council is contributing approximately one-third of the total cost of £12,600 towards its erection.

#### **Staincliffe County Hospital, Dewsbury.**

During the year arrangements were made with the Borough of Morley for maternity patients from that district to be received into the Staincliffe County Hospital, Dewsbury, at the maintenance charge of 7/- per patient per day, plus specialist services when necessary.

#### **Oldham Municipal Hospital.**

Arrangements were made during the year with the Oldham Corporation for the admission and treatment of West Riding cases in the Oldham Municipal Hospital, at a maintenance rate of 11/3d. per patient per day.

#### **Alma Road Hospital, Rotherham.**

During the year arrangements were made with the Rotherham Corporation for the admission and treatment of West Riding cases in the maternity wards of the Alma Road Hospital, at a maintenance charge of £2 2s. 7d. per patient per week.

### County Maternity Home, Montagu Hospital, Mexborough.

The work undertaken during the year at the County Maternity Home, Mexborough, is given below:—

20 maternity beds are provided by the County Council and during 1937, 384 patients were admitted and 339 cases delivered, the average duration of stay being 15 days.

The midwives employed in the wards delivered 317 cases and the doctors 22 cases.

Medical assistance was sought in 55 cases, a decrease of 34 compared with the year 1936.

One case of puerperal fever and 7 cases of puerperal pyrexia were notified during the year.

There were no cases of pemphigus neonatorum or ophthalmia neonatorum.

The number of infants not entirely breastfed whilst in the institution was 26.

4 maternal deaths occurred during the year, one more than the previous year. The cause of death in these four cases was:—

1. Lobar pneumonia, chronic bronchitis, exophthalmic goitre, normal childbirth.
2. Lobar pneumonia.
3. Ante-partum hæmorrhage, obstetric shock.
4. Retained placenta, manual removal, post-partum hæmorrhage, obstetric shock.

Number of infant deaths:—

12 stillborn, a decrease of 6 on the previous year.

4 within ten days of birth, a decrease of one on the previous year.

The deaths of infants were ascribed to:—

- (a) Anencephalus,
- (b) Prematurity,
- (c) Debility.

The number of admissions to this home remains very steady, and Colonel Connell, F.R.C.S., the honorary medical staff, house surgeons, matron, sister and nurses are once again to be congratulated on the excellent results which continue to be obtained at the hospital.

During the year, changes in the medical staff of the Montagu Hospital necessitated the re-arrangement of the staffing and also the establishment of a consultant clinic at the hospital. The County Council asked the Board of Governors of the Montagu Hospital to appoint a woman resident house surgeon with post-graduate experience in a maternity hospital to conduct the ante-natal work at the hospital and in the Mexborough Urban District.

The Public Health and Housing Committee also appointed Mr. Leslie B. Patrick, F.R.C.S., as the consultant obstetrician and gynaecologist for the consultant ante-natal clinic established in conjunction with the County Maternity Home and surrounding districts. He has also been placed in charge of, and to perform, any operative work in the maternity wards.

### Listerdale Maternity Home, Wickersley, near Rotherham.

The building of the Listerdale Maternity Home is the latest expression of the County Council's forward policy in safeguarding the health of the mothers in the West Riding of Yorkshire. Hitherto the County Council considered it advisable to utilise existing accommodation belonging to other Authorities, but in a report presented by the County Medical Officer, it was pointed out that there was urgent need for maternity hospital accommodation in South Yorkshire. After due consideration the County Council decided to embark upon a building programme and approved the erection of two *ad hoc* maternity homes at Listerdale, near Rotherham, and Chapeltown, near Sheffield, each containing 22 beds, including an observation unit of 2 beds.

The Listerdale Maternity Home is the first Home to be opened directly under the control of the County Council, and is the forerunner of other schemes for the provision of a further 300 maternity beds in the West Riding, mentioned in this section of the report.

#### AREA SERVED BY THE HOME.

The chief districts from which patients will enter the home are Maltby, Rawmarsh and Tickhill Urban Districts, and the Kiveton Park and Rotherham Rural Districts with a total population of 88,000 and 1,650 births per annum.

#### SITE.

A site for the Maternity Home was acquired at Wickersley in June, 1934, due to the generosity of J. C. Lister, Esq., of "Listerdale," Wickersley, who donated approximately 2½ acres to the West Riding County Council, on which to build this Home. In recognition of this gift the building is now called the "Listerdale" Maternity Home.

This site is situated at Wickersley and adjoins the main Rotherham-Maltby Road, and is approximately 430 feet above sea level, commanding an extensive and pleasing view of the valley to the south.

#### BUILDING.

The building was designed by Mr. P. O. Platts, the West Riding County Architect.

The Maternity Home is planned symmetrically about its axis and in such a manner that the rooms occupied by the patients and children command a southerly aspect, an essential point in this type of building.

The building is of two storeys and is constructed externally of multi-coloured rustic facing bricks, the roof being covered with red sand faced tiles, and the windows are of wood, being the "double hung sash" type of adequate dimensions.

#### PLAN.

This is in two sections: first, a series of rooms capable of being used for reception of patients or as an Ante-natal Clinic, and second, the Maternity Home proper.

Entrance to the Home is through an entrance hall, which may be used as a waiting room with lavatory accommodation for the public adjoining. From the hall access is obtained to an examination room, a bathroom, a clinical laboratory and a room for the Medical Officer. The Maternity Home proper consists of four 4-bed wards, one 2-bed ward, and two 1-bed wards, having ward sculleries, sink rooms, bathrooms and lavatories adjoining.

A large nursery is included on the south side, a portion of one end being occupied by babies' baths and other necessary sanitary equipment. A Duty Room, Matron's Office and necessary storage accommodation for linen are also provided.

A self-contained labour unit is included within the main building, access being obtained from the main corridor. This unit comprises two labour wards intervened by a sterilising room and a scrub-up and sink room to each ward.

The kitchen and other necessary offices are contained in the north-easterly wing of the Home, the latter containing a kitchen, scullery, larder, refrigerator, coal store, and maids' sitting room, together with the necessary cloak room and lavatories for the staff.

The first floor is reached by two staircases, one at each end of the building, and gives access to a sitting room, bathroom and bedroom for the Matron, a staff common room, a staff dining room with service room adjoining, which contains an electric service lift from the basement and ground floor, a staff sick room, and 16 bedrooms for the remainder of the staff. The necessary lavatory and bathroom accommodation is also provided on this floor, as is also that for linen, etc.

Owing to the nature of the site the basement is conveniently placed at one end of the building and contains the heating chamber, with coal and coke store, wash house, laundry, drying room and two store rooms.

#### ACCOMMODATION AND ADMINISTRATION.

In the main block there are 20 beds which, with a normal stay in the Home of two weeks, should result in approximately 500 patients being admitted each year. The observation unit of two beds is acrially separated from the main block and is equipped with its own ward kitchen and sterilising equipment. There are two labour wards, each with a separate room for "scrubbing up." One of these wards is also equipped with an operating table and other equipment capable of dealing with operative emergencies. One sterilising room, centrally situated, serves both labour wards.

All the buildings have inter-communication by telephones, and the staff quarters and the hospital block are fitted with radio equipment. Electric clocks are fitted throughout. Modern fire prevention equipment is also provided throughout the hospital block and staff quarters.

#### OBSERVATION UNIT.

Situate at a distance of approximately 40-ft. to the west of the main building is an Observation Block, which contains a 2-bed Observation Ward, a Nurses' room, ward scullery, sink room and lavatory.

#### FURNITURE AND EQUIPMENT.

The furniture and equipment is of modern type and has been supplied by contracts through the County Supplies Department.

#### STAFF.

There is no Resident Medical Officer, but in cases of emergency a medical practitioner is called in under the Rules of the Central Midwives Board, and in the event of the services of a Consultant being required, the County Council has an approved panel of Consultant Obstetricians and Gynaecologists, and four of these (who are on the staff of the Jessop Hospital for Women at Sheffield) are within easy reach of the Home. The nursing and domestic staff consists of:—

1 Matron	1 Housemaid
2 Staff Nurse-midwives	2 Ward and general maids.
6 Midwives	2 Laundry maids (non-resident)
1 Cook-Housekeeper	1 Gardener-Porter (non-resident)
1 Kitchenmaid	

## ACKNOWLEDGMENT.

Acknowledgment is made for the valuable advice which has been kindly given by the officials of the Ministry of Health.

## MATERNITY PATIENTS ADMITTED TO HOSPITALS AND MATERNITY HOMES.

The following table gives particulars regarding the admission of patients to Maternity Homes during 1937:—

TABLE LXIV.

Name of Municipal Authority or Hospital Committee.	No. of Maternity Beds in Institution	No. of patients admitted from C.C.'s M. & C.W. area during 1937	Deaths of Mothers	Deaths of Infants within 10 days of birth	Still-Births	Fees of Home per week
1	2	3	4	5	6	7
1. Barnsley Corporation, Municipal Maternity Home	7	55	—	—	2	£ s. d.
2. Barnsley Corporation, St. Helen Hospital ...	11	3	—	1	1	3 3 0
3. Batley Corporation ...	10	1	—	—	—	2 0 11
4. Blackburn Corporation ...	20	—	—	—	—	3 0 0
5. Bradford Royal Infirmary ...	—	—	—	—	—	4 14 6
6. Burnley Corporation ...	21	1	—	—	—	3 3 0
7. Castleford U.D.C. ...	13	170	—	7	2	4 4 0
8. Colne Corporation ...	14	73	1	1	5	4 4 0
9. County Maternity Home, Montagu Hospital, Mexborough ...	20	384*	4	4	12	3 7 6
10. Doncaster, Edenfield (Private) ...	38	608	13	15	46	3 7 6
11. Goole Corporation ...	4	15	—	—	3	3 3 0
12. Royal Halifax Infirmary ...	26	145	—	3	8	—
13. Halifax General Hospital ...	60	172	—	7	9	2 12 6
14. Harrogate and District General Hospital ...	—	71	—	1	10	3 3 0
15. Heckmondwike Nursing Association ...	5	1	—	—	—	2 7 0
16. Holmfirth, Holme Valley Memorial Hospital ...	5	121	1	5	10	3 3 0
17. Huddersfield Corporation, Municipal Maternity Home ...	32	229	—	9	6	4 0 0
18. Huddersfield Corporation, St. Luke's Hospital ...	8	38	1	3	3	2 2 0
19. Huddersfield Royal Infirmary ...	15	72	3	—	12	3 3 0
20. Keighley, St. John's Hospital ...	14	54	—	—	4	2 12 6
21. Leeds Maternity Hospital ...	100	527	7	19	26	4 2 3
22. Morley Corporation ...	8	9	—	—	1	3 5 0
23. Oldham Corporation ...	14	24	—	—	1	3 3 0
24. Ripon Nursing Institution ...	5	47	—	1	4	4 4 0
25. Rotherham Corporation ...	10	16	—	—	1	3 17 6
26. Sheffield, Jessop Hospital for Women ...	51	447†	3	15	38	3 3 0
27. Skipton and District Hospital ...	6	134	1	2	11	3 7 6
28. South Elmsall, etc. ...	6	1	—	—	—	3 3 0
29. Wakefield Corporation ...	33	192	2	9	13	3 3 0
30. York Corporation ...	28	67	—	3	2	3 7 6
	584	3677	36	105	230	

\* This figure includes 48 cases from Mexborough and Bolton-upon-Deane, Districts who were treated prior to 30/6/37, and 13 from Wombwell Urban District, where the local Councils were the authority for administering the Maternity and Child Welfare Act, during the year.

† Includes West Riding patients admitted under the Hospital's 1d.-in-the-£ scheme.

NOTE.—(a) Harrogate General Hospital and the Huddersfield Royal Infirmary at present only admit complicated cases.

(b) Castleford Urban District Council and the Huddersfield Corporation only accept normal cases.

With the exception of Bradford Royal Infirmary, Harrogate General Hospital, Halifax General Hospital, Huddersfield Royal Infirmary, Leeds, Sheffield and York, where the fees are inclusive, a surgeon's fee is chargeable for special cases. In the case of the Royal Halifax Infirmary an annual grant is made.

The total admissions of West Riding patients to maternity homes in the County and in the neighbouring County of Lancashire numbered 3,677, against 3,274 in 1936, an increase of 403 patients.

## Deaths in Maternity Homes.

Although the majority of admissions to maternity homes are of an abnormal character it is gratifying to report that at 19 of these homes there were no deaths. At the remaining 11 there were 36 deaths of women in childbirth, an increase of four over the previous year.

### MATERNITY PATIENTS ADMITTED TO PUBLIC ASSISTANCE INSTITUTIONS.

Under the Local Government Act, 1929, Part I, 22 institutions and one separate hospital (Keighley) were transferred to the County Council on the 1st April, 1930. In 16 of these institutions, 60 beds are available for maternity cases and during 1937, 451 patients were admitted.

The following table gives particulars of these institutions shewing the beds available, cases admitted, and number of maternal and foetal deaths:—

TABLE LXV.

Name of County Institution.	No. of maternity beds.	No. of cases confined during 1937.	No. of cases delivered by		No. of cases in which medical assistance was sought by midwife in emergency	No. of cases notified as				No. of Maternal deaths.	No. of Foetal deaths	
			Midwives.	Doctors.		Puerperal Fever.	Puerperal Pyrexia.	Pemphigus Neonatorum.	Ophthalmia Neonatorum.		Still-born.	within ten days of birth.
1. Batley ... ..	10	108	104	4	41	—	2	—	2	1	6	4
2. Clayton ... ..	6	18	16	2	—	—	—	—	—	—	1	—
3. Goole ... ..	4	2	2	—	—	—	—	—	—	—	—	—
4. Grenoside ... ..	1	4	4	—	—	—	—	—	—	—	—	1
5. Hemsworth ... ..	2	3	3	—	—	—	—	—	—	—	—	—
6. Keighley ... ..	14	227	193	34	24	—	2	—	—	—	10	4
7. Knaresborough ... ..	4	12	12	—	1	1	—	—	—	—	3	—
8. Otley ... ..	2	5	5	—	—	—	—	—	—	—	1	—
9. Pontefract ... ..	4	13	12	1	3	—	—	—	1	—	—	1
10. Ripon ... ..	2	—	—	—	—	1	—	—	—	—	—	—
11. Selby ... ..	3	33	27	6	6	—	—	—	—	—	3	3
12. Settle ... ..	2	2	1	1	—	—	1	—	—	—	—	—
13. Skipton ... ..	1	6	6	—	1	—	—	—	—	—	—	1
14. Tadcaster ... ..	1	1	—	1	—	—	—	—	—	—	—	—
15. Todmorden ... ..	1	2	1	1	1	—	—	—	—	—	—	—
16. Wakefield ... ..	2	15	13	2	1	6	3	—	3	1	3	2
	59	451	399	52	78	8	8	—	6	2	27	16

### COLLECTION OF MATERNITY HOME FEES.

The County Council have fixed the maximum fee to be paid by patients received into Maternity Homes by arrangement with the County Council, at £3 3s. 0d. per week, and in cases where the fee charged exceeds £3 3s. 0d. per week the County Council pay the balance of such fee.

The County Council also pay the doctor's and specialist's fees.

In October, 1937, the County Council amended the scale of payment, as under, and in necessitous cases, the whole or part of the fees are paid by them.

SCALE OF PAYMENT.

Where the total family income, after deducting the actual rent paid and 5/- for each child under 14 years of age, and not working.	Amount payable by Patient.
Does not exceed 24/- per week ... ..	Nil
Is between 24/- and 34/- per week ... ..	Amount of Maternity Benefit received
Is between 34/- and 44/- per week ... ..	Half Fees.
Exceeds 44/- per week ... ..	Whole Fees.

In ascertaining the weekly income of the family, the average earnings for the four weeks preceding the birth are taken, and in addition special deductions in appropriate cases are allowed as follows:—

Workmen's Compensation ... ..	First 7/6 to be deducted from gross income.
National Health Insurance ... ..	First 7/6 to be deducted from gross income.
Sick Club benefits ... ..	First 5/0 to be deducted from gross income.
Army Disability Pension ... ..	First £1 to be deducted from gross income.
Income from lodgers or family in respect of board ... ..	Only 4/0 in each £1 is to be reckoned as income.

If any part of a house is let furnished, only one half the rent therefrom is to be reckoned as income.

As from the 1st January, 1934, the collection of fees was taken over by the West Riding Treasurer's Department and the work is undertaken by 19 area collectors. The Public Health Department ascertains the fee to be paid in each case, and is responsible for rendering accounts.

The number of claims dealt with is as follows:—

	1933	1934	1935	1936	1937
Whole fees ... ..	179	280	315	349	1,000
Half fees ... ..	334	250	320	264	550
Maternity benefit ... ..	979	681	426	288	425
	<u>1,492</u>	<u>1,211</u>	<u>1,061</u>	<u>881</u>	<u>1,975</u>

The following statement is for the period 1st October, 1936 to 30th September, 1937.

	£	s.	d.	£	s.	d.
Amount outstanding 1st October, 1936 ...	2,570	8	11			
Less amounts written off ... ..	644	15	8	1,925	13	3
Accounts rendered ... ..				7,440	8	10
				9,366	2	1
Less fees collected by West Riding Treasurer				4,825	12	9
Amount outstanding 30th September, 1937 ...				4,540	9	4

### Supply of Milk and other Foods to Expectant and Nursing Mothers and Children under Five Years of Age.

The County Council's scheme for the sale and distribution of milk at Child Welfare Centres was extended as from the 1st April, 1937, to include the following special foods:—

Sunrose No. 1. ...	Full cream dried milk powder ... ..	1/5 per lb. carton.
Sunrose No. 2 ...	Full cream dried milk powder with added iron and calciferol ... ..	
Sunrose No. 3 ...	Humanised milk, half cream ... ..	
Cow & Gate ...	Full cream. 1/8d. per lb. carton.	
Fresh milk ...	This is only supplied where dried milks have been tried and found to be unsuitable.	
Virol ...	1/4d. per lb. carton.	
Glucose D. ...	4d. per 4-oz. packet.	
Malt and Cod Liver Oil ...	7d. per 1-lb. container.	
Pure Cod Liver Oil ...	7d. per 8-oz. bottle. (This is necessary for the proper observance of anti-rachitic precautions if any dried milk not containing sufficient vitamin D. is recommended.)	
Cod Liver Oil Emulsion ...	6d. per 8-oz. bottle.	
Olive Oil ...	8d. per 10-oz. bottle.	
Lactogol.	1/4d. per 4-oz. tin.	
Parrish's Chemical Food ...	6d. per 8-oz. bottle.	

In addition to the above, ferrous sulphate tablets, adexolin tablets, Blaud's pills and calcium lactate tablets are supplied on the requisition of Medical Officers of Centres for distribution in necessitous cases only.

Dried milk only is distributed because of its convenience in handling, its concentration and the greater ease of recovery of payments. It is supplied free or at less than cost price for:—

- Children up to three years of age and exceptionally to children between three and five years.
- Nursing mothers.
- Expectant mothers at any stage of pregnancy.

Ordinarily a 1-lb. carton per week (equivalent to five and a half pints of fresh milk) is supplied, but where considered necessary, three cartons may be supplied per fortnight. It is supplied free or at a reduced price in necessitous cases.

Issues were previously made on the recommendation of the Medical Officer of a Child Welfare Centre, or in districts where there was no Centre on the recommendation of the local Medical Officer of Health, but as from the 1st April, 1937, it was decided to extend this authority to certify that milk or foods were necessary for a particular mother or child to the private medical attendant of the patient, it being considered that the Medical Officer of Health was rarely the patient's medical attendant and was not familiar with the family circumstances and that, in addition, he may live many miles from the person applying for the milk. It was also considered that the patient may live a considerable distance from a Child Welfare Centre or Ante-natal Clinic. If the supply is recommended by the medical attendant, he may sign the necessary certificate and the mother may then arrange for it to be presented at a Child Welfare Centre by any member of the family.

The scale of family income adopted by the Committee as a guide to the supply of foods free or at less than cost price was revised by the County Council in October, 1937, and is now as follows:—

Where the net weekly income of the family, after deducting the actual rent paid and 5/- for each child under 14 years of age and not working does not exceed 24/- per week, the County Council provide dried milk free.

Where the net weekly income of the family, calculated as above, exceeds 24/- per week but does not exceed 34/- per week, the County Council provide dried milk at half the cost price.

Where the net weekly income of the family, calculated as above, exceeds 34/- per week, the applicant must pay the full cost price for dried milk.

In ascertaining the weekly income of the family, the average earnings for the four weeks prior to the application are taken. All applicants in necessitous cases are required to fill in a form showing the income of the family from all sources, number of children under 14 years of age, name and address of employer and the signature of the father is required to this statement.

The scheme for the verification of family circumstances was extended to the whole of the County Council's area as from the 1st April, 1937, and the statements of circumstances mentioned above are now, therefore, investigated by the Public Assistance Officer. During 1937, 15,896 cases were verified and in 1,310 cases it was found necessary to charge full cost price in respect of future issues and in 1,416 cases to charge half the cost price.

The certificate of the Medical Officer that milk is needed on the grounds of health is valid for four weeks and may then be renewed on application. Each applicant signs a receipt in the space provided on the form for all foods which are issued.

During 1937, the following issues were made at Child Welfare Centres:—

	Free.	Half Price.	Full Price.
	lbs.	lbs.	lbs.
Dried Milk ... ..	131,921	8,144	120,640
Other Foods ... ..	10,993	379	27,424

On the 1st April, 1937, the Minister of Health issued a circular dealing with the nutrition of expectant and nursing mothers and children under school age requesting Councils to review their arrangements under the Maternity and Child Welfare Act, 1918. He also drew attention to the first report of the Advisory Committee on Nutrition emphasising the nutritional value of milk.

The circular stated that the Minister considered that the arrangements made by each authority should enable sufficient milk or other food to be provided where necessary for the maintenance of health of the mother or young child. With regard to the question of payment for milk or other food supplied, while he does not suggest there should be any departure from the principle that such part of the cost as the recipient can easily afford to pay should be recovered, he emphasises that it is of great importance that the scale of income adopted by the authority for this purpose should be so framed as not to render it difficult for any mothers to take advantage of the authority's arrangements.

The circular was considered by the Committee and it was decided that the suggestions contained therein be circulated to Medical Officers of Child Welfare Centres with instructions that the suggestions be followed as far as possible.

### **Dental Treatment of Expectant and Nursing Mothers.**

Dental treatment is provided by the County Council for expectant and nursing mothers attending Child Welfare Centres and Ante-natal Clinics, who are not eligible for dental treatment from any other service, provided that such treatment is certified by the Medical Officer of the Child Welfare Centre or Ante-natal Clinic to be necessary.

Arrangements are made for treatment, including provision of dentures, with dentists approved by the County Medical Officer. The patient is allowed the choice of dentist in the district where she resides, and the treatment is carried out and paid for by the County Council in accordance with the scale approved by the Dental Benefit regulations made by the Minister of Health and the National Health Insurance Joint Committee for the use of Approved Societies under the National Health Insurance Acts.

Dental clinics have now been established at Wath-on-Deane and Wakefield, and serve the surrounding districts, while giving the patients choice of dentists, Medical Officers of Ante-natal Clinics are urging them to utilise the services of the County Dentist. It is anticipated that there will thus be a saving to the County Council of at least one third of the total cost charged by private dentists. The cost to the patient for treatment carried out under this scheme is assessed on the same scale as in cases where treatment has been completed by a private dentist.

The cost of treatment is recovered from the patients, but in necessitous cases the cost is paid by the County Council, according to the following scale:—

#### SCALE OF PAYMENT.

Where the total family income, after deducting the actual rent paid and 5/- for each child under 14 years of age and not working	Amount payable by patient	Amount payable by County Council
Does not exceed 24/- per week	Nil	Whole Fees
Is between 24/- and 44/- per week	Half Fees	Half Fees
Exceeds 44/- per week	Whole Fees	Nil

All cases are reported to the Committee for consideration before any part of the cost of treatment is claimed from the patient.

During 1937, 496 expectant and nursing mothers received treatment under this scheme at a total cost to the County Council of £3,250.

#### Children under School Age.

In May, 1936, the Minister of Health issued Circular 1550 with regard to children under school age. In this circular it was pointed out that in many areas insufficient attention is being given to the health of young children between the ages of 18 months and 5 years. The Minister also states that it is understood that more than 16% of the children entering school are found to require treatment for some disease or defect and it is clear that many of these conditions could have been prevented from developing or could have been quickly cured if adequate supervision of the health of the children had been exercised throughout the pre-school years.

In December, 1937, the Child Welfare Sub-Committee considered a report of the County Medical Officer and were of opinion that further provision should be made for the supervision of the health of children between the ages of 18 months and 5 years, including the provision of nursery classes, special clinics for the treatment of eye, ear, nose, throat and teeth conditions and toddlers' clinics and the appointment of orthopaedic nurses and additional child welfare nurses.

##### (a) Nursery Schools and Classes.

The West Riding Education Committee has been asked to consider the erection of nursery schools or the provision of nursery classes in the following areas:—

##### Urban Districts:—

Darton.	Otley.
Elland.	Royston.
Holmfirth.	Saddleworth.
Horbury.	Selby.
Horsforth.	Stanley (Outwood).
Knottingley.	Stocksbridge.
Mexborough.	Wath.
Mirfield.	Worsborough.

##### Rural Districts:—

Doncaster R. ... ..	Rossington, Armthorpe.
Rotherham R. ... ..	Swallownest, Thurcroft.
Thorne R. ... ..	Thorne, Dunscroft.
Wakefield R. ... ..	Criggliestone.
Wortley R. ... ..	Chapeltown, Ecclesfield, High Green.

##### (b) Special Clinics.

Many special clinics are already set up for the treatment of eye, ear, nose, throat and teeth conditions and these are to be made available to the fullest extent for children between the ages of one and five years.

##### (c) Toddlers' Clinics.

In connection with the scheme it is proposed to establish toddlers' clinics at the following child welfare centres:—

##### Urban Districts:—

Adwick-le-Street (Woodlands).	Maltby.
Aireborough (Yeadon).	Mirfield.
Bentley.	Normanton.
Conisborough (Denaby Main).	Otley.
Cudworth.	Royston.
Darton.	Saddleworth.
Dearne (Goldthorpe and Thurnscoe).	Selby.
Elland.	Skipton.
Featherstone.	Sowerby Bridge.
Hemsworth (Hemsworth and Fitzwilliam).	Stanley (Outwood).
Holmfirth.	Stocksbridge.
Hoyland Nether (Hoyland and Hoyland Common).	Swinton.
Knottingley.	Wath (Wath and West Melton).
	Worsborough (Dale and Bridge).

## Rural Districts :—

Doncaster R.	...	...	...	Armthorpe, Edlington, Rossington.
Kiveton Park R.	...	...	...	Dinnington.
Rotherham R.	...	...	...	Cortonwood, Dalton, Swallownest, Thurgroft.
Tadcaster R.	...	...	...	Allerton Bywater, Micklegate, Swillington.
Thorne R.	...	...	...	Dunscroft, Moorends, Stainforth, Thorne.
Wortley R.	...	...	...	Chapelton, Ecclesfield, High Green and Stannington.

## (d) Re-organisation of Nursing Staff.

It has been reported to the Child Welfare Sub-Committee upon the number of vacancies during recent years in the present establishment of whole-time health visitors and school nurses. Now that the Review of County Districts is practically settled it has been possible to review the nursing services and during the last ten to fifteen years great strides have been made in the maternity and child welfare work and probably the largest part of the burden of this additional work has fallen upon the shoulders of the child welfare nurses. During more recent years the health visitor has had added to her already extensive list of duties other work in connection with ante-natal and post-natal clinics, the survey of school and pre-school children, increased visits to toddlers etc., and it has become quite impossible in the County for the present establishment to cope with all the demands now made by the Ministry of Health and the Board of Education. In this connection the County Council has agreed to increase the establishment of whole-time health visitors from 117 to 150, this latter figure including the established posts of school nurses, which have now been abolished.

## (e) Orthopaedic Nurses.

In connection with the re-organisation of the nursing staff the Committee has agreed to the appointment of six orthopaedic nurses holding the certificate of the Society of Massage and Medical Gymnastics to serve under the orthopaedic scheme of the Administrative County, including those Part III Education Authorities who are desirous of participating in the scheme, at a salary of £200 rising by increments of £10 to £240 per annum, plus uniform allowance of £8 per annum.

## Homes and Hospitals for Children under Five Years of Age.

The following table shews that during the year 166 children under five years of age were treated in hospitals. The cases dealt with were mainly those of premature babies, improper feeding, or ophthalmia neonatorum.

TABLE LXVI.

Name of Home or Hospital	No. of patients treated by County Council during 1937	Inclusive fees of Home per week		
		£	s.	d.
1. Edenfield Private Maternity Home, Doncaster	45	1	1	0
2. Halifax (General Hospital)	—	1	1	0
3. Harrogate Municipal Babies' Hospital	25	1	10	0
4. Harrogate and District General Hospital	2	3	3	0
5. Huddersfield Maternity Home	1	1	1	0
6. Huddersfield Royal Infirmary	13	1	1	0
7. Leeds General Infirmary	4	1	10	0
8. Leeds Maternity Hospital	28	1	1	0
9. Marguerite Home, Thorparch (Orthopaedic)	12	1	15	0
10. Scarborough Children's Convalescent Home	25	1	1	0
11. Skipton and District Hospital	1	1	1	0
12. York Municipal Maternity Hospital	1	1	1	0
13. Yorkshire Children's Orthopaedic Hospital, Kirbymoorside	5	1	18	6
14. Other Institutions	4	—	—	—
Total ...	166			

## Birth Control.

In March and July, 1931, the Minister of Health issued memoranda on the question of Birth Control and after consideration the County Council decided to take action in this matter on the lines indicated by the Ministry's memoranda. In the memoranda it is pointed out that Local Authorities have no power to establish rate-aided birth control clinics and that their activities are restricted to the giving of advice through their medical officers at Child Welfare and Ante-Natal Clinics, and to the provision of appliances in those cases where it is considered undesirable on the grounds of health that certain married women should give birth to children. Having regard to the acute division of public opinion on the subject of birth control, the Ministry decided that no Departmental sanction which may be necessary to the establishment of such Clinics for expectant and nursing mothers shall be given except on condition that contraceptive advice will be limited strictly to cases where further pregnancy would be detrimental to health.

The following table gives particulars of the five clinics open in the County where advice and instruction in birth control methods are given. These clinics serve a very large number of child welfare centres and ante-natal clinics from which women are referred for advice.

In necessitous cases, appliances and materials are supplied free of cost, and travelling expenses are paid.

TABLE LXVII.

Location.	Day and hours of Attendance.	Medical Staff. Names and Qualifications.	Number of:—	
			Health Visiting Staff.	Nursing Staff.
Doncaster. Edenfield Maternity Home, Thorne Road ... ..	Third Wednesday in Month at 2 p.m.	Agnes G. Bruce, M.B., Ch.B.	—	1
†Hipperholme, Wesleyan Sunday School ... ..	First Friday in month at 2 p.m.	Elizabeth Thompson, M.B., Ch.B.	1	—
Leeds. Maternity Hospital, Hyde Terrace ... ..	Any Wednesday at 9-30 a.m.	Consultant on duty.	—	1
Swinton. Rock House ... ..	Second and fourth Friday in month at 2 p.m.	Margaret M. Owen, M.B., Ch.B.	2	—
Ripon, Alma House ... ..	Alternate Wednesdays at 2 p.m.	Gladys Kay, M.D., M.B.	1	—

During 1937, 492 married women received advice at the above clinics, an increase of 102 over the previous year, and these were distributed between them as under:—

Doncaster ... ..	158
†Hipperholme ... ..	1
Leeds ... ..	32
Swinton ... ..	293
Ripon ... ..	8
<b>Total</b> ... ..	<b>492</b>

† Under the West Riding of York County Review Order, 1937, the Hipperholme Urban District was amalgamated with Brighouse Borough (autonomous for maternity and child welfare services) on the 1st April, 1937, and the figure in respect of the Hipperholme Clinic only relate to the first three months of 1937.

## Public Health Act, 1936.—Part VII.

### Notification of Births.

During the year, 15,680 live births (15,112 legitimate, 568 illegitimate) and 759 still births (713 legitimate, 46 illegitimate), were registered in the County Notification of Births Area, and 15,262 (14,866 live births, and 396 still births) were notified. Of the 15,262 births, 13,313 were notified by midwives, and 1,949 by doctors and parents.

At the end of 1937 there were 10 Boroughs, 8 Urban Districts and 1 Rural District exercising powers under the above Act, namely:—The Boroughs of Batley, Brighouse, Goole, Harrogate, Keighley, Morley, Ossett, Pontefract, Pudsey and Todmorden, the Urban Districts of Bingley, Castleford, Heckmondwike, Ilkley, Rothwell, Shipley, Spenborough and Wombwell, and the Rural District of Hemsworth.

The estimated mid-year population in 1937 of the Administrative County was 1,506,110 and deducting the 19 autonomous areas enumerated above, having a total population of 515,678, the population of the County Notification of Births Area totalled 990,432.

Arrangements made by the County Council in the interests of economy and to avoid overlapping are as follows:—

Authorities performing school nursing for the County Council on agreed terms: Bingley, Heckmondwike and Wombwell Urban Districts.

Districts where the County Council employ whole-time school nurses on account of large size of area: Goole Borough, Castleford, Ilkley and Rothwell Urban Districts and Hemsworth Rural District.

At Heckmondwike and Wombwell, the County Council's school clinics combine with the maternity and child welfare centres belonging to the Local Authority.

By order of the Ministry of Health the powers under Part VII of the Public Health Act, 1936, were transferred from the Dearne, Featherstone and Mexborough Urban District Councils to the County Council. The Orders came into operation on the 1st July, 1937. By these Orders the number of districts in the Administrative County autonomous for maternity and child welfare services was reduced from 22 to 19.

### Inspectresses of Nurses and Midwives.

TABLE LXVIII.

	Miss A. M. Clarke	Miss M. Davenport	Miss R. O'Brien	TOTAL
Visits to Whole-time Health Visitors ... ..	210	198	88	496
" " Part-time " " ... ..	25	7	67	99
" " Child Welfare Centres and Ante-natal Clinics ... ..	147	126	63	336
" " Ultra-Violet Ray Clinics ... ..	2	1	—	3
" " Midwives ... ..	200	318	399	977
" " Children nursed for reward ... ..	3	2	—	5
" " Maternity Homes ... ..	22	2	16	40
Premises inspected as to their suitability for Child Welfare Centres ... ..	39	30	4	73
Special visits (ophthalmia neonatorum, puerperal pyrexia, uncertified practice, concealment of birth, abortifacients, pemphigus and deaths of children)	21	27	21	69
Attendance at meetings of local Child Welfare Committees and with nursing associations and interviews with medical practitioners and various people relative to Maternity and Child Welfare Scheme ... ..	126	145	52	323
	855	856	710	2,421

In addition, during the year the Inspectresses carried out the following duties:—

- (a) Attended official openings and also gave addresses at Child Welfare Centres.
- (b) Met and instructed local voluntary social workers in their duties.
- (c) Assisted in the preparation and at the exhibition at the Bingley College Garden Party.
- (d) Assisted with the ante-natal investigations in connection with the nutrition of expectant mothers.

They also instructed new nurses in their duties; assisted with the preparation of schedules of furniture and equipment for maternity homes, child welfare and ante-natal clinics. Much time has also been spent in connection with the new salaried midwifery service.

It is with very great regret I have to report the death of Miss Annie Brooke, who died on the 3rd September, 1937. Miss Brooke came to the West Riding as a health visitor and school nurse early in 1915 and during the war period was brought into the central office and subsequently appointed the first Inspector of Nurses and Midwives in the County. She had served with the County Council for 22 years and had given the best years of her life to the work which she loved. Her energy and enthusiasm for the work was abundant, and the nurses, midwives and voluntary workers in the County have shown their appreciation of the services she so ungrudgingly rendered by subscribing to a memorial, the form of which has not yet been decided, to perpetuate her memory. At the time of writing this report the fund had reached slightly over £100.

The scale of salaries of the inspectresses of nurses and midwives was increased during the year from £250—(£12/10s.)—£300 to £350—(£10)—£400.

The establishment of inspectresses of nurses and midwives was increased during the year from 3 to 4.

**Nursing Staff.**

The establishment of the Nursing Staff employed in connection with Maternity and Child Welfare work is as under:—

- 4 Inspectresses of Nurses and Midwives.  
1 Emergency Nurse.  
116 Child Welfare Nurses undertaking combined duties of Health Visiting and School Nursing.  
66 Part-time nurses employed by Nursing Associations, to undertake, on behalf of the Council, the Health Visiting and School Nursing work.  
15 Health-Visitor-Midwives employed under the Salaried Midwifery Scheme.

One new nurse was appointed and at the end of the year, by obtaining temporary assistance, all the districts were being served effectively.

Nurse M. Simpson, employed as a Tuberculosis Nurse in the County was transferred to the health visiting staff on the 1st January, 1937.

The new scale of salaries approved by the County Council in January, 1937 came into operation on the 1st April, 1937. This scale was altered from £180—(£10)—£230 to £200—(£10)—£240 per annum.

Nurse A. Broughton (Ilkley Area) retired on superannuation on attaining the age of 65 years on the 5th July, 1937. This nurse had been in the service of the County Council 23 years.

Nurse Broughton was school nurse for the County Council in the Ilkley Urban District and also undertook by arrangement with the Ilkley Council (autonomous for maternity and child welfare services) the health visiting work in the district. On her retirement the Ilkley Urban District Council desired to appoint their own health visitor, but pending the appointment of a nurse asked the County Council to continue the previous arrangement, and as this was agreed to, a nurse from the adjoining area carried out all duties in the Ilkley Urban District until August, 1937.

### Training of Nurses.

For many years difficulty has been experienced not only in the West Riding of Yorkshire but in other parts of the country in obtaining an adequate number of recruits for the nursing services.

In 1931 the Education Officer and the County Medical Officer presented reports as to methods which might be adopted to enable nurses to be trained as Health Visitors. The scheme suggested was not proceeded with, as soon afterwards the shortage of this class of nurse ceased to exist owing to the training schemes operated by many County Boroughs.

The Education Committee in the same year considered the question of the award of Bursarships to girls in attendance at Secondary Schools who had reached the age of 16 years and who wished to become nurses, and decided to offer ten awards each year.

The Bursarships provide tuition, fees, games subscriptions, charges for the use of books and necessary travelling expenses. Maintenance allowances are also granted if need is shown. The awards are made for a period of two years to enable the holders to remain at school until of age to serve as probationer nurses.

Successful candidates were required to give an undertaking that at the age of 18 years they would enter a hospital to train as a general nurse and later obtain the Certificate of the Central Midwives Board and the new Health Visitor's Certificate with a view to qualifying for employment as a Health Visitor.

The following summary gives information on the award of Bursarships since the start of the scheme:—

#### NURSING BURSARSHIPS.

Schedule of Results of Awards up to 31st December, 1937.

Bursarships awarded.		Bursars actually in General Training.	Bursars actually in Midwifery Training.	Bursarships cancelled, etc.		Bursars still at school.
Year.	No.			Before training commenced.	After training commenced.	
1931-32	9	4	4	—	1	—
1932-33	9	6	—	—	3	—
1933-34	8	6	1	—	1	—
1934-35	6	6	—	—	—	—
1935-36	9	7	—	1	—	1
1936-37	7	2	—	1	—	4
1937-38	9	—	—	—	—	9
Totals	57	31	5	2	5	14

Name of Hospital.	Trainees (General).	Trainees (Midwifery).
Battersea ... ..	1	—
Beckett Hospital, Barnsley ... ..	—	1
Bradford Royal Infirmary ... ..	4	—
Clayton, Wakefield ... ..	1	—
Derby Royal Infirmary ... ..	1	—
Huddersfield Royal Infirmary ... ..	1	—
Jessop Hospital for Women ... ..	—	1
Leeds General Infirmary ... ..	11	—
Nottingham ... ..	1	—
Paddington Infirmary ... ..	2	—
Preston Royal Infirmary ... ..	1	—
Royal Halifax Infirmary ... ..	1	—
Royal Manchester Children's Hospital ... ..	1	—
Sheffield City General ... ..	1	2
Sheffield Royal ... ..	3	—
Whitechapel ... ..	2	—
York Maternity Home ... ..	—	1
	<hr/> 31	<hr/> 5

Ten Bursarships were offered by the Education Committee for the year 1937-38 and nine awards have been made.

Although this scheme at the commencement was intended to help the recruitment to the health visiting staff, provision for recruitment to the staffs of the County Council hospitals is also desirable.

The greatest difficulty experienced in any scheme for the encouragement of young women to train for the nursing services is in bridging the gap between the age of 16 years and the age of entry to a hospital for training at 18 or 19 years.

Recent advertisements in nursing papers show that the age at which voluntary hospitals will accept probationer nurses is 18 years in nine cases and 19 years in eight cases. Municipal hospitals, similarly state the minimum age as 18 or 19 years with the exception of one hospital which is willing to accept probationer nurses for general training at 17 years of age. A few hospitals devoted to the treatment of special complaints such as eye and ear diseases are willing to accept nurses for training at 17 or 17½ years.

It is generally recognised that during the gap between the obtaining of Matriculation or School Leaving Certificate and the age of entry into hospital for training the prospective probationer nurse should be given some special tuition.

This special tuition might be in one of the following ways:—

(1) AT A SECONDARY SCHOOL.

This method is at present in force in the West Riding. Heads of schools at which intending nurses are in attendance are recommended, if possible, to include the following subjects in the school work of these pupils.

Economic History.  
General Elementary Science.  
General Elementary Biology.  
Economics of Everyday Life.

For general reading, books on Social Services and pamphlets issued by the Government on social welfare, industrial conditions, etc.

(2) AT A TECHNICAL SCHOOL.

The Kilburn Polytechnic, London, has a "Course in Preparation for entry into the nursing profession," which has been arranged at the request of the Public Health Department of the Middlesex County Council. At the end of the course, opportunity is given to the pupil to enter one of the Middlesex County Council's Hospitals.

The course, extending over two years, gives instruction in the following subjects.

Elementary Inorganic and Organic Chemistry.  
Physics and Biology.  
Anatomy.  
Physiology.  
Hygiene.  
Bacteriology.  
First Aid, Home Nursing and Child Welfare.  
Domestic Subjects.  
Child Study.  
History of Nursing Science, Social Reform, etc.  
English, Arithmetic, Drama, Music.  
Drawing, Physical Training.

In addition, visits are arranged to hospitals and creches.

The pupils are non-resident.

Application has been made to the General Nursing Council for recognition of the Course for the Preliminary State Examination but it has not, as yet, been approved.

After the successful bridging of the gap between the years 16 and 18 the prospective nurse enters a recognised training school and in the case of a pupil intending to adhere to general nursing the difficulties are usually at an end. In the case, however, of a pupil such as the holder of a County Bursarship who is expected to qualify as a health visitor, two further difficulties arise.

On completion of her general training the nurse is expected to take the Certificate of the Central Midwives Board. Several trainees have indicated that the expense of taking this is beyond their resources, for although eleven hospitals in the country give free midwifery training and eighteen at a reduced fee to general trained nurses, it is not always possible to secure admission.

Following the obtaining of the midwifery qualification, training as a health visitor has to be secured. At the present time facilities for this are relatively frequent through the schemes of County Borough Councils. Financial difficulties are eased by a salary loan scheme whereby the trainee receives half salary during the period she is being trained.

#### SUMMARY AND CONCLUSION.

There is a need for an increase in the recruitment to the nursing services of the County Council.

It is desirable that there should be provided facilities for the suitable training of intending pupils from the age of 16 years to 18 years.

Facilities similar to those provided at the Kilburn Polytechnic might be arranged in association with hospitals which are recognised by the General Nursing Council as a complete training school. Thus a supply of pupils suitable for training in County Council hospitals would become available.

The number of hospitals giving facilities for midwifery training, free or at a reduced fee, are insufficient for the demands upon them, and accordingly the question of the provision of financial assistance to those bursars who find difficulty in paying the full fees might receive consideration.

The number of schemes for the training of health visitors by other Authorities appears at present to be sufficient to ensure a supply of fully trained Health Visitors.

The General Nursing Council of England and Wales at its meeting on the 25th March, 1938, asked their Education and Examination Committee to submit draft regulations for giving effect to the following resolution:—

"That the Council approve the division of the preliminary State examinations into two parts; Part I of the examination, which may be taken before entry to a training school, shall include the subjects of anatomy, physiology and hygiene."

"A candidate taking Part I of the examination before entrance to a training school will be required to produce evidence that she has undergone a course of instruction approved by the General Nursing Council, which shall include the above subjects."

"The minimum age of entry to Part I of the examination shall be 18 years."

Immediately the new regulations are issued by the General Nursing Council, the question of the training of nurses is to be considered by a Joint Sub-Committee of the West Riding Education Committee and the West Riding Public Health and Housing Committee.

### Home Visits.

Visits made by Health Visitors during the year were as follows (for detailed analysis see table LXX folded in at page 134).

Expectant Mothers ... ..	13,691
Infants under one—first visits ... ..	15,174
Infants under one—Total ... ..	105,260
Children 1/5 ... ..	159,267
Special Visits (ophthalmia neonatorum, teething, marasmus, feeding, circumcision, etc.) ... ..	3,039
Measles cases ... ..	1,117

## Measles.

During 1937 the Health Visitors made 1,117 visits to measles cases distributed over 42 sanitary districts, being a decrease of 293 from the previous year (see table folded in at page 134).

## Child Welfare Centres.

### Attendances at Child Welfare Centres.

The total attendances at Child Welfare Centres show an increase of 17,327 children compared with the previous year. To some extent this increase is due to the establishment of additional child welfare centres (3) and taking over the centres belonging to the Dearne, Featherstone and Mexborough Urban District Councils but this is offset by the transfer to districts autonomous for maternity and child welfare services under the County Review Order, 1937, the child welfare centres at Ardsley East, Ardsley West, Birkenshaw, Birstall, Drighlington, Farsley, Hipperholme, Methley and Oulton.

The number of children attending a child welfare centre for the first time was 14,125, an increase of 1,113 over the previous year (see table LXIX).

The total attendances at the 134 County Council Child Welfare Centres (see Table LXIX on pages 128 to 134) were 298,635 children, the average attendance per session being 50, the same as last year.

### Establishment of Infant Welfare Centres.

During the year, child welfare centres were established at Grenoside (Wortley R.), Middles-town (Wakefield R.), and Tankersley (Wortley R.). At the end of the year negotiations were in progress for the provision of centres at Blacker Hill (Worsborough U.), Church Fenton (Tadcaster R.), Denholme, and Whixley (Nidderdale R.).

### Provision of Multiple Clinics and Child Welfare Centres—Building Programme.

A preliminary report on a survey of centres where more convenient accommodation is required was presented in December, 1937, and a five-year building programme is to be embarked upon. A special sub-committee has been appointed to consider all details in connection with purchase of sites and the erection of clinics.

This programme is to some extent in conjunction with the school building programme of the Education Committee, and wherever possible clinics will be erected on sites adjacent to school buildings. The districts to receive consideration in connection with these proposals are:—

#### (a) MULTIPLE CLINICS.

- 1938-39. Featherstone, Goldthorpe (Dearne U.), Hemsworth, and Rossington (Doncaster R.).
- 1939-40. Armthorpe (Doncaster R.), Dinnington (Kiveton Park R.), Normanton and Worsborough.
- 1940-41. Maltby, Skipton, Thrybergh (Rotherham R.), Yeadon (Aireborough U.).
- 1941-42. Darfield, Garforth, Settle (Settle R.), Thurcroft (Rotherham R.).
- 1942-43. Barnoldswick, Kippax (Tadcaster R.), Knottingley, Penistone.

#### (b) CHILD WELFARE CENTRES.

- 1938-39. Catcliffe (Rotherham R.), Hatfield (Thorne R.), Wickersley (Rotherham R.).
- 1939-40. Horbury, Outwood (Stanley U.), Queensbury.
- 1940-41. Crofton (Wakefield R.), Barugh (Darton U.), Elland.
- 1941-42. Earby, Hebden Bridge (Hebden Royd U.).
- 1942-43. Glusburn (Skipton R.), Snaith (Goole R.).

The Committee has agreed that the purchase of sites and preparation of plans and estimates for the erection of a multiple clinic at Hemsworth and a child welfare centre at Hatfield be proceeded with forthwith, but if a suitable site cannot be obtained in either of these two districts the erection of a multiple clinic at Knottingley be proceeded with.

### Improvements at Existing Child Welfare Centres.

**BARDSEY (VOLUNTARY).** (WETHERBY R.). Alterations to the premises have been carried out and extra accommodation provided. The County Council made a grant of £10 per annum to the Voluntary Committee and also provided additional equipment.

**CONISBROUGH.** A child welfare centre is to be erected at a total cost of £6,034 and tenders have been accepted amounting to £5,283 10s. 0d. for erection. The furniture and equipment is to cost £750.

**DARTON (OLD INFANTS' SCHOOL).** Further improvements were made at this centre at a cost of £30.

**DENBY DALE.** The sessions at this centre were increased from fortnightly to weekly.

**EDLINGTON (DONCASTER R.).** This centre previously held at the United Methodist Chapel was transferred to more commodious premises at the St. John's Church Hall.

**HOYLAND NETHER.** There is a proposal to erect a Child Welfare Centre to serve this district and negotiations are proceeding for the purchase of a site.

**KIRKBURTON.** The Centre here was transferred from the Drill Hall to the Council Offices owing to the Army Authorities requiring the Drill Hall for other purposes.

**KIRKHAMGATE (STANLEY U.).** This Voluntary Centre was taken over by the County Council and alterations were made by the Trustees of the Mission Hall to provide more convenient accommodation.

**LUDDENDEN FOOT (SOWERBY BRIDGE U.).** The Trustees of the Luddendenfoot Institute have carried out extensive alterations to the premises to meet our requirements for the more commodious working of the Centre.

**RAWMARSH.** A Child Welfare Centre is in course of erection at Rawmarsh at a total cost of £5,320. The cost of erection is £4,800 and the furniture and equipment is to cost £520. Tenders have been accepted and the building is now nearing completion.

**STOCKSBRIDGE.** Electric light has been installed at the Centre held at Mozart House, used exclusively for Child Welfare purposes and a residence for two nurses, at a cost of £23 10s. 0d.

**THURCROFT (ROTHERHAM R.).** This Centre was transferred from the Miners' Welfare Institute to the Methodist Church and thus allow of more convenient working and privacy.

**TODDLERS' CLINICS.** During the year, toddlers' clinics were provided at the Dunscroft and Ripon Centres.

**DECORATIONS AND RENOVATIONS** were carried out at the Earby, Hemsworth, Holmfirth, Knaresborough, Knottingley and Normanton Centres.

**PERAMBULATOR SHELTERS** were provided at the Carcroft, Conisborough, Grenoside, Maltby and Stannington Centres.

#### CENTRES TAKEN OVER FROM AUTHORITIES AUTONOMOUS FOR MATERNITY AND CHILD WELFARE SERVICES.

Under the Dearne, Featherstone and Mexborough (Transfer of Maternity and Child Welfare Services) Order, 1937, the following Centres were taken over from these Councils on the 1st July, 1937.

Dearne U. ....	Centre held at the Welfare Hall, Goldthorpe.
Featherstone U. ....	" " " Pontefract Road Methodist Church, Hopetown.
	" " " Gospel Hall, Featherstone.
	" " " Congregational Chapel, Streethouse.
Mexborough ....	" " " Army Hut, Top Market, Mexborough.

#### Medical Officers of Centres.

The following new appointments were made during the year :—

Name of Centre.	Medical Officer.	Name of Centre.	Medical Officer.
Chapeltown (ante-natal officer)	Ursula Gray.	Sprotborough (ante-natal officer)	Mary Allen.
Cudworth ... ..	Mary Doidge Harrison.	Swallownest ... ..	Ursula Gray.
Grenoside ... ..	Marjorie Rushbrooke.	Tadcaster ... ..	J. A. Glover (since resigned).
Luddendenfoot (ante-natal officer)	Madeleine Dowdall.	Do. ... ..	R. N. Crossley.
Middlestown ... ..	Dorothy Summers.	Thurcroft ... ..	Ursula Gray.
Otley ... ..	H. Wolfe.	Wath (ante-natal officer)	Dora Chapman.
Sprotborough ... ..	A. Penman.	Woodlands ... ..	Mary Allen.
		Worsborough Dale ... ..	Jean Ritchie.

The following resigned their appointments :—

Name of Centre.	Medical Officer.
Cudworth ... ..	J. L. Elliott.
Otley ... ..	W. H. Galloway.
Swallownest ... ..	Dora Chapman.
Tadcaster ... ..	Mary Freeman.
Do. ... ..	J. A. Glover.
Thurcroft ... ..	Dora Chapman.
Worsborough Dale ... ..	H. A. L. Banham.

# Child Welfare Centres.

The following is a list of Centres established by the County Council and also of the Voluntary Centres in the County Maternity and Child Welfare Area :-

TABLE LXIX.

Name and Address	Sessions held weekly, fortnightly, etc.	Day and time of Meeting	Av. Attendance per Session		Number who attended for the first time during 1937.				Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1937.				Total No. of children who were in attendance at the Centre and who at the end of the year were :—	
			Children under one.	Children between the ages of one and five.	Expectant Mothers	Children under one	Children between the ages of one and five	Present arrangements for medical supervision		Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five years	Total Children	Under one year of age	Between the ages of one and five years
1. Adwick-le-Street, Woodside Methodist Chapel, Woodlands	Weekly	Thurs 2-4	66	23	—	147	30	—	49	—	1320	3225	1138	4363	121	195	
2. Airedale (Pontefract R.D.), Holy Cross Hut	Do.	Mon. 2-4	34	26	—	104	19	—	48	—	1264	1634	1246	2880	99	131	
3. Allerton Bywater (Tadcaster R.D.), Miners' Welfare Inst.	Do.	Mon. 2-4	42	17	16	76	25	16	47	16	1011	1951	783	2734	70	173	
4. Alkofts, Red Triangle Club	Do.	Wed. 2-4	18	10	—	78	15	—	50	—	306	865	518	1383	54	69	
5. †Ardley East (Ardley E. & W. U.D.), Primitive Methodist Chapel	Do.	Tues. 2-4	24	12	—	14	2	—	12	—	169	285	148	434	—	—	
6. †Ardley West (Ardley E. & W. U.D.), 1, Syke Lane, West	Do.	Mon. 2-4	25	12	—	13	1	—	12	—	114	298	149	447	—	—	
7. Armthorpe (Doncaster R.D.), Miners' Welfare Institute	Do.	Thurs 2-4	41	41	—	86	29	—	49	—	1170	2125	2015	4140	72	63	
8. Askern (Doncaster R.D.), Baptist Chapel	Do.	Mon. 2-4	16	3	12	105	11	12	48	14	640	879	146	1025	95	130	
9. Baildon, Methodist S. School	Do.	Mon. 2-4	22	10	—	82	23	—	48	1	211	1053	464	1517	129	61	
10. Barnoldswick, Bethesda Baptist Chapel	Do.	Thurs 2-4	29	21	12	95	2	12	48	6	216	1380	1000	2380	71	167	
11. Bentley Park Pavilion	Do.	Wed. 2-4	47	27	1	111	12	1	48	1	1541	2240	1295	3535	124	179	
12. Birdwell (Worsborough U.D.), United Methodist Chapel	Do.	Wed. 2-4	25	13	10	44	5	10	51	10	110	1300	651	1951	37	34	
13. †Birkenshaw, Methodist Free Church	Do.	Tues. 2-4	28	27	3	18	5	3	12	5	284	337	321	658	—	—	
14. †Birstall, St. John's School	Do.	Wed. 2-4	35	18	3	15	1	3	13	8	165	455	235	690	—	—	
15. Bolton-on-Deane (Deane U.D.), Welfare Hall, Goldthorpe	Do.	Mon. 2-4	32	30	—	183	18	—	45	—	268	1449	1348	2797	175	144	
16. Boston Spa (Wetherby R.D.), Congregational Chapel	Do.	Wed. 2-4	6	12	23	32	17	23	51	27	1254	320	1223	1543	32	45	
17. Bramley (Rotherham R.D.), Miners' Welfare Hall	Do.	Wed. 2-4	21	16	—	109	7	—	50	3	655	1070	787	1857	101	108	
18. Brampton Bierlow (Rotherham R.D.), Cortonwood Methodist Church	Do.	Thurs. 2-4	16	33	—	46	30	—	51	—	464	782	1668	2450	36	54	
19. Carcroft (Adwick-le-Street U.D.), Presbyterian Sunday School	Do.	Thurs. 2-5	30	20	38	74	16	38	51	20	601	1519	1022	2541	65	74	
20. Catcliffe (Rotherham R.D.), Church Mission Hall	Fortnightly	Wed. 2-4	36	15	—	80	7	—	26	—	1316	939	385	1824	63	50	
21. Chapeltown (Wortley R.D.), Miners' Welfare Pavilion	Weekly	Wed. 2-4	11	41	—	57	8	—	52	—	779	556	2120	2676	49	133	

\* C.W.C. transferred 1/4/37 to Autonomous Authority, figures given to 31/3/37 only.

TABLE LXIX.—Child Welfare Centres—(continued).

Name and Address	Sessions held weekly, fortnightly, etc.	Day and time of Meeting	Av. Attendance per Session		Number who attended for the first time during 1937.			Present arrangements for medical supervision	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1937.				Total No. of children who were in attendance at the Centre and who at the end of the year were:—	
			Children under one.	Children between the ages of one and five.	Expectant Mothers	Children under one	Children between the ages of one and five			Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five years	Children Total	Under one year of age	Between the ages of one and five years
22. Conisborough, Army Hut, Balby Street Council School ...	Weekly	Tues. 2-4	38	25	—	132	9	School M.I.	49	2	1564	25	1842	1228	3070	103	228
23. Conisborough (Upper), Miners' Welfare Institute ...	Do.	Mon. 2-4	55	29	—	89	15	Part-time Medical woman.	47	—	1058	—	2581	1352	3933	115	57
24. Crigglestone (Wakefield R.D.), Village Institute ...	Do.	Wed. 2-4	23	24	7	56	10	Part-time Medical man.	50	5	1521	10	1144	1198	2342	49	148
25. Crofton (Wakefield R.D.), United Methodist Church ...	Do.	Mon. 2-4	17	18	3	61	13	Do.	48	7	1125	7	837	845	1682	55	105
26. Cudworth, Wesley Hall ...	Do.	Wed. 2-4	42	17	40	190	330	Part-time Medical woman.	51	22	850	62	2159	883	3042	—	—
27. Dalton (Rotherham R.D.), Primitive Methodist Chapel ...	Do.	Tues. 2-4	40	7	—	109	19	Part-time Medical man.	51	—	812	248	2059	358	2417	157	115
28. Darfield Methodist Chapel, Barnsley Road ...	Do.	Wed. 2-4	16	27	—	67	5	Do.	51	—	603	—	800	1395	2195	62	87
29. Darton (Staincross), Wesleyan S.S., Barnsley Road ...	Do.	Thurs. 2-4	32	24	2	87	4	Do.	50	4	627	11	1623	1178	2801	69	92
30. Darton (Darton), Infants' School ...	Do.	Wed. 2-4	46	30	5	91	38	Do.	50	7	763	20	2283	1502	3785	80	49
31. Darton (Gawber), Adult School ...	Do.	Tues. 2-4	18	29	5	61	5	Do.	49	6	614	9	859	1401	2260	49	192
32. Denby and Cumberworth, Victoria Memorial Hall ...	Do.	Wed. 2-4	30	22	—	57	20	School M.I.	28	—	1019	—	840	623	1463	61	144
33. Dinnington (Kiveton Park R.D.), Wesleyan Sunday School ...	Do.	Tues. 2-4	44	18	—	102	33	Part-time Medical woman.	49	—	135	—	2150	900	3050	156	63
34. Dodworth, Mechanics' Institute, High Street ...	Do.	Tues. 2-4	52	29	40	106	9	Part-time Medical man.	47	105	984	150	2431	1339	3770	94	129
35. Drighlington, Wesleyan Sunday School ...	Do.	Mon. 2-4	37	19	9	20	6	Part-time Medical woman.	12	9	380	9	450	225	675	—	—
36. Dunscoff (Thorne R.D.), Church Hall ...	Do.	Tues. 2-4	37	3	55	109	84	Part-time Medical man.	79	55	1244	55	2918	204	3122	251	84
37. Earby, Old Grammar School ...	Do.	Wed. 2-4	10	19	9	39	6	Do.	50	1	189	29	492	939	1431	25	49
38. Ecclesfield (Worley R.D.), Gatty Memorial Hall ...	Do.	Mon. 2-4	17	41	2	73	5	Whole time M.O.H.	48	2	791	2	797	1950	2747	73	111
39. Edlington (Doncaster R.D.), New Church Hall ...	Do.	Tues. 2-4	35	9	—	90	10	Do.	48	—	1121	—	1684	428	2112	89	58
40. Elland, Drill Hall ...	Do.	Wed. 2-4	29	32	18	94	17	Part-time Medical man.	49	18	656	79	1418	1540	2958	23	88
41. Farsley, United Methodist Church ...	Do.	Tues. 2-4	31	16	2	17	2	Part-time Medical man.	12	1	149	3	367	188	555	—	—
42. Featherstone (Loxley), Pontefract Road Methodist Church, Hopetown, Normanton ...	Fortnightly	Alternate Tues. 2-4	8	5	4	12	6	Part-time Medical man.	12	22	78	14	94	65	159	12	9

† C.W.C. transferred 1/4/37 to Autonomous Authority, figures given to 31/3/37 only.

TABLE LXIX.—Child Welfare Centres—(continued).

Name and Address	Sessions held weekly, fortnightly, etc.	Day and time of Meeting	Av. Attendance per Session			Number who attended for the first time during 1937.			Present arrangements for medical supervision	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1937.				Total No. of children who were in attendance at the Centre and who at the end of the year were :—	
			Children under one.	Children between the ages of one and five.	Expectant Mothers	Children under one	Children between the ages of one and five	Expectant Mothers			Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five years	Children Total	Under one year of age	Between the ages of one and five years
43. Featherstone, Gospel Hall	Weekly	Wed. 2-4	30	26	115	123	174	Part-time Medical man.	47	47	104	346	218	1410	1211	2621	81	188
44. Featherstone (Streethouse), Congregational Chapel	Do.	Mon. 2-4	6	13	11	10	13	Do.	47	47	70	180	183	286	626	912	9	29
45. Ferrybridge (Knottingley U.D.), Wesleyan Chapel	Do.	Wed. 2-4	26	13	16	64	5	Do.	50	50	23	634	93	1314	657	1971	42	147
46. Garforth, St. Mary's Hall	Do.	Mon. 2-4	19	34	62	83	10	Do.	47	47	62	210	247	870	1600	2470	83	127
47. Glasshoughton (Pontefract R.D.), St. Paul's Institute	Do.	Mon. 2-4	29	27	16	108	15	Part-time Medical woman.	48	48	16	1121	67	1386	1278	2664	77	73
48. Glusburn (Skipton R.D.), Glusburn Institute	Fortnightly	Tues. 2-4	26	24	4	44	27	Do.	25	25	4	535	4	640	588	1228	51	50
49. Golear, Council Offices	Weekly	Wed. 2-4	23	25	29	71	18	Do.	50	50	21	861	54	1130	1253	2383	55	138
50. Grassington (Skipton R.D.), Church House	Fortnightly	Thurs. 2-4	4	17	—	19	5	School M.I.	26	26	—	469	—	111	450	561	16	46
51. Greetland (Elland U.D.), Clay House	Weekly	Tues. 2-4	23	24	—	89	138	Part-time Medical Man.	46	46	—	463	—	1075	1118	2193	109	37
52. Grenside (Wortley R.D.), Norfolk Hill Methodist Church	Do.	Tues. 2-4	10	9	—	46	38	Part-time Medical woman.	46	46	—	402	—	481	422	903	23	58
53. Guiseley (Aireborough U.D.), Baptist Church, Oxford Road	Do.	Thurs. 2-4	29	19	—	78	21	Do.	50	50	—	867	4	1442	932	2374	64	171
54. Haworth, Hall Green Baptist School	Do.	Tues. 2-4	25	16	22	67	9	Do.	48	48	46	928	49	1218	775	1993	49	82
55. Healden Bridge (Healden Royd U.D.), Old Secondary School, Pitt Street	Do.	Wed. 2-4	20	16	16	65	12	Do.	51	51	16	932	16	1036	797	1833	51	139
56. Hemsworth, Army Hut, West End Council School	Do.	Mon. 2-4	23	13	—	79	20	School M.I.	45	45	—	724	—	1046	584	1630	63	75
57. Hemsworth (Fitzwilliam), Church Hut	Do.	Tues. 2-4	39	25	—	65	12	Part-time Medical man.	47	47	—	1149	—	1849	1165	3014	92	168
58. High Green (Wortley R.D.), Methodist Chapel S. School	Do.	Tues. 2-4	10	37	—	40	22	Part-time Medical woman.	48	48	—	1137	—	491	1782	2273	40	135
59. Hipperholme, Wesleyan Sunday School	Do.	Mon. 2-4	20	20	10	16	3	Do.	12	12	17	277	25	239	239	478	—	—
60. Holmfirth, Town Hall	Do.	Thurs. 2-4	13	15	3	70	13	Do.	50	50	3	708	3	666	751	1417	72	291
61. Horbury, Wesleyan Sunday School	Do.	Mon. 2-4	48	36	6	101	10	Part-time Medical man.	48	48	—	1400	23	2308	1707	4015	72	250
62. Horsforth, St. Margaret's Hall	Do.	Wed. 2-4	41	41	—	116	20	Do.	51	51	—	462	—	2060	2094	4184	106	174
63. Hoyland (Hoyland Nether U.D.), Miners' Welfare Institute	Do.	Tues. 2-4	43	85	56	128	24	Do.	49	49	188	662	188	2107	4193	6300	120	246
64. Hoyland Common (Hoyland Nether U.D.), Wesleyan Chapel	Do.	Thurs. 2-4	32	25	14	94	5	School M.I.	51	51	40	1160	100	1627	1277	2904	78	81
65. Ingleton (Settle R.D.), Literary Institute	Fortnightly	Tues. 2-4	8	13	20	29	73	Part-time Medical man.	25	25	17	376	20	200	332	532	29	73

† C.W.C. transferred to Autonomous Authority, figures given to 31/3/37 only.

TABLE LXIX.—Child Welfare Centres—(continued).

Name and Address	Sessions held weekly, fortnightly, etc.	Day and time of Meeting	Av. Attendance per Session		Number who attended for the first time during 1937.			Present arrangements for medical supervision	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1937.				Total No. of children who were in attendance at the Centre and who at the end of the year were:—	
			Children under one.	Children between the ages of one and five.	Expectant Mothers	Children under one	Children between one and five			Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five	Total Children	Under one year of age	Between the ages of one and five years
66. Kippax (Tadcaster R.D.), Wesleyan Sunday School	Weekly	Tues. 2-4	27	16	20	40	29	Part-time Medical man.	48	17	962	1310	746	2056	42	100	
67. Kirkhamgate (Stanley U.D.), Mission Room	Fortnightly	Wed. 2-4	8	6	—	9	2	Part-time Medical woman.	24	—	297	189	148	337	8	6	
68. Kirkburton, Drill Hall	Weekly	Tues. 2-4	17	13	16	49	5	Part-time Medical man.	33	1	235	556	438	994	40	92	
69. Kirk Sandall (Doncaster R.D.), Assembly Hall	Do.	Thurs. 2-4	37	9	18	50	6	Do.	51	18	688	1902	438	2340	42	60	
70. Knarborough, Fysche Hall Cottage, Isles Lane	Do.	Tues. 2-4	27	28	24	59	29	School M.I.	44	24	1246	1206	1229	2435	105	143	
71. Knottingley, Secondary School, Chapel Street	Do.	Mon. 2-4	45	23	43	100	14	Part-time Medical man.	48	43	843	2163	1081	3244	76	205	
72. Lepton, Liberal Club	Do.	Tues. 2-4	10	37	24	66	35	Do.	48	24	783	487	1768	2255	79	217	
73. Linthwaite (Colne Valley U.D.), Conservative Club	Do.	Tues. 2-4	19	20	—	51	4	School M.I.	48	—	967	900	946	1846	44	100	
74. Luddenden Foot, The Institute	Do.	Tues. 2-4	21	23	8	53	6	Part-time Medical man.	48	8	1168	981	1108	2089	41	122	
75. Malby, Congregational Chapel	Do.	Mon. 2-4	47	29	28	154	98	Do.	48	16	264	2249	1371	3620	139	87	
76. Marsden (Colne Valley U.D.), Conservative Club	Do.	Thurs. 2-4	23	32	11	33	26	Do.	50	32	707	1137	1610	2747	49	213	
77. Meltham, Baptist Church	Do.	Tues. 2-4	27	32	1	60	2	Do.	47	1	310	1291	1517	2808	62	131	
78. Mexborough, Clinic Hut, Bank Street	Do.	Tues. 2-4	71	20	—	125	50	Do.	48	—	697	3410	975	4385	93	96	
79. Mirfield, Ings Grove	Fortnightly 1st & 3rd W. Friday 2-4	Tues. 2-4	31	16	4	106	20	Part-time Medical woman.	47	5	757	1465	773	2238	100	258	
80. Micklefield (Tadcaster R.D.), Wesleyan Chapel	Weekly	Tues. 2-4	14	18	19	23	8	School M.I.	26	19	81	339	454	813	23	58	
81. Middlestown (Wakefield R.D.), Church School	Fortnightly	Tues. 2-4	20	9	1	27	18	Part-time Medical woman.	15	4	290	300	139	439	36	59	
82. Moorlands (Thorne R.D.), Wesleyan Chapel	Do.	Tues. 2-4	37	15	—	164	32	Part-time Medical woman.	47	4	1172	1732	713	2445	153	175	
83. Mytholmroyd (Hebden Royd U.D.), Methodist Chapel	Do.	Wed. 2-4	10	10	—	50	229	Part-time Medical men.	50	—	998	502	496	998	37	64	
84. Normanton, Park Pavilion	Do.	Tues. & Thurs. 2-4	18	9	—	160	5	School M.I.	116	—	2224	2132	1061	3193	142	217	
85. Orley, Primitive Methodist Chapel, Station Road	Do.	Thurs. 2-4	40	38	—	104	12	Part-time Medical man.	51	—	730	2034	1934	3968	76	149	
86. Oulton (Hunslet R.D.), Village Institute	Do.	Tues. 2-4	12	5	2	7	1	Do.	12	2	184	147	63	210	210	—	
87. Outwood (Stanley U.D.), Church Institute	Do.	Mon. 2-4	38	24	52	71	20	Do.	47	124	1425	1803	1140	2943	68	277	
88. Oughtibridge (Wortley R.D.), Church Hall	Do.	Thurs. 2-4	20	22	5	34	15	Do.	50	12	1158	975	1077	2052	29	114	

\* C.W.C. transferred 1/4/37 to Autonomous Authority, figures given to 31/3/37 only.

TABLE LXIX.—Child Welfare Centres—(continued).

Name and Address	Sessions held weekly, fortnightly, etc.	Day and time of Meeting	Av. Attendance per Session		Number who attended for the first time during 1937.			Present arrangements for medical supervision	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1937.				Total No. of children who were in attendance at the Centre and who at the end of the year were :—	
			Children under one.	Children between the ages of one and five.	Expectant Mothers	Children under one	Children between the ages of one and five			Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five years	Total Children	Under one year of age	Between the ages of one and five years
89. Penistone, Shrewsbury Road Methodist Chapel ...	Weekly	Mon. 2-4	43	21	19	92	8	Part-time Medical woman.	48	19	816	2063	1020	3083	69	146	
90. Queensbury (Queensbury and Shelf U.D.), Cricket Pavilion	Do.	Tues. 2-4 Fri. 2-3 (Toddlers)	9	5	26	69	7	Part-time Medical man.	100	36	175	898	531	1429	57	108	
91. Rawmarsh Spiritual Temple, Parkgate ...	Do.	Tues. 2-4 Wed. 9.30-12 (Toddlers)	43	70	70	204	310	School M.I.	48	70	1856	2040	3360	5400	201	831	
92. Ripon City, Alma House	Do.	Mon. 2-4	29	51	—	78	24	Do.	45	—	1540	1287	2312	3599	59	99	
93. Ripponden, Zion Congregational Church ...	Do.	Tues. 2-4	13	12	30	43	107	Part-time Medical woman.	48	25	150	605	563	1168	43	107	
94. Rossington (Doncaster R.D.), United Methodist Church ...	Do.	Tues. 2-4	47	21	43	111	25	Part-time Medical man.	48	—	1023	2254	1005	3259	99	133	
95. Royston, Wesleyan Sunday School ...	Do.	Wed. 2-4	59	42	—	121	—	Do.	49	—	941	2912	2067	4979	102	282	
96. Saddleworth, 'Mechanics' Institute, Uppermill ...	Do.	Wed. 2-4	32	39	2	99	2	Do.	49	2	293	1555	1920	3475	78	153	
97. Selby, Museum Hall, Park Street	Do.	Fri. 2-4	12	22	—	54	8	Whole-time M.O.H.	50	—	980	586	1092	1678	62	104	
98. Settle (Settle R.D.), Wesleyan Sunday School ...	Do.	Thurs. 2-4	20	8	—	14	4	School M.I.	24	—	307	291	200	491	19	33	
99. Sharlston (Wakefield R.D.), St. Luke's Hall ...	Do.	Tues. 2-4	25	27	1	71	10	Part-time Medical man.	48	1	1516	1186	1298	2484	64	132	
100. Shelf (Queensbury and Shelf U.D.), Methodist Chapel, Witchfield Hill ...	Do.	Mon. 2-4	15	3	—	65	6	Part-time Medical woman.	47	—	120	720	121	841	49	66	
101. Silsden, Ambulance Station, Kirkgate ...	Fort-nightly	Tues. 2-4	16	17	3	31	12	Do.	25	3	—	394	421	815	42	49	
102. Skipton, Wesleyan Methodist Sunday School, Water Street	Weekly	Wed. 2-4	13	62	4	97	104	School M.I.	48	2	1324	600	2970	3570	57	80	
103. Slaithwaite, (Colne Valley U.D.), United Methodist Sunday School, Carr Lane, ...	Do.	Wed. 2-4	27	21	—	77	6	Part-time Medical man.	49	—	1406	1339	1054	2393	54	81	
104. Snaith (Goole R.D.), House, Market Place ...	Do.	Thurs. 2-4	7	11	2	37	1	Part-time Medical man.	51	2	946	388	569	957	37	57	
105. South Milford (Tadcaster R.D.), St. Mary's Schoolroom ...	Fort-nightly	Tues. 2-4	17	14	6	21	11	School M.I.	26	6	803	450	353	803	21	26	
106. Springhead (Saddleworth U.D.), Congregational Chapel ...	Weekly	Fri. 2-4	32	36	—	80	14	Part-time Medical woman.	48	—	959	1537	1747	3284	63	160	
107. Sprotborough (Doncaster R.D.), New Council School ...	Do.	Mon. & Thurs. 2-4	8	22	—	84	71	Part-time Medical man.	44	—	768	359	979	1338	84	71	
108. Stainforth (Thorne R.D.), Wesleyan S.S., Church Road	Do.	Tues. 2-4	59	5	—	111	80	Part-time Medical woman.	48	—	1384	2814	220	3034	90	91	

TABLE LXIX.—Child Welfare Centres—(continued).

Name and Address	Sessions held weekly, fortnightly, etc.	Day and time of Meeting	Av. Attendance per Session		Number who attended for the first time during 1937.			Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1937.				Total No. of children who were in attendance at the Centre and who at the end of the year were :—	
			Children under one.	Children between the ages of one and five.	Expectant Mothers	Children under one	Children between the ages of one and five		Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five years	Total Children	Under one year of age	Between the ages of one and five years
109. Sowerby Bridge, Allan House ...	Weekly	Tues. & Thurs. 2-4	13	14	—	196	206	97	—	402	—	1270	1356	2606	186	286
110. Stanley, Zion Congregational Chapel ...	Do.	Mon. 2-4	13	21	—	61	8	48	—	975	—	626	1015	1641	50	65
111. Stannington (Wortley R.D.), ...	Do.	Wed. 2-4	21	25	6	56	9	50	20	890	20	1036	1248	2284	36	77
112. Underbank Chapel ...	Do.	Tues. 2-4	31	24	3	97	18	48	15	781	18	1468	1171	2639	129	149
113. Stocksbridge, Mozart House, Deepcar ...	Do.	Mon. 2-4	26	14	—	71	15	36	—	1004	—	919	492	1411	53	245
114. Church Hall ...	Do.	Wed. 2-4	23	23	36	50	8	26	36	159	106	596	602	1198	50	109
115. Swinfield (Goole R.D.), ...	Do.	Tues. 2-4	12	1	—	48	—	48	—	536	—	579	60	639	65	16
116. Swinton, Rock House ...	Do.	Mon. and Wed. 2-4	38	16	5	338	216	98	35	1714	5	3715	1825	5240	162	201
117. T-easter (Tadcaster R.D.), ...	Fort-nightly	Tues. 2-4	13	26	16	42	9	26	20	717	20	340	678	1018	42	89
118. Shann House, Westgate Tankersley (Wortley R.D.), ...	Do.	Mon. 2-4	7	10	3	19	20	26	5	38	16	190	254	444	9	18
119. Scours' Hall ...	Weekly	Wed. 2-4	18	41	—	91	4	49	—	992	—	901	2003	2904	77	179
120. Thorpe (Thorne R.D.), ...	Do.	Mon. 2-4	10	7	32	45	—	46	32	210	46	459	316	775	60	69
121. Thundersley (Rotherham R.D.), ...	Do.	Mon. and Tues. 2-5	28	13	—	175	6	98	50	858	50	2753	1258	4011	129	62
122. Thornscoe (Dearne U.D.), ...	Do.	Mon. 2-4	28	9	41	112	84	47	41	223	166	1328	442	1770	116	94
123. Wales (Kiveton Park R.D.), ...	Do.	Mon. 2-4	43	32	—	117	4	48	—	904	—	2064	1550	3614	94	37
124. Methodist Chapel ...	Do.	Tues. 2-4	23	49	—	71	11	48	—	754	—	1084	2369	3453	70	46
125. West Melton (Wath U.D.), ...	Do.	Thurs. 2-4	21	13	4	26	12	51	—	214	—	1058	649	1707	29	60
126. Wetherby (Wetherby R.D.), ...	Do.	Thurs. 2-4	14	23	7	31	5	26	—	447	—	361	591	952	27	61
127. Wesleyan Sunday School ...	Fort-nightly	Thurs. 2-4	39	37	15	100	26	51	15	1415	25	1959	1876	3835	84	91
128. Church Institute ...	Weekly	Thurs. 2-4	21	19	17	36	3	48	81	680	93	999	938	1937	28	32
129. Wrenthorpe (Stanley U.D.), ...	Do.	Thurs. 2-4	60	38	—	123	21	51	—	2139	—	3075	1953	5028	110	192
130. Church Sun'ay School ...	Do.	Thurs. 2-4	60	38	—	123	21	51	—	2139	—	3075	1953	5028	110	192
131. Worsborough Dale (Worsborough U.D.), ...	Do.	Thurs. 2-4	60	38	—	123	21	51	—	2139	—	3075	1953	5028	110	192
132. Wesleyan Sunday School, Worsborough Dale ...	Do.	Thurs. 2-4	60	38	—	123	21	51	—	2139	—	3075	1953	5028	110	192

TABLE LXIX.  
Child Welfare Centres,—continued.

Name and Address	Sessions held weekly, fortnightly, etc.	Day and time of Meeting	Av. Attendance per Session		Number who attended for the first time during 1937.				Present supervision for medical arrangements	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1937.				Total No. of children who were in attendance at the Centre and who at the end of the year were :—	
			Children under one.	Children between the ages of one and five.	Expectant Mothers	Children under one	Children between the ages of one and five	Expectant Mothers			Children	Children under one	Children between one and five years	Total Children	Under one year of age	Between the ages of one and five years		
130. Worsborough Bridge (Worsborough U.D.), St. John's Ambulance Hall ...	Weekly	Mon. 2—4	37	38	—	70	7	47	Part-time Medical man.	47	—	1644	1700	1756	3456	59	187	
131. Yeadon (Aireborough), Town Hall ...	Do.	Tues. 2—4	22	32	—	123	47	48	Do.	48	—	1069	1038	1554	2592	82	192	
<b>VOLUNTARY INFANT WELFARE CENTRES.</b>																		
1. Bardsey (Wetherby R.D.), Trustees Hall ...	Fort-nightly	Tues. 2—4	8	13	2	15	8	25	Part-time Medical woman.	25	9	92	196	332	528	13	39	
2. Benthall (Settle R.D.), St. Margaret's Sunday School	Do.	Thurs. 2—4	4	9	—	11	—	26	Do.	26	—	199	91	244	335	6	32	
3. †Methley, Mickleton Institute	Weekly	Mon. 2—4	18	10	6	13	1	12	Part-time Medical man.	12	14	181	216	120	336	—	—	
TOTAL ...			—	—	1396	10125	4000	6911		6911	1897	10444	163042	135593	298635	9108	14776	

\* C.W.C. transferred to Autonomous Authority, figures given to 31/3/37 only.





### Ultra-Violet Light.

The following table shews the arrangements made for Ultra Violet light treatment by the County Council. The cases dealt with are mainly school children, but infants suffering from malnutrition, debility and rickets receive this treatment from time to time at the hospitals and clinics provided.

TABLE LXXI.

Location.	Day and hours of Attendance.	Medical Staff. Names and Qualifications.	Health Visiting Staff.
Brighouse, Huddersfield Road ... ..	Monday and Friday, 4 to 5 p.m.	R. Sutherland, M.D., D.P.H.	1
Conisbrough, Miners' Welfare Institute ...	Thursday, 2 p.m.	D. C. Rice, M.B., Ch.B.	3
Hemsworth, Army Hut, West End Council School ... ..	Wednesday, 1-30 p.m.	D. C. Rice, M.B., Ch.B.	1
Holmfirth, Town Hall ... ..	Monday and Thursday, 10 to 12 noon.	Muriel V. Wilby, M.R.C.S., L.R.C.P.	1
Sowerby Bridge, Allan House ... ..	Tuesday and Thursday, 10 a.m.	Janet M. Macmillan, M.B., Ch.B., D.P.H.	2
Bingley, Baths ... ..	Monday, Wednesday, Friday. All day.	O. T. Wade, M.R.C.S., L.R.C.P.	1
Wombwell, Free Library ... ..	Monday and Thursday, 2 p.m.	J. C. Pickup, M.B., D.P.H.	1
Wakefield, Clayton Hospital ... ..	Any day.	—	—
Leeds, General Infirmary ... ..	Any day.	—	—
Doncaster, Thorne Road ... ..	Any day, 5 to 6 p.m.	G. W. Wigg, M.R.C.S., L.R.C.P.	—
Do. Balby Road ... ..	Any day, 9 to 10 a.m., 6-30 to 7-30 p.m.	G. W. Wigg, M.R.C.S., L.R.C.P.	—

The clinics at Conisbrough, Hemsworth, Holmfirth and Sowerby Bridge are provided by the County Council, and those at Bingley, Brighouse and Wombwell belong to the local Council and accept cases by arrangement with the County Council at an agreed fee. The latter remark also applies to the facilities available at the Clayton Hospital, Wakefield, and the Leeds General Infirmary. The clinics at Doncaster are provided by private arrangement with Dr. G. W. Wigg.

All treatment is given free of charge and fares are paid in necessitous cases.

### Verification of Family Circumstances.

A scheme for the verification of family circumstances in connection with all forms of relief granted by the County Council was put into operation in the Lower Agbrigg Guardians' Committee area for an experimental period on the 1st January, 1934.

As from the 1st April, 1936, the County Council decided to extend this scheme of verification of family circumstances to the Osgoldcross, Don Valley and Rother Valley Guardians' Committee areas, and as from the 1st April, 1937, it was decided to operate the scheme throughout the whole of the County Council's area.

The results achieved during the year can be seen from the following:—

#### (1) MATERNITY HOME TREATMENT.

A total of 2,265 cases have been investigated by the County Public Assistance Officer during the year and accounts have been rendered to patients as follows:—

Whole fee cases ... ..	1,000
Half fee cases ... ..	550
Maternity benefit cases ... ..	425
Total number of accounts rendered	1,975

These accounts represent approximately £8,400, which has been claimed from patients, whereas before verification was commenced, this figure amounted only to approximately £4,500 each year. The number of admissions to maternity homes has not substantially changed.

#### (2) MIDWIVES' FEES IN NECESSITOUS CASES.

A total of 2,018 cases have been investigated and to 315 of these it has been necessary to refuse assistance.

#### (3) SUPPLY OF MILK AND FOODS.

15,896 cases have been investigated during the year and of these, 1,310 cases have been refused further issues because of inaccurate statements and in 1,416 cases it has been necessary to charge half price for subsequent issues.

## ASSESSMENT AND COLLECTION OF CONTRIBUTIONS.

In order that more uniformity could be obtained in the application of assessment of contributions towards the cost of treatment and the provision of milk and foods under the Maternity and Child Welfare scheme, the County Council adopted the following scales to be applied in the assessment and collection of contributions.

## INCOME INCLUDED FOR ASSESSMENT.

Description of Income.	Amount to be brought into account.
Wages, salary, pension and/or value of emoluments ... ..	Full amount.
House property (in which patient does not reside)	Net income derived.
Payments by lodgers (including relatives) for full or part board ... ..	Estimated reasonable profits at 4/- in the £.
Proceeds of sub-letting—	
(a) Unfurnished rooms ... ..	Nett proceeds.
(b) Furnished rooms ... ..	One-half.
All other income or means ... ..	Full amount.

## SPECIAL INCOME TO BE DISREGARDED.

Particulars.	Amount.
Wounds or disability pensions ... ..	First £1 per week.
Workmen's compensation weekly payment ... ..	First 7/6.
National Health Insurance Benefit ... ..	First 7/6 per week.
Friendly Society sick benefit and trade union sick pay ... ..	First 5/- per week.

## (a) PROVISION OF DRIED MILK AND OTHER FOODS.

Where the total family income, after deducting the actual rent paid and 5/- for each child under 14 years of age and not working.	Amount payable by applicant.	Amount payable by County Council.
Does not exceed 24/- per week ... ..	Nil.	Whole.
Is between 24/- and 34/- per week ... ..	Half.	Half.
Exceeds 34/- per week ... ..	Whole.	Nil.

## (b) HOSPITAL, ORTHOPÆDIC, CONVALESCENT AND DENTAL TREATMENT, AND CASES ARISING UNDER THE DISTRESS FUND.

Where the total family income, after deducting the actual rent paid and 5/- for each child under 14 years of age and not working.	Amount payable by applicant.	Amount payable by County Council.
Does not exceed 24/- per week ... ..	Nil.	Whole fees.
Is between 24/- and 44/- per week ... ..	Half fees.	Half fees.
Exceeds 44/- per week ... ..	Whole fees.	Nil.

## (c) MATERNITY HOME TREATMENT.

Where the total family income, after deducting the actual rent paid and 5/- for each child under 14 years of age and not working.	Amount payable by patient.
Does not exceed 24/- per week ... ..	Nil.
Between 24/- and 34/- per week ... ..	Amount of Maternity Benefit received.
Between 34/- and 44/- per week ... ..	Half fees.
Exceeds 44/- per week ... ..	Whole fees.

## (d) PAYMENT OF MIDWIVES' FEES IN NECESSITIOUS CASES.

Where the total family income, after deducting the actual rent paid and 5/- for each child under 14 years of age and not working.	Amount payable by applicant.	Amount payable by County Council.
Does not exceed 24/- per week ... ..	10/-.	20/-.
Exceeds 24/- per week ... ..	Whole fee.	Nil.

## (e) EMPLOYMENT OF MIDWIVES AS MATERNITY NURSES.

Where the total family income, after deducting the actual rent paid and 5/- for each child under 14 years of age and not working.	Amount payable by applicant.	Amount payable by County Council.
Does not exceed 24/- per week ... ..	10/-.	10/-.
Exceeds 24/- per week ... ..	Whole fee.	Nil.

## (f) PROVISION OF MID-DAY MEALS FOR EXPECTANT MOTHERS.

Only cases where the total family income, after deducting the actual rent paid and 5/- for each child under 14 years of age and not working, does not exceed 34/- per week, are considered.

### Provision of Meals for Expectant Mothers.

One of the findings of the Special Committee set up by the Minister of Health to investigate the subject of maternal mortality was that malnutrition of mothers was a possible contributory factor to the high maternal death rate.

It was estimated from enquiries made in the County that approximately 5% of expectant mothers who attended child welfare centres were suffering from malnutrition. In certain cases it was found, especially where the husband was unemployed, that the mother was unable to provide the necessary food. It was for this class of patient that a scheme to provide extra nourishment, in addition to the supplying of milk, was formulated.

1. The meal, *e.g.*, mid-day dinner, is provided on weekdays only and is in addition to milk.
2. During the year 1937, 176 expectant mothers received 2,233 meals, a considerable reduction compared with the previous year when 564 expectant mothers received 4,110 meals.
3. The diet is prescribed by the ante-natal officer but this varies according to the needs of the individual patient, but is usually vegetable soup, meat or fish, potato and other vegetable, milk puddings and stewed fruit.

The meals cover a period not exceeding four weeks and if it is desired to continue with these the ante-natal officer, after further examination of the patient, completes another certificate. The cost averages 1/5d. per meal per patient.

The meals are usually provided at some nearby cafe or restaurant and not at the patient's home. This arrangement ensures that the meals are consumed by the mother herself.

4. Meals are only supplied to expectant mothers. Usually the average period of pregnancy when an expectant mother first attends the ante-natal clinic is 4½ months, and she continues to attend up to about 8½ months; if necessary, meals are supplied during the whole of this period.
5. The ante-natal officer decides as to whether the mother is in need of the meals.
6. Mid-day meals are only supplied in necessitous cases, *i.e.*, where the total family income, after deducting the actual rent paid and 5/- for each child under fourteen years of age and not working, does not exceed 34/- per week.

This is the revised scale of assistance and was approved by the County Council in October, 1937.

### Child Life Protection.

#### Public Health Act, 1936, Section 206.

Visits are made periodically and in cases where the Infant Protection Visitor is not satisfied with the condition of a child or the home, and where any irregularity occurs, the circumstances are reported immediately and investigations made by the Assistant County Medical Officers or one of the Inspectresses.

The following return relates to the administration of the above Section of the Public Health Act, 1936, during the year 1937.

#### 1. Notification:—

(i)	Number of foster parents on the Register at the end of the year	185
(ii)	Number of children on the Register	
(a)	at the end of the year	224
(b)	who died during the year	—
(c)	on whom inquests were held during the year	—

#### 2. Visiting:—

(i)	Number of Visitors holding appointments under Section 2 (2) at the end of the year:—	
(a)	Health Visitors	117
(b)	Female, other than Health Visitors	4
(c)	Male	3
(ii)	Number of persons or societies authorised to visit under the proviso to Section 2 (2).	none

3. No proceedings were taken during the year under the various Sections of the Act.
4. No sanctions were given under Section 3 (a) (b) and (c) during the year.
5. No orders were obtained during the year under Section 5 (1) from a Justice or from the Local Authority.

During the year 1937 the Infant Protection Visitors made 572 visits to children notified as being nursed for reward.

### Widows', Orphans' and Old Age Contributory Pensions Act, 1925.

The County Council is the Local Authority under the above Act for certain administrative purposes.

The duties to be performed by the Local Authority necessitate enquiry as to the conduct of widows in relation to the desertion, abandonment or non-support of children.

The County Council decided that, having regard to the nature of the enquiries, it was desirable that they should be undertaken by women, and accordingly any investigations are carried out by the inspectresses. In every case the report of the Health Visitor in the area is also considered. No investigations were made during 1937.

# PART IV. TUBERCULOSIS SCHEME.

DR. G. S. JOHNSTON.—Chief Clinical Tuberculosis Officer.

TABLE LXXII.

**Mortality from Tuberculosis of the Respiratory System.  
(Pulmonary Tuberculosis).**

Year	West Riding Administrative County						England & Wales Death-rate
	Total No. of Deaths			Death-rate per 1,000 of population			
	County	Urban	Rural	County	Urban	Rural	
1927	981	739	242	0.65	0.68	0.57	0.79
1928	926	706	220	0.61	0.64	0.51	0.76
1929	1011	747	264	0.66	0.68	0.62	0.79
1930	876	673	203	0.57	0.62	0.46	0.74
1931	882	632	250	0.57	0.58	0.58	0.74
1932	806	617	189	0.52	0.57	0.42	0.69
1933	745	545	200	0.49	0.50	0.45	0.69
1934	671	513	158	0.44	0.47	0.35	0.64
1935	734	529	205	0.48	0.49	0.45	0.61
1936	669	486	183	0.44	0.45	0.41	0.58
Average for 10 years, 1927-36	830	619	211	0.54	0.57	0.48	0.70
1937	695	516	179	0.46	0.48	0.42	0.58

TABLE LXXIII.

**Mortality from Other Forms of Tuberculosis.**

Year	West Riding Administrative County						England & Wales Death-rate
	Total No. of Deaths			Death-rate per 1,000 of population			
	County	Urban	Rural	County	Urban	Rural	
1927	323	246	77	0.21	0.23	0.18	0.18
1928	342	246	96	0.22	0.22	0.22	0.17
1929	321	223	98	0.21	0.20	0.23	0.17
1930	309	213	96	0.20	0.20	0.22	0.16
1931	253	164	89	0.16	0.15	0.20	0.15
1932	264	182	82	0.17	0.17	0.18	0.15
1933	218	157	61	0.14	0.14	0.14	0.13
1934	181	131	50	0.12	0.12	0.11	0.13
1935	157	109	48	0.10	0.10	0.11	0.11
1936	185	130	55	0.12	0.12	0.12	0.11
Average for 10 years, 1927-36	255	180	75	0.17	0.16	0.17	0.15
1937	163	118	45	0.11	0.11	0.11	0.11

TABLE LXXIV.

**Tuberculosis Deaths in 1937 at different periods of Life.**

		Sex.	Age Groups.											All Ages
			Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 35	35 and under 45	45 and under 55	55 and under 65	65 and under 75	75 and up-wards	
RESPIRATORY														
TUBERCULOSIS														
Urban Districts	...	M.	1	—	1	3	50	60	58	54	66	16	4	313
		F.	—	—	3	5	54	54	34	20	25	8	—	203
Rural Districts	...	M.	—	1	—	—	12	21	22	18	19	1	—	94
		F.	—	—	1	2	19	29	18	6	8	2	—	85
Administrative County			1	1	5	10	135	164	132	98	118	27	4	695
OTHER TUBERCULOUS DISEASES—														
Urban Districts	...	M.	7	4	16	12	8	11	4	7	2	1	1	73
		F.	2	2	7	8	8	6	4	5	1	1	1	45
Rural Districts	...	M.	1	—	2	2	4	2	2	2	1	2	1	19
		F.	4	4	1	2	4	3	3	—	3	1	1	26
Administrative County			14	10	26	24	24	22	13	14	7	5	4	163

TABLE LXXV.

## Tuberculosis of Respiratory System.

Mortality per 100,000 living at different ages in the West Riding Administrative County in the years 1911-20, 1921-30, 1931-35, 1936, and 1937.

AGES.	URBAN DISTRICTS.					RURAL DISTRICTS.					ADMINISTRATIVE COUNTY.				
	1911-20	1921-30	1931-35	1936	1937	1911-20	1921-30	1931-35	1936	1937	1911-20	1921-30	1931-35	1936	1937
MALES.															
Under 15 years ...	27	14	7	5	4	21	12	8	3	2	25	14	7	4	3
15 and under 25 years ...	106	77	54	53	57	79	60	50	37	31	99	72	53	48	49
25 and under 45 years ...	150	107	78	54	72	124	90	60	40	65	143	102	73	50	70
45 and under 65 years ...	175	127	101	108	101	127	89	86	108	83	163	117	97	108	96
65 and upwards ...	82	65	61	55	65	53	48	64	40	9	73	60	62	50	50
All ages ...	104	79	61	55	60	78	59	49	44	44	97	73	57	52	55
FEMALES.															
Under 15 years ...	37	19	7	8	7	25	21	7	9	6	34	19	7	8	6
15 and under 25 years ...	111	106	86	68	61	100	99	80	57	53	108	104	84	65	59
25 and under 45 years ...	109	83	61	42	49	109	76	61	54	75	109	81	61	46	56
45 and under 65 years ...	73	51	33	37	33	65	51	33	32	31	71	51	33	36	32
65 and upwards ...	48	37	29	20	20	39	28	17	38	17	46	35	26	25	19
All ages ...	79	62	44	36	36	69	55	41	37	41	77	60	43	36	37

TABLE LXXVI.

## Other Forms of Tuberculosis.

Mortality per 100,000 living at different ages in the West Riding Administrative County in the years 1911-20, 1921-30, 1931-35, 1936, and 1937.

AGES.	URBAN DISTRICTS.					RURAL DISTRICTS.					ADMINISTRATIVE COUNTY.				
	1911-20	1921-30	1931-35	1936	1937	1911-20	1921-30	1931-35	1936	1937	1911-20	1921-30	1931-35	1936	1937
MALES.															
Under 15 years ...	96	62	33	30	33	73	50	30	27	9	89	58	32	29	25
15 and under 25 years ...	25	22	15	16	9	20	15	12	12	10	24	20	14	15	9
25 and under 45 years ...	19	12	11	8	9	15	11	8	7	6	18	12	10	8	8
45 and under 65 years ...	18	14	6	8	8	18	13	9	2	7	18	14	7	6	7
65 and upwards ...	20	15	9	10	7	11	8	12	24	26	17	13	9	14	12
All ages ...	45	28	16	14	14	36	24	15	13	9	43	27	16	14	12
FEMALES.															
Under 15 years ...	80	47	25	22	16	61	52	29	10	21	74	48	26	18	18
15 and under 25 years ...	26	22	15	22	9	20	21	13	11	11	24	22	14	19	10
25 and under 45 years ...	14	11	6	4	6	14	10	8	15	10	14	11	7	7	7
45 and under 65 years ...	14	12	5	1	4	11	9	5	9	7	14	12	5	3	5
65 and upwards ...	14	12	7	3	5	19	11	16	8	17	15	12	9	4	8
All ages ...	35	22	12	10	8	30	2	14	11	12	34	22	12	10	9

Chart shewing Mortality from Tuberculosis during the Years 1921-37 in the West Riding Administrative County and England and Wales.

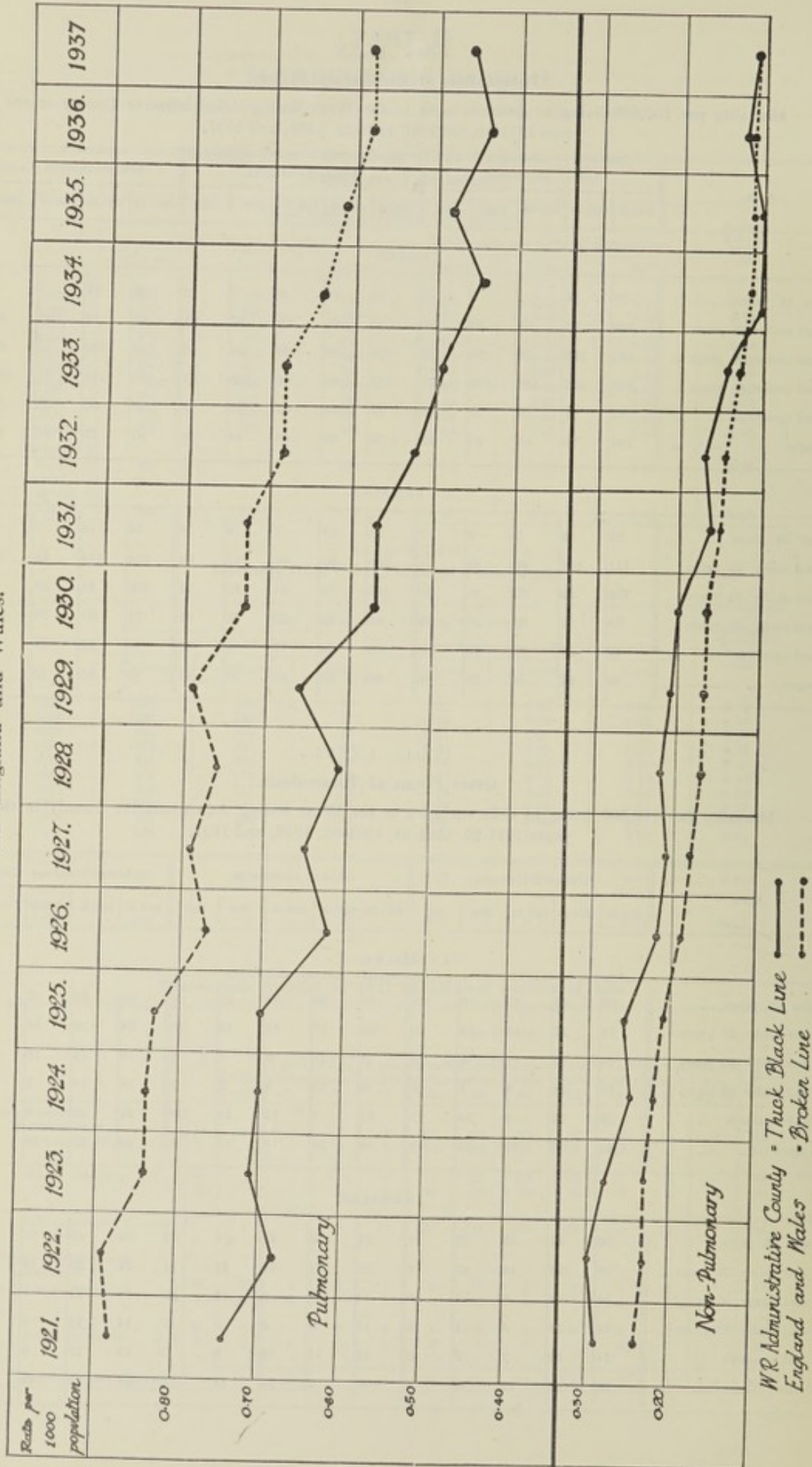


TABLE LXXVII.  
Tuberculosis Mortality—Comparison of Dispensary Areas.

Dispensary Area and Centre.	Estimated Population (mid. 1937).	DEATHS IN 1937.				DEATH RATES PER 1,000 ESTIMATED POPULATION.	
		PULMONARY.		NON-PULMONARY.		Pulmonary.	Non-Pulmonary.
		Male.	Female.	Male.	Female.		
No. 1. (Skipton) ...	141,358	39	31	10	8	0.50	0.13
No. 2. (Harrogate) ...	153,974	36	37	7	11	0.47	0.12
No. 3. (Doncaster) ...	387,381	121	78	32	27	0.51	0.15
No. 4. (Barnsley) ...	471,020	124	64	22	13	0.40	0.07
No. 5. (Sowerby Bridge) ...	356,798	87	78	21	12	0.46	0.09
County Totals ...	1,510,531	407	288	92	71	0.46	0.11

### NOTIFICATION OF TUBERCULOSIS.

TABLE LXXVIII.  
Notifications received during the period 1922-1937 under the Public Health (Tuberculosis) Regulations.

Year.	Pulmonary Cases.		Non-Pulmonary Cases.		Total.
	M.	F.	M.	F.	
Average 5 years, 1922-1926 ...	1,321	1,120	377	354	3,172
" " 1927-1931 ...	1,142	886	429	360	2,817
" " 1932-1936 ...	651	528	273	248	1,700
1936 ...	539	446	261	243	1,489
1937 ...	590	415	228	236	1,469

TABLE LXXIX.  
Public Health (Tuberculosis) Regulations 1930.

Summary of Notifications during the period from the 1st January, 1937, to the 31st December, 1937, in the area of the West Riding Administrative County.

Age Periods.					Formal Notifications.											Total Notifications	
					Number of Primary Notifications of new cases of Tuberculosis.												
					0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—		Total (all ages)
Pulmonary	Males	...	...	...	3	7	16	17	46	83	109	117	102	74	16	590	615
"	Females	...	...	...	1	2	10	26	51	81	117	67	32	23	5	415	426
Non-pulm.	Males	...	...	...	5	28	44	51	25	15	27	16	12	4	1	228	231
"	Females	...	...	...	13	29	40	44	24	26	29	20	7	—	4	236	243

### PART II.—SUPPLEMENTAL RETURN.

New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the above-mentioned period, otherwise than by formal notification.

Age period.	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total
Pulmonary Males ...	—	2	2	1	2	8	16	20	16	12	6	85
" Females ...	—	—	1	2	6	10	15	11	5	6	2	58
Non-pulm. Males ...	3	7	6	7	1	3	—	4	3	1	2	39
" Females ...	2	10	7	6	2	5	—	2	2	3	4	46

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

Source of Information.	No. of Cases.	
	Pulm.	Non-Pulm.
Death Returns {from local Registrars ...	41	31
transferable deaths from Registrar General ...	23	24
Posthumous notifications ...	10	3
"Transfers" from other areas (other than transferable deaths) ...	60	27
Other sources ...	—	—

TABLE LXXIX.—(Continued.)  
PART III.—NOTIFICATION REGISTER.

	Pulmonary			Non-pulmonary			Total cases
	m.	f.	Total	m.	f.	Total	
Number of cases of Tuberculosis remaining at the 31st December, 1937 on the Registers of Notifications kept by District Medical Officers of Health in the County.	4855	3604	8459	2266	2129	4395	12854
Number of cases removed from the Registers during the year by reason inter alia of:—							
1. Withdrawal of Notification ... ..	28	22	50	16	11	27	77
2. Recovery from the disease ... ..	244	179	423	152	132	284	707
3. Death (all causes) ... ..	402	283	685	61	48	109	794
4. Otherwise ... ..	215	184	399	76	76	152	551

TABLE LXXX.  
Notified Cases in the West Riding in December, 1936 and 1937.

	Pulmonary.		Non-Pulmonary.		Totals.
	Males.	Females.	Males.	Females.	
No. of cases on registers of local Medical Officers of Health at end of 1936 ... ..	5,088	3,809	2,333	2,010	13,240
New Cases notified in 1937 ... ..	675	473	267	282	1,697
Cases removed from registers during 1937 ... ..	908	678	334	163	2,083
No. of cases on registers of local Medical Officers of Health at end of 1937 ... ..	4,855	3,604	2,266	2,129	12,854

### Dispensary Scheme.

The year's record of work in the prevention and treatment of tuberculosis in the administrative area still maintains a steady and satisfactory level.

During the past ten years the average death rate from pulmonary tuberculosis has shown a continuous decline from that of the preceding decade (vide Table LXXII on page 139).

The total deaths from tuberculosis (all forms) in the County during 1937 was 858. Respiratory tuberculosis accounted for 695 deaths (an increase of 26 compared with 1936), representing a death rate of 0.46 per 1,000 of the population. Deaths from non-pulmonary tuberculosis totalled 163, giving a rate of 0.11 per 1,000. The death rate for England and Wales for 1937 was, pulmonary tuberculosis 0.58 per 1,000, and non-pulmonary 0.11 per 1,000.

It is pleasing to note the reduction in mortality from non-pulmonary tuberculosis in children under 15 years. Thus in 1937 there were 74 deaths from surgical tuberculosis in age groups 1-15 years as compared with 178 in 1930. The average number of deaths (all ages) from non-pulmonary tuberculosis for the period 1927-1936 was 255 compared with 385 for 1920-1929.

With regard to the phthisis death rate in women, age groups 15-25, a reduction has been recorded for the year 1937. It has been observed in previous reports that the phthisis death rate in the West Riding is particularly heavy in young adult females, and it is gratifying to note that the diminution has been maintained during the past few years. Deaths from phthisis in young adult females, age groups 15-25:—

1930.	1937.
134 deaths.	73 deaths.

Under the Tuberculosis Regulations notifications relating to 1,005 new cases of pulmonary tuberculosis were received during the year. 792 (or 79%) of these were referred to the dispensary and examined by the dispensary medical staffs. Of the pulmonary cases attending the dispensaries for the first time during 1937, 463 (or 58%) were found to have a positive sputum, and death occurred before the end of 1937 in 122 of these cases.

One satisfactory feature of the figures dealing with notification, is the reduction in the number of cases coming to the knowledge of the Medical Officer of Health otherwise than by formal notification. During 1937 there were 13 posthumous notifications as compared with 44 in 1932.

Dispensary attendances of old and new cases (including contacts) during the years 1933-1937 (inclusive):—

New cases examined:—

	1933	1934	1935	1936	1937
(a) Contacts	1,025	1,282	1,425	1,659	1,433
(b) Others	3,469	3,210	4,274	3,658	3,559
Attendances	33,646	32,990	30,992	30,318	29,026
(all cases)					

Of the applications for treatment during the year:—

1,413	were recommended	Sanatorium Treatment.
156	"	Hospital
49	"	Dispensary
1,174	"	Dispensary Supervision
330	"	referred to their own Doctor.

The total number of definite cases of tuberculosis on the dispensary registers on the 31st December, 1937, was 8,203.

TABLE LXXXI.

Table shewing the work of the Dispensaries during 1937.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.				GRAND TOTAL
	Adults.		Children.		Adults.		Children.		Adults.		Children.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A.—NEW CASES examined during the year (excluding contacts):—													
(a) Definitely tuberculous ... ..	405	260	20	17	71	85	67	82	476	345	87	99	1007
(b) Diagnosis not completed ... ..	—	—	—	—	—	—	—	—	151	106	74	64	395
(c) Non-tuberculous ... ..	—	—	—	—	—	—	—	—	777	667	354	359	2157
B.—CONTACTS examined during the year:—													
(a) Definitely tuberculous ... ..	35	36	12	7	3	3	10	5	38	39	22	12	111
(b) Diagnosis not completed ... ..	—	—	—	—	—	—	—	—	17	18	36	25	96
(c) Non-tuberculous ... ..	—	—	—	—	—	—	—	—	193	326	361	346	1226
C.—CASES written off the Dispensary Register as:—													
(a) Recovered ... ..	145	112	70	40	29	29	107	99	174	141	177	139	631
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ... ..	—	—	—	—	—	—	—	—	1144	1124	917	823	4008
D.—NUMBER OF CASES ON Dispensary Register on December 31st:—													
(a) Definitely tuberculous ... ..	2817	1776	512	475	458	461	937	767	3275	2237	1449	1242	8203
(b) Diagnosis not completed ... ..	—	—	—	—	—	—	—	—	168	127	111	91	497
1. Number of cases on Dispensary Register on January 1st ... ..				9491	2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...				242				
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ... ..				722	4. Cases written off during the year as Dead (all causes) ... ..				664				
5. Number of attendances at the Dispensary (including Contacts) ... ..				29026	6. Number of Insured Persons under Domiciliary Treatment on the 31st December				446				
7. Number of consultations with medical practitioners:—					8. Number of visits by Tuberculosis Officers to homes (including personal consultations) ... ..				3440				
(a) Personal ... ..				1305									
(b) Other ... ..				6258									
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes ... ..				40053	10. Number of:—								
					(a) Specimens of sputum, etc., examined ... ..				3202				
					(b) X-ray examinations made ... .. in connection with Dispensary work				4664				
11. Number of "Recovered" cases restored to Dispensary Register, and included in A(a) and A(b) above ... ..				25	12. Number of "T.B. plus" cases on Dispensary Register on December 31st ...				1655				

There is still evidence of overcrowding in the West Riding, particularly in the industrial areas (vide environmental table on page 156). Of the 1,655 infectious pulmonary cases attending the dispensaries there were 47 patients from houses where more than one family reside, 468 instances where they slept two in a bed, and 5 where worse conditions prevailed. The provision of open-air shelters fulfils a useful purpose by providing separate sleeping accommodation for tuberculous patients, living in overcrowded areas, enabling them to take full advantage of living in the open air and reducing the risk of infecting other members of the household.

The number of definite cases on the dispensary registers at the end of 1937 was 8,203. This represents a reduction of 603 cases during the preceding twelve months. Pulmonary cases number 5,580, 1,655 of which are known to have "positive" sputum. During 1937, 631 cases were marked off the register "recovered," 664 were reported to have died, and 722 had left the district, were lost sight of, or were found to have no further need of assistance under the County scheme.

There were 1,615 new applications for treatment and 1,507 old cases were reconsidered during 1937, as compared with 1,404 and 1,735 in 1936.

During the year 477 positive and infectious cases of pulmonary tuberculosis returned home from hospital or sanatorium, many of them to houses where there were children or young adults living.

The importance of field work generally (i.e., apart from institutional treatment) in connection with prevention is borne out by the steady improvement of the figures relating to the past few years. For example, in 1930 the number of contacts examined under the West Riding Tuberculosis Scheme was 1,313, sputum examinations numbered 1,728, X-Ray examinations 365, visits to the homes of the patients by Tuberculosis Officers 2,738, and the number of T.B. + cases on the Register 863, whereas in 1937 the corresponding figures were contacts examined 1,433, sputum examinations 3,202, X-Ray examinations 4,664, visits to the homes 3,440, and T.B. + cases on the Register 1,655. The increase in the number of sputum positive (i.e., known infectious cases) indicates a better system of weeding out of those cases who are more likely to spread infection, and not an increase in the total number of cases.

During these seven years the number of cases on the Dispensary Registers had dropped from 14,500 in 1930 to 8,700 in 1937.

On the question of "contacts," an investigation was made recently in the West Riding into the number of T.B. plus cases in women who had been living in contact with an infectious case of tuberculosis at any time during the preceding seven years, and it was found that out of a total of 602 cases in women with a T.B. plus sputum and who were on the Dispensary Register, 157 or 26% had been living in contact with known cases of tuberculosis.

A significant feature of the report was the high proportion of T.B. plus cases in the age group 15 to 35; 402 occurred in this group out of a total of 602 for all ages, and of these 106 or 26% had been living in contact.

In January, 1937, Dr. E. Ratner, Chief Tuberculosis Officer for Stockport, was appointed to the post of Consultant Tuberculosis Officer for the No. 3 (Doncaster) area, in succession to Dr. V. Ryan, who took up his duties as Medical Superintendent, Scotton Banks Sanatorium, on 1st March.

During the year, facilities were given to the following members of the medical staff to attend post-graduate courses:—

Dr. W. Guthrie, Junior Assistant Medical Officer, Middleton Sanatorium. City of London Hospital. (February.)

Dr. A. Leitch, Assistant Tuberculosis Officer, Doncaster Area. Brompton Hospital. Artificial Pneumothorax Therapy. (October.)

#### Dispensary Premises.

Early in the year under review a report was submitted by the Special Visiting Sub-Committee relating to dispensary premises. Recommendations were made and approved with a view to remedying existing structural defects, and in connection with alterations in the heating arrangements at X-Ray Centres. Improvements have also been carried out in connection with the X-Ray plants at Tuberculosis Dispensaries.

Schemes are being prepared for the establishment of joint medical centres and clinics, in conjunction with other activities of the Department.

#### Special Treatment.

**ARTIFICIAL PNEUMOTHORAX.** During the year artificial pneumothorax was induced in two cases. In one case the induction failed; in the other the patient was improving when admitted to Sanatorium three weeks after the induction. Refills to the number of 521 were given to 48 patients and the following table indicates their condition at the end of the year:—

Disease arrested	...	...	...	...	...	...	...	2
Disease quiescent	...	...	...	...	...	...	...	6
Condition improved or maintained	...	...	...	...	...	...	...	26
Condition worse or treatment discontinued	...	...	...	...	...	...	...	7
Re-admitted to sanatorium	...	...	...	...	...	...	...	3
Left the district	...	...	...	...	...	...	...	2
Died	...	...	...	...	...	...	...	2

**Tuberculin.** Tuberculin was administered to 86 patients comprising 9 pulmonary and 77 non-pulmonary cases. The following table indicates the various lesions treated and the results recorded at the end of the year:—

TABLE LXXXII.

	Arrested	Quiescent	Improving	In Statu Quo	Active	Total
Pulmonary ... ..	1	5	1	—	2	9
Non-Pulmonary:—						
Bones ... ..	3	1	—	—	3	7
Abdomen ... ..	—	1	—	—	—	1
Eyes ... ..	—	—	4	—	—	4
Lupus ... ..	—	2	—	—	1	3
Genito-urinary ...	2	3	—	2	—	7
Glands ... ..	16	21	6	—	12	55
Total ... ..	22	33	11	2	18	86

#### Consultant Surgeons.

In continuance of the arrangements made for certain cases of pulmonary and non-pulmonary tuberculosis to be referred to surgeon specialists, consultations have been held from time to time at the various sanatoria and dispensaries; and operations performed at Middleton Sanatorium, Scotton Banks Sanatorium, Leeds General Infirmary, and the St. James's Hospital at Leeds as below:—

Mr. Moir, chest surgeon, 54 cases in consultation as follows:—

Scotton Banks ... ..	19
Cardigan ... ..	15
Middleton ... ..	1
Oakwood Hall ... ..	5
Crookhill Hall ... ..	8
Barnsley dispensary area ...	3
Sowerby Bridge dispensary area ...	3

Operations were performed on 31 of these cases:—

Mr. Broomhead, Orthopaedic surgeon, 32 cases.

Middleton Sanatorium ... ..	30
Cardigan Sanatorium ... ..	2

Operations performed on 12 cases.

Dr. Watson, Laryngologist, 5 cases.

Middleton Sanatorium ... ..	3
Cardigan Sanatorium ... ..	2

Operations performed on 3 cases.

Dr. Callander, Surgeon, 3 cases at Doncaster Royal Infirmary, which were all operated upon.

Dr. Ingram, Skin specialist, saw 5 cases at Middleton Sanatorium.

#### Chest Surgery.

On 31st December, 1937, an enquiry was made into the after histories (dating back to 1932) of 29 cases operated upon for thoracoplasty and 94 cases for phrenic paralysis.

The following is a broad summary of the results. A more detailed report on each individual case will be published later.

#### Thoracoplasty.

Of the 29 cases of thoracoplasty the operation was advised in 23 cases for pulmonary tuberculosis, one for bronchiectasis, four for lung abscess and one for empyema.

In all the cases of pulmonary tuberculosis, X-Ray examination revealed one or more cavities, which were unaffected by artificial pneumothorax. Some patients had other diseases present which complicated the result of the operation.

The results are disappointing, but it should be noted that thoracoplasty was performed in most instances as a last resort and offered the only possible alternative to the patient. Most of the operations were carried out at the Leeds General Infirmary or Leeds Public Dispensary.

At Middleton and Scotton Banks Sanatoria up-to-date theatres and X-Ray Departments have now been provided.

A summary of the cases operated upon is as follows:—

Of the 14 cases who had positive sputum at the time of the operation, there were on the 31st December last

Sputum conversion cases ...	4
Still positive and active ...	7
Dead ...	3

Of the 13 cases with negative sputum there were

Remaining sputum negative and quiescent ...	4
Becoming positive and active ...	3
Died ...	3
Diagnosis revised ...	2
Remaining sputum negative but active	1

Of the two cases with no sputum

Died ...	1
Diagnosis revised ...	1

#### Phrenic Paralysis.

The operation of phrenic avulsion or phrenic crush was carried out as an adjunct to artificial pneumothorax in 45 cases. In the 49 cases where artificial pneumothorax was unsuccessful or had not been attempted the operation was resorted to for one or other of the following reasons:—

- In an attempt to check the spread of the disease.
- To allay cough or relieve pain.
- To rest the lung in bronchiectasis or lung abscess.

Of the 45 cases who at the time of the operation had a positive sputum, the results on the 31st December last were as follows

Died ...	16
Positive sputum and active ...	17
Negative sputum and active ...	2
Negative sputum and quiescent ...	8
No sputum and quiescent ...	1
Left district ...	1

Of the 48 negative sputum cases the results were as follows

Died ...	14
Positive sputum and active ...	13
Positive sputum and quiescent ...	1
Negative sputum and quiescent ...	11
Negative sputum and active ...	5
Discharged "recovered" ...	1
Diagnosis revised ...	1
Left district ...	2

One case who had no sputum was subsequently discharged "recovered."

TABLE LXXXIII.  
Thoracoplasty, 1932-37.—Summary of Results.

Year of operation.	No. of cases.	Original Sputum findings.	Dead.	Left District.	Discharged. Revision of diagnosis.	Discharged. Recovered.	Condition at 31.12.37.					
							Quiescent.			Active.		
							Nil.	Neg.	+	Nil.	Neg.	+
1932	3	Nil.	—	—	—	—	—	—	—	—	—	—
		Neg.	1	—	—	—	—	1	—	—	—	—
		+	2	—	—	—	—	2	—	—	—	—
1933	4	Nil.	—	—	—	—	—	—	—	—	—	—
		Neg.	3	1	1	—	—	—	—	—	—	1
		+	1	—	—	—	—	—	—	—	—	1
1934	2	Nil.	—	—	—	—	—	—	—	—	—	—
		Neg.	2	1	—	—	—	1	—	—	—	—
		+	—	—	—	—	—	—	—	—	—	—
1935	9	Nil.	2	1	1	—	—	—	—	—	—	—
		Neg.	3	1	1	—	—	—	—	—	—	1
		+	4	1	—	—	—	—	—	—	—	3
1936	6	Nil.	—	—	—	—	—	—	—	—	—	—
		Neg.	1	—	—	—	—	—	—	—	1	—
		+	5	1	—	—	—	2	—	—	—	2
1937	5	Nil.	—	—	—	—	—	—	—	—	—	—
		Neg.	3	—	—	—	—	2	—	—	—	1
		+	2	1	—	—	—	—	—	—	—	1
Totals ...	29		29	7	3	—	—	8	—	—	1	10

TABLE LXXXIV.  
Phrenic Operations, 1932-37.—Summary of Results.

Year of operation.	No. of cases.	Original Sputum findings.	Dead.	Left District.	Discharged. Revision of diagnosis.	Discharged. Recovered.	Condition at 31.12.37.						
							Quiescent.			Active.			
							Nil.	Neg.	+	Nil.	Neg.	+	
1932	15	Nil. Neg. +	— 8 7	— 2 5	— 1 —	— — —	— 1 —	— 2 —	— — —	— — —	— 1 —	— 1 2	
1933	25	Nil. Neg. +	— 16 9	— 8 5	— 1 1	— 1 —	— 1 —	— 1 1	— 1 —	— — —	— — —	— 3 2	
1934	8	Nil. Neg. +	— 6 2	— 1 1	— — —	— 1 —	— 1 —	— 1 —	— — —	— — —	— — —	— 2 1	
1935	9	Nil. Neg. +	— 4 5	— 1 3	— — —	— — —	— 2 —	— — 1	— — —	— — —	— — —	— 1 1	
1936	12	Nil. Neg. +	1 5 6	— 2 1	— — —	1 — —	— 1 —	— — 2	— — —	— 1 —	— 1 1	— — 2	
1937	25	Nil. Neg. +	— 9 16	— — 1	— — —	— — —	— 1 1	— — 4	— — —	— 1 1	— 1 —	— 6 9	
Totals ...	94		94	30	3	1	2	8	12	1	3	4	30

#### Operations on the Spine.—Spinal Fixation.

It has been recognised for a long time that some form of "Internal Splintage" which effectively controls or prohibits the movements of the spinal column, is a reasonable and rapid method of attacking tuberculous spinal caries. The operation is indicated where there is pain, muscle spasm, increasing deformity, abscess formation and paraplegia or paralysis. It can only be applied where there is no secondary infection with high fever, and is therefore limited to a few cases.

Two types of operation are performed, Hibb's and Albee. Both have the same objects in view, i.e., fixation of the spine and shortening the period in bed. An investigation into the after histories of 23 West Riding patients who have undergone the operation is given in Table LXXXV below. It will be observed that in most instances the results have been satisfactory.

TABLE LXXXV.  
Details of Splinting Operations of the Spine performed on West Riding Patients.

Case No.	Age and Sex.	Date of notification.	Institution and date of operation.	Result.
A. 32,916	41 F.	30-7-33	Oswestry, October, 1934.	Now in excellent condition and the operation appears to have been quite satisfactory.
A. 15,584	39 F.	25-2-27	Leeds General Infirmary 1925.	Result is good. Patient wears a spinal support and does not complain of symptoms.
A. 28,699	39 M.	27-12-27	Oswestry, November, 1928.	Condition very satisfactory. Patient in full work, not wearing any instrument. Discharged "recovered" December, 1937.
A. 35,387	38 F.	14-2-35	Leeds General Infirmary 1935.	Patient suffered from complete paralysis of the legs and was bedridden up to her death in September, 1937.
A. 36,009	50 F.	7-8-35	Oswestry, 1936.	Is making satisfactory progress, has had no recurrence of symptoms, and is walking well in black leather jacket.
A. 27,757	28 F.	6-10-30	Oswestry, 22nd March, 1935.	Condition satisfactory. Apparently quiescent.
A. 34,792	42 M.	28-9-34	Oswestry, 19th December, 1934.	Condition satisfactory.
A. 32,966	29 F.	21-7-33	Oswestry, March, 1934.	Excellent result.
A. 32,751	21 F.	30-6-33	Stanmore, 1935.	Under observation at Leeds General Infirmary. Condition satisfactory. No evidence of active disease in recent X-Ray.
A. 32,081	28 F.	18-1-33	Leeds General Infirmary 24th May, 1935.	Condition satisfactory. No evidence of active disease in recent X-Ray.
A. 32,591	17 F.	5-6-33	Stanmore, 29th August, 1935.	Symptomless. Well and working.
A. 36,038	43 F.	8-7-35	Leeds General Infirmary 26th June, 1935.	Kept well until January, 1937, and then complained of pain which became more severe. September, 1937, X-Ray shows spinal lesion well healed with calcification. Has been admitted to Oswestry for alcoholic injection of intercostal nerves or for special appliance.

TABLE LXXXV. —(continued).

Case No.	Age and Sex.	Date of notification.	Institution and date of operation.	Result.
A. 27,941	35 M.	26-9-30	Leeds General Infirmary May, 1930.	Last seen in 1934 when wearing jacket. October, 1937, reported to be working regularly and keeping well.
A. 38,624	16 M.	19-1-29	Alton. December, 1936.	26th April, 1937, transferred to Rothwell in West Riding. Patient well and wearing a brace. Admitted to the Derwen Cripples' Training College 16th February, 1938.
A. 27,579	10 M.	15-6-34	Jenny Lind Hospital. 13th May, 1937.	Condition satisfactory. Wearing a Thomas spinal support.
A. 32,617	23 F.	13-5-33	Leasowe. 17th October, 1934.	Satisfactory result. Disease now almost arrested.
A. 34,192	20 F.	11-7-34	Oswestry. 14th November, 1934.	Satisfactory result. Disease appears arrested. No change in appearance of spine for last two years.
A. 34,358	45 F.	24-7-30	Oswestry. 26th July, 1930.	Recent X-Ray shows disease healed, and alignment of spine satisfactory. Good result.
A. 32,743	29 M.	21-1-29	Oswestry. 7th September, 1929.	Good result and patient now working. Recent X-Ray shows healing fairly satisfactory. Still requires considerable care.
A. 33,028	54 F.	27-2-32	Leasowe. 22nd September, 1934	This patient, probably because of her age, had a doubtful passage after her operation, as the graft fractured, and she required further treatment on the frame. Recent X-Ray, however, shows very satisfactory alignment of the vertebrae, both P.A. and lateral views, and there is no definite evidence of active disease in the spine.
A. 33,207	35 M.	27-2-34	Oswestry. 2nd February, 1935.	This patient did not have a very good result, and the lesion is probably still active in the spine. At present undergoing further treatment at Oswestry.
A. 32,273	33 M.	24-3-33	Oswestry. 28th October, 1933.	Recent X-Ray shows the disease "cured," and the position of the vertebrae very satisfactory. This patient is living a normal life and it is anticipated that his name will shortly be removed from the dispensary register.
A. 20,092	52 F.	20-2-27	Leasowe. 19th October, 1934.	The result of the operation in this case has not been very good, as the angle of deformity is just as great as it was prior to the operation. Recent X-Ray showed possibly more erosion of the two affected lumbar vertebrae. The reason probably for the poor result is that the patient herself is very stout.

## Milk and Tuberculosis.

Infected milk is one potent source of danger in tuberculosis, and the remedy is in our own hands.

In a recent report the County Bacteriologist stated that during the years 1932-1937, in the West Riding 12,938 samples of milk had been examined, and 487 (or 3.7%) were found positive with tubercle bacillus.

The classes of milk examined were ordinary milk, Grade "A" and "Accredited" milk, and Pasteurised milk. Ordinary milk consisted of samples submitted by Local Authorities of the milk produced or distributed in their areas, and of milk supplied to school children. Very few of the samples were from "bulked" milk and the results obtained may therefore be regarded as applying to individual herds.

The following table gives the results obtained during 1932 to 1936 and the first three quarters of 1937:—

TABLE LXXXVI.  
Samples Examined for Tubercle Bacillus, 1932-1937:—

Designation.	Number Examined.	Number Positive.	Percentage.
Ordinary ... ..	8,931	371	4.1
Grade "A" and Accredited ... ..	3,344	89	2.6
Pasteurised ... ..	663	27	4.0
	12,938	487	3.7

Further details relating to tuberculous infection of milk will be found on page 70 of this report.

TABLE LXXXVII.  
Revision of Dispensary Registers, 1937.

CENTRAL OR BRANCH DISPENSARY	Patients on the Dispensary Register 1st January, 1937			Additions to the Dispensary Register						Removals from the Dispensary Register				Patients on the Dispensary Register 31st December, 1937				
	Pul.	Non-Pul.	Diag- nosis not com- pleted	NEW CASES			CONTACTS			Transfers from other areas and returned to the register	Cases written off as Recovered	Dis- charged Non- Tuber- culous etc.	Transfers to other areas lost sight of etc.	Cases written off as Dead	Pul.	Non- Pul.	Diag- nosis not Com- pleted	
				Defi- nitely Tuber- culous	Diagnosis not completed	Non- Tuber- culous	Defi- nitely Tuber- culous	Diagnosis not completed	Non- Tuber- culous									
<b>Area No. 1.</b>																		
<b>Skipton</b>	111	31	8	29	3	45	—	—	16	1	6	71	17	15	103	29	3	
Barnoldswick	105	26	15	22	6	63	2	—	18	1	4	98	11	15	95	29	6	
Clitheroe	20	8	—	2	—	4	1	1	1	1	4	5	1	2	18	7	1	
Horsforth	90	16	4	18	6	53	1	—	18	5	2	76	20	9	77	21	6	
Odley	108	30	10	24	7	17	3	2	24	9	9	52	12	17	106	29	9	
Settle	44	9	3	3	2	9	—	—	3	2	—	12	4	6	40	11	2	
<b>Area No. 2.</b>																		
<b>Harrogate</b>	149	80	4	59	6	85	3	—	67	10	20	156	34	34	148	65	6	
Garforth	65	57	2	16	2	28	—	—	16	8	4	43	11	6	69	59	2	
Ripon	25	12	4	9	1	11	—	—	11	—	4	23	5	4	25	11	1	
Selby	41	36	2	16	3	36	—	—	14	—	5	53	7	5	41	34	3	
Tadcaster	9	17	—	6	—	9	—	—	8	1	—	18	—	2	12	18	—	
<b>Area No. 3.</b>																		
<b>Doncaster</b>	383	169	22	80	58	148	13	17	64	20	12	223	36	47	389	181	76	
Goldthorpe	286	122	30	27	7	50	9	7	93	4	10	163	34	15	292	107	14	
Goole	162	50	16	18	9	25	3	4	48	4	10	119	9	16	122	50	13	
Hensworth	197	72	27	31	36	63	4	5	33	5	10	124	19	15	185	79	41	
Mexborough	386	213	52	38	18	115	7	5	52	7	51	226	90	45	282	173	23	
Pontefract	563	218	46	94	49	145	24	15	217	9	48	396	94	53	519	206	64	
South Kirkby	163	70	13	17	17	33	2	3	24	3	8	62	3	17	156	79	20	
Thorne	211	110	63	22	21	103	10	12	53	4	7	207	19	15	216	108	37	
<b>Area No. 4.</b>																		
<b>Barnsley</b>	426	216	48	56	34	165	4	5	57	28	37	251	33	44	406	229	39	
Batley	120	68	10	23	—	34	—	—	14	2	15	57	12	15	107	65	—	
Dinnington	185	61	15	10	6	49	3	2	39	2	20	103	8	7	171	55	8	
Liversedge	97	40	8	14	3	42	—	—	13	6	5	64	24	13	79	35	3	
Morley	114	54	20	23	5	35	—	—	26	6	27	80	20	13	101	37	5	
Normanton	106	41	10	21	4	31	2	2	34	2	16	74	7	8	99	43	6	
Penistone	33	12	12	2	—	9	—	—	10	2	5	30	1	4	29	11	—	
Pudsey	67	38	7	12	2	22	—	—	17	7	10	49	3	10	61	37	3	
Rotherham	556	224	48	33	13	226	1	2	79	11	48	349	40	24	510	207	15	
Rothwell	77	22	5	13	2	24	—	—	16	31	25	29	14	8	81	31	2	
Stocksbridge	95	41	3	8	—	19	1	—	8	—	24	33	1	6	81	30	—	
Wadley Bridge	114	53	4	10	1	20	1	—	19	2	21	47	2	7	103	43	1	
Wakefield	180	81	16	39	12	60	—	1	34	10	19	111	10	22	170	88	13	
<b>Area No. 5.</b>																		
<b>Sowerby Bridge.</b>	125	86	57	23	13	99	2	2	19	5	18	177	7	18	118	78	15	
Brighouse	50	29	6	23	8	22	2	4	7	4	10	35	3	14	52	29	12	
Huddersfield	188	125	20	69	8	65	9	3	14	11	45	93	58	31	154	120	11	
Keighley	172	81	38	45	12	94	1	—	17	6	33	145	20	32	148	76	12	
Shipley	132	48	15	33	18	59	2	3	12	6	17	82	25	31	101	50	22	
Todmorden	75	57	16	13	3	26	—	—	1	—	13	41	4	14	66	50	3	
Uppermill	37	16	6	6	—	14	1	—	10	7	6	31	4	5	38	13	—	
<b>TOTALS</b>	6067	2739	685	1007	395	2157	111	96	1226	242	631	4008	722	664	5580	2623	497	

TABLE LXXXVIII.

**LIST OF TUBERCULOSIS DISPENSARIES, SHEWING DISPENSARY ADDRESSES  
AND TIMES OF SESSIONS (Revised April, 1938).**

*County Medical Officer: T. N. V. POTTS, M.D., County Hall, Wakefield.*

*Chief Tuberculosis Officer: G. S. JOHNSTON, M.D., County Hall, Wakefield.*

Situation of Chief Dispensary or Branch.	Day and Time of Session	Sanitary Districts included in Area.	Medical Staff.
<b>AREA No. 1.</b> 54, Keighley Road, Skipton (Tel. 31).	Mondays, 10 a.m. Fridays, 10 a.m.	Silsden U., Skipton U., Skipton R. (part).	<b>Consultant Tuberculosis Officer:</b> H.E. Raeburn, M.D., B.S., D.P.H.
Whiteley Croft, Station Road, Otley, (Telephone 218).	Thursdays, 10 a.m.	Ilkley U., Otley U., Wharfedale R.	
95, Town Street, Horsforth.	Thursdays, 2 p.m.	Aireborough U., Horsforth U.	<b>Assistant Tuberculosis Officer:</b>
2, Manchester Road, Barnoldswick.	Tuesdays, 10 a.m. and 2 p.m.	Barnoldswick U., Earby U., Bowland R. (part).	E. A. Wilson, M.D., M.R.C.S., L.R.C.P.
Bowland Chambers, Clitheroe.	Last Wednesday in month, 11-30 a.m.	Bowland R. (part).	
St. John Ambulance Rooms, Settle.	First Wednesday in month, 11 a.m.	Sedburgh R., Settle R.	
<b>AREA No. 2.</b> 10, North Park Road, Harrogate (Telephone 5339)	Tuesdays & Thursdays 2 p.m. ;	Harrogate B., Knaresborough U., Nidderdale R., Wetherby R., Pateley Bridge and Ripon R. (part).	<b>Consultant Tuberculosis Officer:</b> V. Ryan, M.D., M.B., B.Ch., B.A.O., D.P.H.
44, Ousegate, Selby.	Mondays, 10 a.m.	Selby U., Selby R.	<b>Assistant Tuberculosis Officer:</b>
Child Welfare Centre, Westgate, Tadcaster.	First Wednesday in month, at 10-30 a.m.	Tadcaster R. (part).	G. A. Crowley, B.A., M.D., B.Ch., D.P.H.
4, College Road, Ripon.	First and Third Thursday in month, 10 a.m.	Ripon C., Pateley Bridge and Ripon R. (part).	
14, Hilderthorpe Terrace, Garforth.	Friday, 10-30 a.m.	Garforth U., Tadcaster R. (part)	
<b>AREA No. 3.</b> Merton House, 20, Christchurch Road, Doncaster (Telephone 3552).	Mondays, 2 and 6-30 to 7-30 p.m.	Adwick-le-Street U., Bentley U., Tickhill U., Doncaster R.	<b>Consultant Tuberculosis Officer:</b>
37, Hook Road, Goole	Mondays, 10-30 a.m.	Goole U., Goole R.	E. Ratner, M.D., M.B., B.Ch., D.P.H.
Thorne Hall, Thorne	Fridays, 10 a.m.	Thorne R.	
The Lindens, Linden Terrace, Tanshelf.	Tuesdays, 2 & 6-30 p.m.	Pontefract B., Castleford U., Featherstone U., Knottingley U., Osgoldcross R.	<b>Assistant Tuberculosis Officers:</b>
Pontefract (Telephone 88).		Conisborough U., Mexborough U., Swinton U., Wath U.	A. Leitch, M.B., Ch.B., D.P.H.
Exchange Buildings, Market Street, Mexborough	Wednesdays, 10 a.m.		T. W. Rutledge, M.B., Ch.B., D.P.H.
8, Goldthorpe Road, Goldthorpe	Thursdays, 10 a.m.	Dearne U.	
Plimsoll Street, Hemsworth	Thursdays, 10 a.m.	Hemsworth U. Hemsworth R. (part)	
The Green, South Kirkby	Fridays, 10-30 a.m.	Hemsworth R. (part)	
<b>AREA No. 4.</b> 46, Church Street, Barnsley (Telephone 2802).	Weds., 10 a.m. & 2 p.m. Fridays, 10 a.m.	Cudworth U., Darfield U., Darton U., Dodworth U., Hoyland Nether U., Royston U., Wombwell U., Worsborough U., Wakefield R. (part).	<b>Consultant Tuberculosis Officer:</b>
Wesleyan Sunday School, Penistone	1st and 3rd Thursdays in month, 2 p.m.	Penistone U., Penistone R. (part).	H. A. Crowther, M.A., M.R.C.S., L.R.C.P.
5, Almshouse Lane, Wakefield.	Tuesdays and Fridays, 2 p.m.	Horbury U., Stanley U., Wakefield R., (part), Ossett B. (part).	<b>Assistant Tuberculosis Officers:</b>
The Park Pavilion, Normanton	Tuesdays, 10 a.m.	Normanton U.	E. J. C. Groves, M.B., Ch.B.
Isolation Hospital, Rothwell	Mondays, 10 a.m.	Rothwell U.	S. P. Wilson, M.D., D.P.H.
Branch House Chambers, Bradford Rd., Batley. (Telephone 73).	Thursdays, 2 p.m.	Batley B., Ossett B. (part).	N. J. S. Nathan, M.R.C.S., L.R.C.P.
Wellington House, High Street Morley (Telephone 22).	Second Thursday in month at 6 p.m.	Morley B.	D. S. Hayes, M.R.C.S., L.R.C.P.
Old Town Hall, Knowler Hill, Liversedge	Thursdays, 10 a.m.	Spensborough U., Heckmondwike U.	
45, Richardshaw Lane, Pudsey.	Fridays, 10 a.m.	Pudsey B.	
Carnson House, Moorgate Road, Rotherham (Telephone 59).	Tuesdays, 2 p.m.	Maltby U., Rawmarsh U., Rotherham R.	
162, Lorden's Hill, Dinnington	Tuesdays, 10 a.m.	Kiveton Park R.	
Urban District Council Offices, Stocksbridge	Mondays, 2 p.m.	Stocksbridge U., Wortley R. (part)	
102, Parson Cross Rd., Wadsley Bridge.	Thursdays, 10-30 a.m.	Wortley R. (part)	
<b>AREA No. 5.</b> Greenups Terrace, Sowerby Bridge (Telephone 81221).	Tuesdays, 10 a.m. Thursdays, 2 p.m.	Elland U., Midgley U., Queensbury and Shelf U., Ripponden U., Sowerby Bridge U.	<b>Consultant Tuberculosis Officer:</b>
Masonic Hall, Todmorden.	Fridays, 2 p.m.	Todmorden B., Hebden Royd U., Todmorden R.	S. R. Wilson, M.D., M.B., Ch. B., D.P.H.
143, Skipton Road, Keighley. (Telephone 3625).	Mondays, 2 p.m., and Wednesdays, 1 p.m.	Keighley B., Denholme U., Skipton R. (part).	<b>Assistant Tuberculosis Officers:</b>
1, Peel Street, Huddersfield (Telephone 3641—Extension 8).	Tuesdays, 2 p.m. Fridays, 2 p.m.	Colne Valley U., Denby Dale U., Kirkburton U., Holmfirth U., Meltham U., Mirfield U., Penistone R. (part).	J. E. Gething, B.A., M.B., Ch.B.
Court Street, Uppermill	1st and 3rd Thursdays in month, 10 a.m.	Saddleworth U.	A. D. Rankin, M.B., Ch.B., D.P.H.
Mill House, Bradford Road, Brighouse	Fridays, 10 a.m.	Brighouse B.	
Farr Royd, Otley Road, Shipley (Telephone 1897).	Mondays, 10 a.m. and first Wednesday in month at 5-30 p.m.	Baildon U., Bingley U., Shipley U.	

TABLE LXXXIX.  
Applications for Treatment, 1937.

	Kind of Treatment Granted.				Cases referred to own Medical Attendant.	Totals.
	Sanatorium.	Hospital.	Dispensary Treatment.	Dispensary Supervision.		
New Cases ... ..	950	106	34	415	110	1,615
Old Cases reconsidered ... ..	463	50	15	759	220	1,507
Totals ...	1,413	156	46	1,174	330	3,122

TABLE XC.  
Summary of Dispensary Work, 1937.

Dispensary Area.	Number of Consultations with Practitioners.	Domiciliary visits paid by Dispensary Nurses and Health Visitors to old and new cases.	Visits paid by Consultant and Assistant Tuberculosis Officers to patients at their homes.	Attendances made by old and new patients.
Area No. 1 ... ..	883	4,451	517	3,136
Area No. 2 ... ..	525	3,443	342	2,742
Area No. 3 ... ..	2,492	13,433	638	6,854
Area No. 4 ... ..	2,503	12,385	809	8,640
Area No. 5 ... ..	1,160	6,341	1,134	7,654
Totals ... ..	7,563	40,053	3,440	29,026

TABLE XCI.  
Home Visitation by Dispensary Staff.

Year.	Visits by Tuberculosis Officers.	Visits by Dispensary Nurses.	Visits by Health Visitors.
1933	2,989	29,694	5,175
1934	3,686	30,742	5,199
1935	3,818	30,511	5,694
1936	3,627	35,121	6,060
1937	3,440	35,788	4,265

#### Tuberculosis Cases in Public Assistance and other Institutions.

During the year, 255 cases in County Institutions and local infirmaries and hospitals were seen by the Tuberculosis Officers. The following table shews the action taken under the Tuberculosis Scheme.

TABLE XCII.

Dispensary Area	No. of Cases seen by Tuberculosis Officers.		Action taken under County Council Scheme.			
	Pul.	Non.-Pul.	Institutional Treatment	Dispensary Treatment or Supervision	Referred to Own Medical Attendant	Remarks.
No. 1 (Skipton) ... ..	12	7	10	2	2	5 non-tuberculous.
No. 2 (Harrogate) ... ..	34	11	29	1	2	13 non-tuberculous.
No. 3 (Doncaster) ... ..	26	13	19	11	3	1 non-tuberculous. 2 left district. 3 died.
No. 4 (Barnsley) ... ..	56	27	29	33	10	4 non-tuberculous. 2 died. 4 not requiring treatment. 1 declined treatment.
No. 5 (Sowerby Bridge)	22	47	23	44	2	
TOTAL ...	150	105	110	91	19	

### X-Ray Examinations.

X-Ray plants are now working at seven centres in the West Riding, an additional one-valve set having been installed at the Shipley Branch Dispensary in December. There are still certain areas of the County where no convenient County X-Ray Centre is available, and arrangements are made for cases in these districts to visit private clinics, or for the X-Ray examination to be carried out at a local hospital or infirmary, as shewn:—

Oldham Royal Infirmary.	For Saddleworth and Springhead patients.
Skipton and District General Hospital.	Patients from Barnoldswick, Clitheroe, Settle, Keighley, Skipton and Otley Dispensaries.
Dr. J. A. Thomson, Harrogate.	Patients from Harrogate, Ripon and Tadcaster Dispensaries.

Dispensary patients in No. 1 area, within reasonable distance from the sanatorium, attend at Middleton for X-Ray. This is found to be a convenient arrangement for the Consultant Tuberculosis Officer, who is also Medical Superintendent. During 1937, a total of 254 dispensary patients attended for X-Ray examination at the sanatorium.

In all, during the year, a total of 5,003 examinations are recorded from the dispensary X-Ray centres, as follows:—

Barnsley	...	460	Rotherham	...	563
Batley	...	717	Sowerby Bridge	...	804
Doncaster	...	1,012	Shipley	...	4
Pontefract	...	1,443			

4,266 of the above patients were referred for examination from the dispensaries, the remainder being patients undergoing institutional treatment, etc., i.e.:—

Crookhill Hall Receiving Home	82	Staincliffe County Hospital	...	325
Eldwick Sanatorium	...	Miscellaneous	...	36
Cardigan Sanatorium	...			258

The following table gives details of 4,664 dispensary patients examined during the year. These figures include 398 cases referred to private clinics and institutions:—

TABLE XCH.

Dispensary Area.	For Diagnosis				For Treatment and Progress		TOTAL
	Pulmonary		Non-Pulmonary		Pul- monary	Non- Pul- monary	
	Pos.	Neg.	Pos.	Neg.			
Area No. 1 (Skipton ...	52	223	2	7	39	3	326
Area No. 2 (Harrogate	32	85	—	4	4	—	125
Area No. 3 (Doncaster)	261	949	15	57	492	30	1804
Area No. 4 (Barnsley)	214	902	32	93	298	86	1625
Area No. 5 (Sowerby Bridge) ...	162	341	9	30	210	32	784
	721	2500	58	191	1043	151	4664

### Domiciliary Open-Air Shelters.

There has been a steady decline in the number of applications received for the loan of open-air sleeping shelters during the year, and shelters have also been vacated upon patients obtaining better housing accommodation. During the year, one shelter was sold, and seven were condemned owing to their dilapidated condition, and were destroyed by the local Sanitary Inspectors concerned. The Sanitary Inspectors are always willing to undertake this work, and to assist in other ways, such as disinfecting shelters and equipment, and inspecting sites. The shelters are kept under the supervision of the dispensary staff and health visitors, and periodical reports upon their condition are regularly furnished to the central department. There were 89 shelters available for loan at the end of the year.

### Provision of Clothing.

During the year, 341 orders were issued under the Council's scheme for the provision of clothing, in respect of applications for assistance in necessitous cases, where the applicant was receiving sanatorium treatment as follows:—

Middleton Sanatorium ... ..	179	Crookhill Hall Receiving Home	49
Scotton Banks Sanatorium ... ..	35	Cardigan Sanatorium ... ..	22
Eldwick Sanatorium ... ..	8	Other Institutions ... ..	48

### West Riding Distress Fund.

Cases have been reported, from time to time, of persons suffering from tuberculosis, who, through financial stress, have not been able to purchase extra bedding, and have therefore been compelled to sleep with other members of the family. To enable these patients to occupy separate beds, the following articles have been purchased through the West Riding Distress Fund, and supplied on loan during the year:—59 blankets, 10 pillows, 2 bedsteads, 4 mattresses, 4 sheets and 1 quilt. Travelling expenses were paid in three necessitous cases, to enable parents to visit patients who were seriously ill in Sanatoria. Boot repairs were paid for, and a colostomy belt supplied from the fund.

### WAR PENSIONERS FOR TUBERCULOSIS.

There was an addition of four new cases of War Pensioners for tuberculosis during the year, the total on the 31st of December being 536.

The following table shows the number of War Pensioners for tuberculosis on various forms of treatment on the 31st December, 1937.

TABLE XCIV.

AREA.	Dispensary.					General Dispensary Supervision					Domiciliary.					Institutional (includes San., Hosp., and Training).					TOTALS
	Class T.B. Minus	Class T.B. Plus			Non-Pulm.	Class T.B. Minus	Class T.B. Plus			Non-Pulm.	Class T.B. Minus	Class T.B. Plus			Non-Pulm.	Class T.B. Minus	Class T.B. Plus			Non-Pulm.	
		Group 1	Group 2	Group 3			Group 1	Group 2	Group 3			Group 1	Group 2	Group 3			Group 1	Group 2	Group 3		
No. 1 (Skipton) ... ..	1	—	—	—	—	36	—	6	1	1	3	—	4	—	1	—	—	—	—	53	
" 2 (Harrogate) ... ..	—	—	—	—	—	11	—	3	—	1	3	1	3	3	1	—	—	—	1	27	
" 3 (Doncaster) ... ..	6	—	—	1	1	62	3	7	2	—	70	3	4	10	4	—	—	—	1	173	
" 4 (Barnsley) ... ..	4	—	1	—	—	86	1	3	1	3	99	2	8	3	1	—	—	1	—	214	
" 5 (Sowerby Bridge) ... ..	12	—	—	—	3	27	—	2	4	3	11	—	2	4	1	—	—	—	—	69	
Totals ... ..	23	—	1	1	5	222	4	21	8	8	186	6	21	20	8	—	—	1	1	536	

### COMBINED TREATMENT AND TRAINING.

The following table shows the admissions and discharges of all classes of patients to courses of combined treatment and training, with or without a view to ultimate settlement. At the end of the year the County had 28 colonists; 9 at Preston Hall, near Maidstone, Kent; 15 at Papworth Hall, near Cambridge; 3 at East Lancashire Tuberculosis Colony, Barrowmore Hall, Gt. Barrow, Chester, and 1 at Derwen Cripples' Training College, Oswestry. One patient removed from the settlement at Preston Hall to alternative employment, and one returned to the West Riding from Papworth, his family having obtained employment here.

TABLE XCV.

Colony.	No. under training on 1.1.37.	No. admitted during 1937.	No. discharged during 1937.	No. remaining under training on 31.12.37.	
Papworth Village Settlement, near Cambridge ... ..	1	—	—	1	For training only. Qualifying for Village Settlement.
British Legion Village, Preston Hall, Aylesford, Kent ... ..	12	6	8	10	
East Lancs. Tuberculosis Colony, Gt. Barrow, Chester ... ..	5	1	6	—	
Burrow Hill San. Colony, Frimley, Surrey ... ..	—	1	—	1	Do.
Derwen Cripples' Training College, Oswestry ... ..	4	4	4	4	For training only.
Stanmore Cripples' Training College, Stanmore, Middlesex ... ..	4	2	—	6	
	—	1	—	1	Do.

Of the 18 cases shewn under the heading "discharged," one completed a course, 4 cases did not complete courses, having been prematurely discharged for various reasons, 2 were discharged at own request, 5 were absorbed into the settlement at Preston Hall, and 6 at Papworth.

### ARTIFICIAL SUNLIGHT TREATMENT.

Dispensary patients in need of artificial sunlight treatment have been sent to the following private and voluntary clinics and during the year 136 patients were referred to the dispensaries for this treatment.

Clayton Hospital, Wakefield.  
Huddersfield Royal Infirmary.  
Leeds General Infirmary.  
Sheffield Royal Infirmary.  
Pontefract General Infirmary

Dr. J. Grieve, Burnley.  
Middleton Sanatorium.  
Manchester and Salford Hospital for  
Skin diseases (daily clinic).  
Dr. G. W. Wigg, Doncaster.

The following table indicates the work done in respect of different dispensary areas and the results noted at the end of the year.

TABLE XCVI.

Dispensary Area	Type of Case.	No Treated	Total No. of treatments	Result of treatment			
				Quiescent and apparently well.	Much improved	Improved	No change
No. 1 (Skipton)	Adenitis (Cervical and Inguinal)	8	177	1	4	2	1
	Lupus	6	246	3	1	2	—
	Other Conditions	3	234	—	1	—	2
No. 2 (Harrogate)	Adenitis (Cervical and Inguinal)	—	—	—	—	—	—
	Lupus	11	889	1	4	—	2
	Other Conditions	1	50	1	—	—	—
No. 3 (Doncaster)	Adenitis (Cervical and Inguinal)	15	2006	10	4	1	—
	Lupus	29	3518	7	10	9	3
	Other Conditions	6	485	1	2	3	—
No. 4 (Barnsley)	Adenitis (Cervical and Inguinal)	15	568	4	5	3	3
	Lupus	24	1834	4	10	7	3
	Other Conditions	4	369	2	1	1	—
No. 5 (Sowerby Bridge)	Adenitis (Cervical and Inguinal)	8	395	3	1	4	—
	Lupus	4	470	—	4	—	—
	Other Conditions	2	44	1	—	1	—

### SURGICAL APPLIANCES.

The following Surgical Appliances were supplied to patients receiving dispensary or domiciliary treatment during the year, namely:—

Surgical Boots	...	9
Spinal and Abdominal Supports	...	3
Hip Splint	...	1
Iron Pattens	...	2
Blocked Leather Knee Support	...	1
Blocked Leather Elbow Support	...	1
Artificial Limbs	...	2
Artificial Nose	...	1
Alterations, Repairs and Renewal Parts	...	15

The cost of these appliances was £77 8s. 3d., of which a sum of £10 2s. 6d. was subscribed by or on behalf of six patients.

In addition to those enumerated, some 30 surgical appliances of various types representing a total cost to the County Council of £33 19s. 8d. were supplied during the period of the report to patients actually undergoing residential institutional treatment for surgical tuberculosis.

Contributions towards the cost of surgical appliances are required where patients are not receiving institutional treatment and where the circumstances of the family, as determined by the approved scale of income, permit of this. In the case of patients undergoing Hospital or other residential treatment for surgical tuberculosis, appliances are prescribed by and fitted under the supervision of the Medical Superintendent, and the full cost of these is borne by the County Council.

### EXTRA NOURISHMENT.

The system of free grants of nourishment to tuberculous persons, whose circumstances may be described as coming within the poverty line, was an integral part of the scheme originally laid down in 1912, and has been retained ever since. One of the chief measures in the treatment of tuberculosis is the maintenance of a good bodily resistance; while the absence of a proper and sufficient diet means a nullification of treatment given by the dispensary and sanatorium organisations.

It is estimated that the proportion of cases on the dispensary registers whose income has to be supplemented by public funds is a high one, and the number of tuberculous persons known to the dispensary staffs to obtain relief by Public Assistance funds alone exceeds 25 per cent. of the total on the registers. This does not take into account the cases relying upon monetary benefits made available during unemployment.

During 1936, an arrangement of co-operation was made with the Unemployment Assistance Board whereby Area Officers refer any alleged, suspected, or confirmed cases of tuberculosis in the family of an applicant for Unemployment Assistance allowances to the Public Health Department. As a result of this collaboration, the additional dietary has been provided by the Unemployment Assistance Board and the arrangement has been useful in preventing the duplication of grants by the two Authorities.

During 1937, the average number of patients in receipt of extra nourishment from the County Council was 431. 756 patients undergoing dispensary or domiciliary treatment received grants in the form of eggs and milk during the year at a total cost of £3,131 9s. 7d.

#### DENTAL TREATMENT.

Approval was given for the provision of dental treatment in 167 necessitous cases during the year, at an estimated cost of £204 12s. 2d. Approved Societies and parents contributed £39 18s. 10d. towards the cost of treatment, and the balance, £164 13s. 4d., was paid by the County Council. Particulars of the treatment approved are shown below:—

TABLE XCVII.

Institution or Dispensary Area.	No. of Cases	Extractions	Fillings	Scalings	Full Upper and Lower Dentures	Upper Denture	Lower Denture	Part Upper Denture	Part Lower Denture	Repairs etc.	Re-makes
Middleton Sanatorium ... ..	38	230	14	—	8	1	1	1	—	1	1
Cardigan Sanatorium ... ..	13	55	2	1	—	1	—	1	1	—	1
Crookhill Hall Receiving Home ... ..	12	43	—	—	4	1	1	—	—	—	5
Westmorland Sanatorium ... ..	1	—	—	—	—	—	—	—	—	—	1
Scotton Banks Sanatorium ... ..	26	61	—	—	1	1	1	—	—	—	2
Papworth Village Settlement ... ..	5	33	8	—	1	—	—	1	—	—	—
East Anglian Sanatorium ... ..	6	20	—	—	—	—	—	—	—	—	—
Eldwick Sanatorium ... ..	62	57	10	—	—	—	—	—	—	—	—
Dean Head Sanatorium ... ..	1	16	—	—	—	—	—	—	—	—	—
British Legion Village ... ..	1	18	—	—	—	—	—	—	—	—	—
Derwen Cripples' Training College ... ..	1	—	—	—	—	1	—	—	—	—	—
No. 4. Barnsley Area ... ..	1	—	—	—	1	—	—	—	—	—	—
Totals ... ..	167	533	34	1	15	5	3	3	1	1	10

TABLE XCVIII.

#### TABLE SHOWING ENVIRONMENTAL AND SOCIAL CONDITION OF PATIENTS, DECEMBER, 1937.

	Infectious Pulmonary		Non-infectious Pulmonary		Non-Pulmonary		Total
	Under 15	15 and Over	Under 15	15 and Over	Under 15	15 and Over	
No. of cases from houses where more than one family reside	1	46	15	119	30	36	247
No. of cases where patient sleeps in separate room ... ..	12	875	205	919	413	473	2,897
No. of cases where patient sleeps in separate bed but not separate room ... ..	4	261	162	447	449	260	1,583
No. of cases where patient sleeps "two in a bed" ... ..	1	467	183	1,928	376	524	3,489
No. of cases where patient sleeps "more than two in a bed" ... ..	1	4	15	75	47	28	170

### TUBERCULOSIS CARE COMMITTEES.

Valuable work continues to be done by voluntary committees, in the six centres mentioned in the table set out below, and patients from distressed families, to the number of 310, have been helped in various ways, and assistance towards the carrying out of the treatment recommended has been given, which could not be made available through ordinary official channels. During the year, 20 children have been boarded out, and thus removed at a critical time from conditions which, in an infected household, may be described as dangerous.

The thanks of the Tuberculosis Committee are due to the many voluntary workers engaged in this scheme, which, it is hoped, may be extended in certain areas in the near future.

The County Council have agreed to continue to supplement local efforts in the raising of funds for this work, and the following table shows the grants made in respect of the assistance given during 1937 :—

TABLE XCIX.

Care Committee	Number of cases in which grants have been made			Total Expenditure incurred in 1937.	Grants made by County Council.
	Food	Clothing	Other		
Barnsley ... ..	23	2	4	£ s. d. 26 19 10	£ s. d. 18 0 0
Castleford ... ..	75	6	3	214 9 0	131 0 0
Doncaster ... ..	29	8	5	36 6 6	22 0 0
Huddersfield ... ..	29	—	9	28 14 6	18 0 0
Aberford ... ..	4	—	—	4 17 8	3 0 0
Osgoldersoss ... ..	89	5	19	175 13 2	108 0 0
	249	21	40	487 0 8	300 0 0

### INSTITUTIONAL TREATMENT.

During the year 626 beds were available for the treatment of Pulmonary Tuberculosis and 182 beds for other forms of the disease occurring in West Riding patients. These figures compare with 586 pulmonary and 181 non-pulmonary beds available in 1936.

The allocation of beds was as follows :—

	In the West Riding Area	Outside the West Riding
In institutions controlled by the County Council ... ..	629	—
In other institutions ... ..	98	81
Totals ... ..	727	81

It will be observed from Table CI that the majority of non-pulmonary cases are treated in institutions which are not controlled by the County Council and that the beds in institutions outside the West Riding are required chiefly for the treatment of such cases.

During the year 159 beds were relinquished as a result of the opening of the new sanatorium at Scotton Banks. This was effected principally by the total withdrawal of patients from :—

Dean Head Sanatorium ... ..	60 beds for pulmonary women.
Morton Banks Sanatorium ... ..	53 beds for pulmonary women and children.

In addition accommodation was reduced at other miscellaneous institutions.

In April, 1937, the first patients were admitted to Scotton Banks and towards the end of the year the full complement of 200 beds had been occupied.

250 beds at Middleton Sanatorium and 200 beds at Scotton Banks Sanatorium are reserved for the treatment of pulmonary tuberculosis. As both these institutions are equipped with modern operating theatre and X-Ray unit, treatment by artificial pneumothorax and chest surgery is available as well as the ordinary sanatorium routine, i.e., fresh air and graduated rest and exercise. Cases for diagnosis are also admitted.

At Middleton Sanatorium also, 50 beds are reserved for the treatment of tuberculous orthopaedic conditions (25 boys and 25 men).

Consulting surgeons and physicians are available at all tuberculous institutions under the West Riding Tuberculosis Scheme for the following :—

- Chest Surgery.
- Orthopaedic Surgery.
- Ear, Nose and Throat conditions.
- Skin Diseases.
- Diseases of the Eye.

During the year, visits of inspection by members of the Tuberculosis Sub-Committee were made on two occasions as under :—

September ... ..	Westmorland Sanatorium, Meathop.
November ... ..	East Anglian Sanatorium, Nayland.

TABLE C.

## Institutional Accommodation Available for West Riding Cases—December, 1937.

	No. of Beds available					
	For Pulmonary Cases			For Non-Pulmonary Cases		
	Men	Women	Children	Men	Women	Children
<b>Controlled by County Council (Public Health Committee).</b>						
Middleton-in-Wharfedale Sanatorium ... ..	250	—	—	25	—	25
Scotton Banks Sanatorium, Knaresborough ... ..	—	100	100	—	—	—
Cardigan Sanatorium, near Wakefield ... ..	—	50	—	—	—	—
Eldwick Sanatorium, near Bingley ... ..	—	—	39	—	—	—
Crookhill Hall Receiving Home ... ..	40	—	—	—	—	—
<b>Not Controlled by the County Council.</b>						
Oakwood Hall Sanatorium, Rotherham ... ..	1	17	4	—	5	1
East Anglian Sanatorium, Nayland ... ..	—	—	6	—	—	2
Wensleydale Sanatorium, Aysgarth ... ..	—	—	4	1	—	3
Westmorland Sanatorium, Meathop ... ..	2	4	—	—	—	—
Marguerite Home, Thorparch ... ..	—	—	—	—	—	31
Leasowe Hospital, Cheshire ... ..	—	—	—	—	3	6
King Edward VII Hospital, Rivelin Valley ... ..	—	—	—	—	—	35
Shropshire Orthopaedic Hospital, Oswestry ... ..	—	—	—	12	14	—
Yorkshire Children's Orthopaedic Hospital, Kirkby- moorside ... ..	—	—	—	—	—	7
Royal National Orthopaedic Hospital, Stanmore, Middlesex ... ..	—	—	—	—	—	4
Miscellaneous Institutions ... ..	8	1	—	1	1	6
	301	172	153	39	23	120

TABLE CI.

## Institutional Treatment during 1937.

Institution	Patients in residence on 1.1.37	Admissions 1937			Total number of Admissions	Discharges 1937			Total number of Discharges	Patients in residence on 31.12.37
		Men	Women	Children		Men	Women	Children		
<b>Pulmonary Institutions.</b>										
Middleton-in-Wharfedale Sanatorium ... ..	291	471	—	28	499	486	—	27	513	277
Scotton Banks Sanatorium ... ..	—	—	208	153	361	—	106	81	187	174
Cardigan Sanatorium ... ..	45	—	135	6	141	—	124	12	136	50
Eldwick Sanatorium ... ..	39	—	—	50	50	—	—	58	58	31
Crookhill Hall Receiving Home ... ..	40	74	—	—	74	75	—	—	75	39
Dean Head Sanatorium ... ..	47	—	22	1	23	—	69	1	70	—
Morton Banks Sanatorium ... ..	41	—	4	2	6	—	45	2	47	—
Westmorland Sanatorium ... ..	3	4	10	—	14	2	9	—	11	6
Oakwood Hall Sanatorium ... ..	31	4	50	26	80	3	42	38	83	28
Stannington Sanatorium ... ..	5	—	—	2	2	—	—	6	6	1
East Anglian Sanatorium ... ..	19	—	—	1	1	—	—	12	12	8
Wensleydale Sanatorium ... ..	11	1	—	7	8	2	2	7	11	8
Stanhope Sanatorium ... ..	4	—	—	—	—	—	—	4	4	—
Barrowmore Hall ... ..	—	15	—	—	15	14	—	—	14	1
King George's Sanatorium ... ..	—	1	—	—	1	1	—	—	1	—
Papworth Sanatorium ... ..	—	15	1	—	16	13	—	—	13	3
Preston Hall Sanatorium ... ..	—	20	—	—	20	16	—	—	16	4
<b>Non-Pulmonary Institutions.</b>										
Yorkshire Children's Orthopaedic Hospital ... ..	6	—	—	7	7	—	—	6	6	7
Marguerite Home ... ..	28	—	—	12	12	—	—	9	9	31
King Edward VII Hospital ... ..	39	—	—	14	14	—	—	18	18	35
Shropshire Orthopaedic Hospital ... ..	24	39	30	—	69	39	28	—	67	26
Royal National Orthopaedic Hospital ... ..	6	—	—	3	3	—	—	5	5	4
Leasowe ... ..	11	—	5	3	8	—	6	4	10	9
Jenny Lind Hospital ... ..	—	—	—	1	1	—	—	1	1	—
Melton Lodge Hospital ... ..	—	—	—	1	1	—	—	—	—	1
St. Vincents Hospital ... ..	1	—	—	—	—	—	—	—	—	1
Alton Hospital, Hants. ... ..	2	—	—	—	—	—	—	1	1	1
St. Georges Hospital, S.W.1. ... ..	1	—	—	—	—	—	—	1	1	—
St. Nicholas Hospital ... ..	1	—	—	—	—	—	—	1	1	—
Heswall Hospital ... ..	—	—	—	1	1	—	—	—	—	1
Leeds General Infirmary ... ..	3	26	42	36	104	25	43	37	105	2
Huddersfield Royal Infirmary ... ..	—	8	13	10	31	8	13	10	31	—
Bradford Royal Infirmary ... ..	—	3	3	3	9	3	3	3	9	—
Doncaster Royal Infirmary ... ..	—	3	2	1	6	3	2	1	6	—
Harrogate General Hospital ... ..	—	—	—	1	1	—	—	—	—	1
Rotherham Hospital ... ..	—	—	—	1	1	—	—	1	1	—
Manchester and Salford Hospital ... ..	—	1	1	—	2	—	1	—	1	1
York County Hospital ... ..	1	—	—	1	1	1	—	1	2	—
Sheffield Royal Infirmary ... ..	—	—	1	—	1	—	1	—	1	—
St. James Hospital ... ..	—	—	1	—	1	—	1	—	1	—
Training Centres and Village Settlements ... ..	26	8	5	1	14	5	1	1	7	33
	725	693	533	372	1598	696	496	348	1540	783

TABLE CII.

**Immediate Results of Treatment of Patients Discharged from Residential Institutions during the year 1937.**

**(a) Pulmonary Cases.**

Classification on admission*	Condition at time of Discharge.	Duration of Treatment in the Institution.												Total.
		Under 3 months			3-6 months			6-12 months			More than 12 months			
		M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	
Class T.B. Minus.	Quiescent ...	25	22	5	22	33	17	12	9	25	7	3	5	185
	Not Quiescent ...	29	14	4	23	6	3	12	4	7	3	3	2	110
	Died in Institution	2	1	—	1	1	—	1	—	—	—	—	—	6
Class T.B. + Group I.	Quiescent ...	4	3	—	7	5	—	—	1	—	1	—	1	22
	Not Quiescent ...	5	4	1	1	4	—	2	—	—	2	—	—	19
	Died in Institution	1	—	—	—	—	—	—	—	—	1	—	—	2
Class T.B. + Group II.	Quiescent ...	9	—	—	7	8	1	6	8	—	3	2	—	44
	Not Quiescent ...	28	23	—	42	30	1	35	8	1	23	3	1	195
	Died in Institution	6	4	—	3	1	—	8	1	—	6	1	1	31
Class T.B. + Group III.	Quiescent ...	—	—	—	1	1	—	—	1	—	—	—	—	3
	Not Quiescent ...	17	19	1	11	29	1	25	10	1	9	4	1	128
	Died in Institution	17	12	1	8	9	—	3	5	1	8	1	—	65
Totals ...		143	102	12	126	127	23	104	47	35	63	17	11	810

**(b) Non-Pulmonary Cases.**

Classification on admission*	Condition at time of discharge.	Duration of Treatment in the Institution.												Total.
		Under 3 months			3-6 months			6-12 months			More than 12 months			
		M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	
Bones and Joints.	Quiescent ...	7	5	3	6	6	5	5	—	6	9	8	24	84
	Not Quiescent ...	2	8	8	2	1	2	3	2	2	3	2	3	38
	Died in Institution	—	1	1	—	1	1	1	—	—	4	—	—	9
Abdominal.	Quiescent ...	—	—	3	3	3	11	2	1	16	2	—	2	43
	Not Quiescent ...	2	2	3	2	4	4	4	1	2	1	—	—	25
	Died in Institution	—	1	—	—	—	—	—	—	—	—	—	—	1
Other organs.	Quiescent ...	—	4	1	—	—	2	—	—	1	1	—	2	11
	Not Quiescent ...	3	5	—	1	—	1	1	—	—	—	—	—	11
	Died in Institution	1	—	—	—	—	—	1	—	—	—	—	1	3
Peripheral Glands.	Quiescent ...	—	—	3	—	1	8	—	—	10	—	—	3	25
	Not Quiescent ...	—	3	2	—	—	1	2	—	2	—	—	—	10
	Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals ...		15	29	24	14	16	35	19	4	39	20	10	35	260

Patients whose stay in residential institutions has not exceeded 28 days are not included in these tables.

\* Classification according to Memo. 37/T.

**(c) Observation Cases.**

Diagnosis on discharge from observation.	For Pulmonary Tuberculosis.						For Non-Pulmonary Tuberculosis.						Totals.		
	Stay under 4 weeks.			Stay over 4 weeks.			Stay under 4 weeks.			Stay over 4 weeks.					
	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.
Tuberculous ...	7	2	2	9	6	5	—	—	1	4	1	2	20	9	10
Non-tuberculous ...	10	7	3	45	12	58	—	—	2	1	1	15	56	20	78
Doubtful ...	1	3	3	—	—	—	—	—	—	1	—	—	2	3	3
Totals ...	18	12	8	54	18	63	—	—	3	6	2	17	78	32	91

### SANATORIUM TREATMENT—IMMEDIATE RESULTS.

During 1937, 269 patients, 160 pulmonary and 109 non-pulmonary, were discharged, or took their own discharge after a period of institutional residence which did not exceed 28 days. This represents a percentage of 17.5 of the total number of discharges. The results of treatment in these cases are not included in the details given below. 42 (or 26.3%) of the pulmonary cases, and 5 (or 4.6%) of the non-pulmonary cases died within this period.

There has been a further increase in the proportion of positive cases of pulmonary tuberculosis admitted for treatment. In the years 1925-30 this proportion was 21.0% and had increased to 58.1% in the year 1936. Last year there was a further increase to 62.5%. This increase in the admission of "positive" sputum cases is due to a large extent to the increased number of bacteriological examinations of sputum which have taken place during recent years; or in other words in previous years many cases were admitted to sanatorium as "T.B. negative" whereas if there had been adequate facilities for bacteriological examination they would have been classified "T.B. positive."

#### (a) Pulmonary Cases. Adults.

729 adult patients (436 male and 293 female) suffering from pulmonary tuberculosis were discharged from institutional treatment during the year. Of these 233 were of the T.B. Minus group, and 496 were patients with positive sputum. An analysis of the immediate results of treatment is given on page 159, but further details are given below to indicate the proportion of cases discharged quiescent or not quiescent.

TABLE CHII.

	Total cases treated (adults)	Discharged quiescent		Discharged not quiescent		Died in Institution	
		No.	%	No.	%	No.	%
Males (T.B. -)	137	66	48.2	67	48.9	4	2.9
Females (T.B. -)	96	67	69.8	27	28.1	2	2.1
Males (T.B. +)	299	38	12.7	200	66.9	61	20.4
Females (T.B. +)	197	29	14.7	134	68.0	34	17.3

Of 729 cases dealt with, 498 (or 68.4%) were discharged, or took their own discharge after a period of treatment of less than six months. 179 (or 35.9%) of these were of the T.B. Minus group, and 319 (or 64.1%) were cases with a positive sputum.

Of the deaths which occurred in the institutions 95 (or 91.3%) were cases with a positive sputum.

#### (b) Children.—Pulmonary.

The number of children suffering from pulmonary disease and discharged from institutional treatment was 81, and 13 of these (or 16.0%) were positive cases.

#### (c) Non-Pulmonary Tuberculosis.

260 cases of the non-pulmonary form of tuberculosis were discharged from in-patient treatment during the year; 127 adults and 133 children.

The immediate results of treatment show a quiescent condition on discharge in the case of 49.6% of the adults and 75.2% of the children.

### MIDDLETON-IN-WHARFEDALE SANATORIUM, ILKLEY.

Dr. H. E. Raeburn, Medical Superintendent, reports:—

#### Buildings and Equipment.

No changes have been made in the buildings during the year. A new over-couch tube stand has been installed in the X-Ray department, and is very useful when X-Raying orthopaedic cases. A new Alpine Sun-Lamp has been installed in the Light Department.

#### Staff.

At times, some difficulty has been experienced in obtaining nursing and domestic staff, but this has been no greater than in other hospitals, and on the whole, I think Middleton has been very fortunate in this respect. The health of the staff has been excellent. During the influenza epidemic in the early part of the year, only three nursing and three domestic staff were off-duty with influenza, and these were very mild attacks.

The small swimming pool in the Nurses' garden has been very popular, and it is hoped to provide one for the maids in the near future. In a rather isolated place such as this it is only by providing facilities for recreation that there can be a healthy and contented staff and on this the efficiency of the Sanatorium depends.

Eleven Nurses passed the preliminary, and twelve the final examination of the Tuberculosis Association. One Sister gained honours in this examination.

**Statistics.**

The number of cases admitted during the year was 499, classified as follows:—

**Pulmonary.**

T.B. Negative	...	...	...	...	...	...	166
T.B. Positive—Group I	...	...	...	...	...	...	26
Group II	...	...	...	...	...	...	95
Group III	...	...	...	...	...	...	70
Total Pulmonary	...	...	...	...	...	...	357

The percentage of sputum positive cases was 53.2 as compared with 47.7 in 1936, and 36.2 in 1935.

**Non-Pulmonary.**

Bones	...	...	...	...	...	...	21
Abdomen	...	...	...	...	...	...	26
Glands	...	...	...	...	...	...	4
Skin	...	...	...	...	...	...	1
Other organs	...	...	...	...	...	...	1
Total non-pulmonary	...	...	...	...	...	...	53
Observation	...	...	...	...	...	...	89

Of the observation cases, 16 were diagnosed as suffering from tuberculosis.

The percentage of bed patients was 66.58. The corresponding figure for 1936 was 67.37, and for 1935 was 62.55.

**Immediate Results of Treatment.**

The following table shows the immediate results of treatment of patients discharged with tuberculosis in 1937. In 54 cases the period of residence was less than 29 days; the results of treatment in these are not included in the table.

TABLE CIV.

Classification on admission to the Institution	Condition at time of Discharge	Duration of Residence.								Totals
		Under 3 months		3 to 6 months		6 to 12 months		Over 12 months		
		M.	B.	M.	B.	M.	B.	M.	B.	
PULMONARY.										
Class	Quiescent ... ..	18	—	12	—	11	—	6	—	47
T.B.	Not Quiescent ... ..	18	—	19	—	9	—	3	—	50
Minus	Died ... ..	2	—	1	—	1	—	—	—	4
Class	Quiescent ... ..	3	—	4	—	—	—	1	—	8
T.B. +	Not Quiescent ... ..	4	—	1	—	2	—	2	—	9
Group I.	Died ... ..	—	—	—	—	—	—	1	—	1
Class	Quiescent ... ..	3	—	5	—	6	—	3	—	17
T.B. +	Not Quiescent ... ..	16	—	28	—	31	—	20	—	95
Group II.	Died ... ..	3	—	3	—	5	—	6	—	17
Class	Quiescent ... ..	—	—	1	—	—	—	—	—	1
T.B. +	Not Quiescent ... ..	10	—	6	—	16	—	6	—	38
Group III.	Died ... ..	16	—	6	—	3	—	8	—	33
NON-PULMONARY.										
Bones and Joints	Quiescent ... ..	2	—	—	—	3	2	5	2	14
	Not Quiescent ... ..	1	—	1	1	2	1	3	1	10
	Died ... ..	—	—	—	—	1	—	2	—	3
Abdomen	Quiescent ... ..	—	—	3	1	2	1	2	—	9
	Not Quiescent ... ..	—	—	2	1	4	1	1	—	9
	Died ... ..	—	—	—	—	—	—	—	—	—
Other Organs	Quiescent ... ..	—	—	—	—	—	1	1	1	3
	Not Quiescent ... ..	1	—	1	—	1	—	—	—	3
	Died ... ..	1	—	—	—	1	—	—	—	2
Peripheral Glands	Quiescent ... ..	—	—	—	1	2	1	—	—	4
	Not Quiescent ... ..	—	—	—	—	—	—	—	—	—
	Died ... ..	—	—	—	—	—	—	—	—	—
	Total ...	98	—	93	4	100	7	70	5	377

**Treatment of Pulmonary Cases.** The treatment of the pulmonary cases consisted of the usual sanatorium routine of rest and graduated exercise, assisted where necessary by the various forms of collapse therapy, and by injection of gold salts and calcium.

**Thoracoplasty.** Four cases had a partial or complete thoracoplasty. Two became quiescent, and the sputum changed from positive to negative. Two require further operations.

**Phrenic Paralysis.** Ten cases had permanent or temporary phrenic paralysis. In one case this was done for repeated hæmoptysis, which it was successful in stopping, although there was no improvement in the patient's general condition. In three cases it was done when the lesion in the lung was quiescent, with a view to preventing a relapse. In two cases it was done for apical cavities; one showed improvement; the other showed no change, and subsequently had a thoracoplasty. In one case it was to supplement artificial pneumothorax treatment. In the remaining three cases, it was done for patients where artificial pneumothorax had failed, and who were not quite suitable for thoracoplasty, and in these, there was no material improvement.

**Artificial Pneumothorax.** Artificial pneumothorax was induced in 29 cases. It was attempted in 13 others, but failed owing to pleural adhesions. At the end of 1937, 24 cases were having artificial pneumothorax treatment. Of these, 17 were induced in 1937, 6 in 1936, and 1 in 1935. 36 patients were discharged who had had artificial pneumothorax, the results being:—

Quiescent	...	...	...	4
Improved	...	...	...	15
Not improved	...	...	...	6
Died	...	...	...	11

In four cases, the sputum changed from positive to negative.

835 refills were given, and 80 aspirations and air-replacements done. In addition, 83 refills were given to out-patients attending at Middleton.

**Gold.** 47 patients received gold treatment during 1937. 41 commenced in 1937, and 6 commenced in 1936. 13 patients were continuing gold at the end of 1937. Of those discharged, the results were:—

Quiescent	...	...	...	2
Improved	...	...	...	17
Not improved	...	...	...	8
Died	...	...	...	6

In two cases the sputum changed from positive to negative.

745 injections were given during the year.

**Calcium.** 48 cases received calcium treatment during the year. 45 commenced in 1937, and 3 continued from 1936. 3 patients were continuing treatment at the end of 1937. Of those discharged, the results were:—

Quiescent	...	...	...	3	(sputum changed from positive to negative).
Improved	...	...	...	18	
Not improved	...	...	...	5	
Died	...	...	...	5	

942 injections of calcium were given during the year.

Dr. Hill, the Senior Medical Officer, is at present observing the effects of calcium on the course of tuberculosis. He finds that the amount of calcium in the blood is increased when calcium is given in combination with parathyroid extract, and that this effect is produced whether calcium is given by mouth or by injection. The number of cases treated so far is too small to give any decision as to the effect of calcium on the course of the disease, but it may be stated now that two cases certainly did better than one would expect, and two more responded well to the first course of calcium, but gave no response to the second course.

#### **Treatment of Non-Pulmonary Cases.**

The treatment of the non-pulmonary cases varied with the site of the disease. Rest and sunlight (artificial and natural) formed the basis of the treatment, assisted by splints and plasters in the orthopaedic cases, and in the renal cases, by injections of tuberculin.

A certain number of the cases received operative treatment. Mr. R. Broomhead, the Consulting Orthopaedic Surgeon visited the Sanatorium 12 times during the year. He had 38 consultations, and performed 14 operations. Of these, three were fusions of the spine, and one of the hip, and all made excellent recoveries. Another patient with old-standing hip disease and severe deformity, had four operations. He has made an excellent recovery, and is now able to get about with much greater ease than before.

**Massage.** A temporary masseuse was appointed at the end of July, and attended regularly to the end of the year. 20 patients had massage treatment.

**Splints.** All the orthopaedic cases, whether receiving operative treatment or not, required some form of splint, and the following were made on the premises by the splint-maker:—

Spinal and hip frames	...	19
Spinal carriages	...	3
Spinal braces	...	8
Splints and crutches (various)	...	54

**Tuberculin.** Tuberculin was used in 12 cases of genito-urinary tuberculosis, and one of cervical glands. 12 of these commenced in 1937 and one in 1936. Of those discharged, the results were:—

Quiescent	...	1
Improved	...	4
Died	...	1

305 injections were given during the year.

**Surgery.** The following operations were performed at Middleton during the year:—

Thoracoplasty (4 cases)	...	8	Sequestrectomy—femur	...	2
Phrenic avulsion	...	5	Sequestrectomy—humerus	...	2
Phrenic crush	...	5	Tenotomy	...	1
Adhesiotomy	...	4	Excision of glands of neck	...	2
Bronchoscopy	...	4	Cholecystotomy	...	1
Hibbs spinal fusion	...	3	Laparotomy	...	1
Laminectomy	...	1	Orchidectomy	...	1
Costo-Transversectomy	...	1	Catheterization of Stricture	...	1
Arthrodesis of the hip	...	1	Cystoscopy	...	2
Sacro-iliac fixation	...	1	Abscess of leg	...	1
Osteotomy	...	3	Septic fingers	...	6

The orthopaedic operations were done by Mr. Broomhead, and the general and thoracic operations were done by the Medical Superintendent.

Two patients were transferred to Leeds General Infirmary, and operated on by Mr. Moir.

**Radiography.** The number of films taken during the year was:—

In-patients	...	2,430
Out-patients	...	254
Staff	...	65
		<hr/> 2,749 <hr/>

These include 35 Barium Meals, and 8 Lipiodol examinations.

**Ultra-Violet Light.** Light treatment was given in the following cases:—

	Out-patients.	In-patients.
Bones	1	20
Glands	4	7
Abdomen	2	31
Renal	—	3
Skin	1	4
Other organs	—	2
	<hr/> 8 <hr/>	<hr/> 67 <hr/>

The results were:—Improved, 73; No change, 2.

#### Consultations.

**Eyes.** Dr. C. G. Kay Sharp, the eye specialist, visited the Sanatorium during the year, and had four consultations.

Two patients were sent to Leeds General Infirmary, and were seen by the eye specialist, Mr. Foster.

**Skin.** Dr. John T. Ingram, the consultant dermatologist also visited the Sanatorium, and saw five patients.

**Dental Treatment.** Mr. Thornton, the local dentist attends when required. He treated 84 patients during the year.

**Pathological Laboratory.** All the routine work was carried out by Mr. Goodacre, the Laboratory Technician.

The total number of specimens examined in the Laboratory was 4,553.

**Bacteriology.** Examinations of:—

Sputa ... ..	3,647
Swabs from eyes, ears, nose or throat for <i>B. Diphtheriæ</i> or other bacteria ...	209 (4 contained <i>B. Diphtheriæ</i> ).
Urine ... ..	143
Blood for culture ... ..	5
Pleural effusions ... ..	53
Fæces ... ..	66

## Blood for agglutination tests.

<i>B. Abortus</i> ... ..	20 (8 were positive).
<i>B. Typhosus</i> ... ..	9 (3 were positive). (due to previous inoculation).

## From the Sanatorium farm—Agglutination tests.

Cows blood with <i>B. Abortus</i>	18 (all positive).
Cows milk with <i>B. Abortus</i>	6 (nil positive).

348 specimens were cultured on Lowenstein-Jensen or Besredkas mediums for the presence of *B. Tuberculosis*, which was found in 61 cases. Of the 61 positive cultures, 26 cases were microscopically negative both previous to, and on admission; the remaining 35 cases had been found positive at some date previous to admission, but microscopically negative on admission.

Water from the Nurses swimming pool was examined regularly, and at no time was any dangerous contamination found. The water was treated with ammonia and chlorine.

During the year, the bodies of three fowls from the Sanatorium farm were brought to the laboratory, and in two cases, the cause of death was found to be due to Avian Tuberculosis.

All the media used were prepared in the laboratory.

**Hæmatology.** 169 specimens of blood were taken for the estimation of the sedimentation rate of the Red Blood Corpuscles. Of these specimens, 142 were taken for complete investigation; that is, enumeration of the Red and White Corpuscles and Von Bonsdorff Count of Neutrophils; estimation of Hæmoglobin and Colour-Index; and from these results, the calculation of Houghtons Index. This investigation is carried out in all cases before collapse therapy is undertaken.

**Bio-Chemistry.**

Estimation of Blood Urea ...	27
Estimation of Blood Sugar ...	10
Estimation of Blood Calcium	16
Estimation of Urinary Urea	14
Fractional Test Meals ...	11

**Pathology.** During the latter months, when the necessary equipment had been received, sections were cut from 30 specimens taken from post mortem examinations. Also, during the year, interesting specimens taken at post-mortems and operations have been preserved, the object being to form a museum.

On several occasions, Nurses were given a short talk on a few of the routine laboratory methods, and were instructed in the use of apparatus; for example, the blood counting chamber, determination of the sedimentation rate of Red Blood Corpuscles, and the staining of slides for *B. Tuberculosis*.

**Post-Mortems.** During the year, 30 post-mortem examinations were done, 12 being at the request of the West Riding Coroner.

**Occupational Therapy.** The average number of patients attending daily for instruction was 21. In addition, patients were visited on the wards.

The work done consists of Carpentry, Rug and Raffia work, Weaving, Fancy leather work, Pewter work, Book-binding and Cobbling.

During the year, 693 pairs of boots have been repaired, 271 pairs for necessitous cases, and 422 pairs were paid for by staff and patients.

181 leather purses have been made. One patient has made, since 1932, either at home or at the Sanatorium, 1,500 articles.

**Library.** There are approximately 3,142 books in the library, and the number of loans to patients during the year was 4,807.

**Entertainments.** Talking pictures were shown every Wednesday night during the winter, and concerts were given fortnightly.

**Chapel.** Services have been held in the Chapel regularly each Sunday morning, the average attendance being:—

Church of England ... ..	22
Methodist ... ..	21

**Sanatorium Farm.** A herd of tuberculin-tested cows is kept at the Sanatorium farm, and during the year, 19,140 gallons of milk were supplied to the Sanatorium. Other supplies to the Sanatorium were 1,007 fowls, 392 stone of pork, and 91,614 eggs. The sales during the year realised £441 5s. 8d.

#### SCOTTON BANKS SANATORIUM, KNARESBOROUGH.

**Dr. V. RYAN**, Medical Superintendent, reports:—

This new Sanatorium became available for patients during the year.

It contains 200 beds (100 for women and 100 for children) for the investigation of observation cases and for the modern treatment of tuberculosis. The first patients were admitted on the 26th April, 1937 and by the end of the year, 208 women and 153 children had been admitted and 106 women and 81 children discharged.

The Sanatorium is situated one mile from Knaresborough and four miles from Harrogate. It is therefore easily accessible by road and rail to the population it serves and although in the country, is sufficiently near to the large towns to attract and retain nursing and domestic staff. It is sufficiently urbanised for advantage to be taken of the public services, including water and gas; and electricity for the X-Ray and other electro-medical apparatus requiring alternating current. The electricity for the general lighting of the Sanatorium is direct current (230 volts) generated on the premises.

The patients' accommodation is provided by pavilions of the one-storey type, in two rows, facing south, each containing fifty beds, made up of six single bedded, six double bedded, and eight four bedded cubicles. They are well provided with central heating by steam radiators, electric light, sanitary and lavatory annexes. Protection from weather conditions is afforded by a verandah in front and a closed-in corridor at the back.

Connected with one pavilion is a modern Operating Theatre, fully equipped for all major operations, including chest surgery.

The medical centre, situated apart from the pavilions, and near the Nurses' Hostel and Domestic Block, contains the usual administrative offices and examination and treatment rooms. It houses a modern four-valve X-Ray plant; an artificial light department, containing mercury vapour, carbon arc and a Kromayer lamp, also a radiant heat bath. Adjoining the Dispensary is a dark room, fully equipped so that special methods of examination and treatment, such as bronchoscopy, thoracoscopy and adhesiotomy can be carried out in addition to routine laryngoscopy, pneumothorax, refills, etc. The laboratory is in the mortuary annexe. A central covered corridor is about to be erected connecting the pavilions with the main buildings. This is very necessary. It will provide cover for patients, especially for those who have to be carried on stretchers to the medical centre for treatment. Besides giving protection from the weather to patients and staff, it will make the transport of food, etc., to bed patients much easier.

The domestic side includes a spacious and well appointed kitchen, with modern electrical appliances. The main cooking is done by gas. The patients' dining hall is large, airy and well lighted. The Sanatorium has its own Laundry and generates its own heating and lighting.

The number of cases admitted during the year was 361, classified as follows:—

##### PULMONARY.

T.B. Negative ... ..	92
T.B. Positive—Group I ... ..	15
Group II ... ..	43
Group III ... ..	55
Total Pulmonary ... ..	205

The percentage of sputum positive cases was 55.1.

##### NON-PULMONARY.

Bones ... ..	3
Abdomen ... ..	25
Glands ... ..	27
Skin ... ..	2
Other organs ... ..	10
Total Non-Pulmonary ... ..	67

OBSERVATION ... ..	89
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Of the observation cases, 14 were diagnosed as suffering from tuberculosis.

### Immediate Results of Treatment.

The following table shows the immediate results of treatment of patients discharged with tuberculosis in 1937. In 18 cases the period of residence was less than 29 days; the results of treatment in these are not included in the table.

TABLE CV.

Classification on admission to the Institution.	Condition at time of Discharge.	Duration of Residence.						Totals.
		Under 3 months.		3 to 6 months.		6 to 12 months.		
		W.	Ch.	W.	Ch.	W.	Ch.	
<b>PULMONARY.</b>								
Class	Quiescent ... ..	10	3	12	5	3	4	37
T.B.	Not Quiescent ... ..	4	—	1	—	1	—	6
Minus	Died ... ..	—	—	1	—	—	—	1
Class	Quiescent ... ..	1	—	1	—	—	—	2
T.B. + Group I.	Not Quiescent ... ..	2	1	1	—	—	—	4
	Died ... ..	—	—	—	—	—	—	—
Class	Quiescent ... ..	—	—	2	—	—	—	2
T.B. + Group II.	Not Quiescent ... ..	5	—	3	—	—	—	8
	Died ... ..	—	—	—	—	—	—	—
Class	Quiescent ... ..	—	—	—	—	—	—	—
T.B. + Group III.	Not Quiescent ... ..	2	1	8	1	2	—	14
	Died ... ..	3	—	3	—	1	—	7
<b>NON-PULMONARY.</b>								
Bones and Joints.	Quiescent ... ..	—	—	—	—	—	—	—
	Not Quiescent ... ..	—	1	—	—	—	—	1
	Died ... ..	—	—	—	—	—	—	—
Abdomen.	Quiescent ... ..	—	2	—	4	—	4	10
	Not Quiescent ... ..	—	—	—	2	—	—	2
	Died ... ..	—	—	—	—	—	—	—
Other Organs.	Quiescent ... ..	1	—	—	2	—	—	3
	Not Quiescent ... ..	1	—	—	1	—	—	2
	Died ... ..	—	—	—	—	—	—	—
Peripheral Glands.	Quiescent ... ..	—	—	—	4	—	2	6
	Not Quiescent ... ..	—	—	—	1	—	1	2
	Died ... ..	—	—	—	—	—	—	—
	Totals ... ..	29	8	32	20	7	11	107

The treatment consisted of the well-known Sanatorium routine, the patients being at all times in an atmosphere of fresh and moving air, so essential for the increased metabolism and resulting feeling of well-being. A system of carefully controlled rest and exercise is applied, the respective amounts being varied for each patient. Mass treatment is avoided. The patients are considered individually and the type of disease present determines the amount of rest and exercise to be taken. The dietary is varied so as to avoid the psychological effect of monotonous repetition, which is liable to be experienced by patients in residence a long time.

Special treatment was resorted to as follows:—

Artificial pneumothorax was tried in 24 patients and a useful pneumothorax was established in 16 of these. Alternative treatment either medical or surgical was substituted in the eight patients, in whose cases pleural adhesions prevented collapse of their disease. In addition, two patients were admitted for artificial pneumothorax refills, the induction having been done prior to admission. Of the 16 cases of useful pneumothorax, 2 had also a phrenic avulsion to enhance the effect.

#### Phrenic Paralysis.

Five patients were treated by phrenic avulsion. Two patients had the phrenic nerve temporarily paralysed by a "crush." In one the effect was so good that later on the diaphragm was permanently paralysed by avulsion of the nerve.

These operations and the following were performed by Mr. Moir.

#### Thoracoplasty.

Three patients were operated upon by thoracoplasty. In each case the operation was carried out in three stages, necessitating nine operations. One patient, while convalescing, unfortunately contracted a pulmonary embolism and died.

Thoracoscopy was undertaken in one case and cystoscopy in another.

The ultra-violet ray equipment was available for the latter half of the year and 16 patients underwent treatment, namely:—

Lupus	...	...	...	...	...	1 Adult.
Tuberculides	...	...	...	...	...	1 Child.
Abdomen	...	...	...	...	...	2 Adults and 3 children.
Peripheral Glands	...	...	...	...	...	5 Children.
Rickets	...	...	...	...	...	2 Children.
Debility	...	...	...	...	...	2 Children.

**X-Ray Examinations.**

Pending the supply of alternating current, X-Ray examinations were carried out as follows:—

Dr. Thomson's Clinic, Harrogate	...	...	...	85.
Middleton Sanatorium, Ilkley	...	...	...	120.

**Dental Treatment.**

A dentist is now in attendance at the Sanatorium one half-day weekly.

**Religion.**

Church of England	...	Service on alternate Sundays.
Free Church	...	Service on alternate Sundays.
Roman Catholic	...	Services as required.

**CARDIGAN SANATORIUM.**

The Medical Superintendent reports:—

During the year, 135 adult female patients and 6 female children were admitted, and were classified as follows:—

Pulmonary—T.B. Minus	...	...	...	...	...	29
T.B. Plus—Group 1	...	...	...	...	...	3
Group 2	...	...	...	...	...	57
Group 3	...	...	...	...	...	42
Non-pulmonary	...	...	...	...	...	8
For observation and diagnosis	...	...	...	...	...	2
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The number of cases with tubercle bacilli in their sputum, found before admission or by examination whilst in the sanatorium was 102, or 77.9% of the pulmonary cases admitted. Two patients admitted with pulmonary tuberculosis were later found to be suffering also with tuberculosis of the bones and joints. During the year there were 13 deaths in the sanatorium.

**Observation Cases.**

Of the 12 patients discharged from observation, 4 (including 1 child) were found to be suffering from tuberculosis.

**Immediate Results of Treatment.**

The following table shows the immediate results of treatment of patients discharged with tuberculosis in 1937. In 27 cases the period of residence was less than 29 days; the results of treatment in these are not included in the table.

TABLE CVI.

Classification on Admission	Condition at time of discharge.	Period of Residence								Total	
		Under 3 months		3/6 months		6/12 months		Over 12 months			
		W.	Ch.	W.	Ch.	W.	Ch.	W.	Ch.		
PULMONARY :—											
Class	Quiescent ... ..	5	—	7	2	2	—	2	—	18	
T.B.	Not quiescent ... ..	3	1	1	1	1	—	—	—	7	
Minus	Died ... ..	—	—	—	—	—	—	—	—	—	
Class	Quiescent ... ..	—	—	4	—	1	—	—	—	5	
T.B. +	Not quiescent ... ..	—	—	2	—	—	—	—	—	2	
Group I.	Died ... ..	—	—	—	—	—	—	—	—	—	
Class	Quiescent ... ..	—	—	2	—	4	—	1	—	7	
T.B. +	Not quiescent ... ..	3	—	11	1	3	—	1	—	19	
Group II.	Died ... ..	1	—	—	—	—	—	—	—	1	
Class	Quiescent ... ..	—	—	1	—	—	—	—	—	1	
T.B. +	Not quiescent ... ..	6	—	10	—	3	—	—	1	20	
Group III.	Died ... ..	6	—	1	—	—	1	—	—	8	
NON-PULMONARY :—											
Bones and Joints.	Quiescent ... ..	—	—	—	—	—	—	—	—	—	
	Not quiescent ... ..	1	—	—	—	—	—	—	—	1	
	Died ... ..	—	—	—	—	—	—	—	—	—	
Abdomen.	Quiescent ... ..	—	—	2	1	—	—	—	—	3	
	Not quiescent ... ..	—	—	1	—	—	—	—	—	1	
	Died ... ..	—	—	—	—	—	—	—	—	—	
Other Organs.	Quiescent ... ..	—	—	—	—	—	—	—	—	—	
	Not quiescent ... ..	1	—	—	—	—	—	—	—	1	
	Died ... ..	—	—	—	—	—	—	—	—	—	
Peripheral Glands.	Quiescent ... ..	—	1	1	—	—	—	—	—	2	
	Not quiescent ... ..	—	1	—	—	—	—	—	—	1	
	Died ... ..	—	—	—	—	—	—	—	—	—	
	Totals ... ..	26	3	43	5	14	1	4	1	97	

**Artificial Pneumothorax Treatment.** During the year, artificial pneumothorax was induced and maintained in 11 cases. Approximately 272 refills have been given. Two women attended as out-patients, their refills being included in this number. Of 11 cases discharged the condition at the time of discharge was:—quiescent, 2; improved, 6; worse or died, 3.

**Surgical Treatment.** During the year 12 patients were seen by Mr. P. J. Moir, M.B., Ch.B., F.R.C.S., in consultation and were transferred to the General Infirmary at Leeds. In 3 of the cases the phrenic nerve was crushed and in 1 of these evulsed later. In the other 9 cases phrenic avulsion was performed. In 10 of the cases the immediate result was satisfactory and in the remaining 2 there was no improvement.

**Orthopaedic Treatment.** One pulmonary case found to have a tuberculous spine, and one who developed a tuberculous hip, were referred to Mr. R. Broomhead, F.R.C.S., and were recommended for treatment on appropriate frames.

**Gold Salts.** The preparations used were sanocrysin, solganal B. oleosum, and myocrysin. In all, 13 patients were given a course of one or other of these. A total of 183 injections were given and the results in general appeared to be satisfactory.

**Cadmium.** Three cases have had a total of 18 injections of a suspension of cadmium sulphide. All these patients became worse in spite of treatment.

**Tuberculin.** Tuberculin was used in two cases of pulmonary tuberculosis and in one case of cervical adenitis. All made good progress.

**Insulin.** One patient treated with insulin and glucose showed no improvement in general condition. Two cases of diabetes complicating pulmonary tuberculosis have been successfully controlled.

**Dental Treatment.** The services of Mr. F. G. W. Bruce, the dental surgeon were again available for those patients in whom the condition of the mouth appeared to be interfering with progress. Twenty-two patients had teeth extracted, two were provided with dentures, and two had dentures repaired.

**Radiography.** The total number of X-Ray examinations made during the year was 236, patients being sent either to the Staincliffe Institution or to Pontefract Dispensary. All films were taken by the County Radiographer.

**Occupational Therapy.** Four hours instruction (in two sessions) has been given weekly during the winter months by Mrs. Crowe, the instructress, in leatherwork, needlework and raffia-work. These classes are extremely popular; the work, besides proving interesting, serves in some measure to relieve the tedium of months of rest and quiet in the sanatorium.

**Provision of Clothing.** Twenty-two grants were made under the scheme for provision of clothing to patients under treatment.

**Alterations and Additions.** During the year a special Sub-Committee was appointed to consider the question of effecting certain improvements at Cardigan Sanatorium. The following recommendations were made:—

- (a) **MAIN WARD BLOCK.** Provision of sanitary annexe with additional bath and lavatory accommodation to serve the patients in the shelters.
- (b) **ADMINISTRATIVE BLOCK.** To overcome the present overcrowding by providing a group of five additional bedrooms for nurses and domestic staff.

To increase the size of the kitchen by adding to it, and to improve the lighting by adding a large window.

To provide twelve new double shelters to replace the existing shelters which are worn out and unserviceable.

Construction of new pathways to the shelters.

To carry out road repairs to main roadways leading to the Sanatorium.

To provide a new dry store.

## CROOKHILL HALL RECEIVING HOME.

Dr. E. Ratner, the Medical Superintendent, reports:—

During the year, 74 adult male patients were admitted to the Home, classified as follows:—

Pulmonary—T.B. Minus	...	...	...	...	...	21
T.B. Plus—Group I	...	...	...	...	...	4
Group II	...	...	...	...	...	27
Group III	...	...	...	...	...	20
Non-pulmonary	...	...	...	...	...	1
Observation	...	...	...	...	...	1

The patient admitted for observation was found to be tuberculous, and the result of treatment is included in the table below.

## Immediate Results of Treatment.

The following table shows the immediate results of treatment of patients discharged with tuberculosis in 1937. In seven cases the period of residence was less than 29 days; the results of treatment in these are not included in the table.

TABLE CVII.

Classification on admission to the Institution.	Condition at time of discharge.	Period of Residence.				Total.
		Under 3 months	3-6 months	6-12 months	Over 12 months	
PULMONARY. Class T.B. Minus	Quiescent	—	5	—	—	5
	Not quiescent	1	3	3	—	7
	Died	—	—	—	—	—
Class T.B. + Group I.	Quiescent	—	2	—	—	2
	Not quiescent	—	—	—	—	—
	Died	1	—	—	—	1
Class T.B. + Group II.	Quiescent	2	—	—	—	2
	Not quiescent	2	10	4	—	19
	Died	3	—	3	—	6
Class T.B. + Group III.	Quiescent	—	—	—	—	—
	Not quiescent	5	5	9	2	21
	Died	1	2	—	—	3
NON-PULMONARY. Abdomen.	Quiescent	—	—	—	—	—
	Not quiescent	1	—	—	—	—
	Died	—	—	—	—	1
Totals		16	27	19	5	67

Of the 75 patients discharged from the Hospital, 15 died, five within 29 days, giving a mortality of 20·0%. Of these 75 patients, 44 were coal miners, 28 other manual workers and three non-manual workers (1 clerk, 1 traveller and 1 club steward). The age distribution is as follows:—

Under 20	...	1 patient.	41-45	...	13 patients.
21-25	...	5 "	46-50	...	10 "
26-30	...	6 "	51-55	...	8 "
31-35	...	10 "	56-60	...	5 "
36-40	...	9 "	Over 60	...	8 "

It is worth noting that 44 patients (or 58·7%) were over 40, and 31 patients (or 41·3%) over 45 years old.

The length of illness amongst these 75 men is as follows:—

Under 3 months	...	8 cases.	5 years	...	5 cases.
3-6 months	...	16 "	6 "	...	6 "
1 year	...	9 "	7 "	...	3 "
2 years	...	7 "	8 "	...	3 "
3 "	...	2 "	9 "	...	0 "
4 "	...	7 "	10 "	...	6 "
			Over 10 years	...	3 "

In other words, 68·0% of cases were ill for a year or longer, and 46·7% of cases were ill for 3 years or longer.

The previous institutional history is also interesting; 40 patients (or 53.3%) have had one or more previous period of institutional treatment for tuberculosis. The following complications were observed amongst the 75 patients who left the Institution or died:—

Asthma	...	1	Syphilis	...	2
T.B. Larynx	...	8	Diabetes	...	1
Pleural Effusion	...	1	Epilepsy	...	1
Old Thoracoplasty	...	1	Cancer of Rectum	...	2
Heart Disease	...	1	Abdominal Tuberculosis	...	1
Spontaneous Pneumothorax			...	1	

From the foregoing figures it is clear that this Hospital is used mainly for the treatment of the advanced and chronic patients with pulmonary tuberculosis. Moreover, 58.7% of the cases were over 40 years old, and therefore no longer young. It follows, therefore, that the scope for active treatment is a very limited one. We rely mostly on rest and symptomatic treatment.

**Artificial Pneumothorax.** Artificial pneumothorax was attempted in 3 cases, and was successful in 1, who improved greatly and returned home.

**Phrenic Avulsion.** Phrenic avulsion was performed in 6 cases, in 2 of whom the artificial pneumothorax failed. The results were good. This was done by Mr. Moir at the Leeds General Infirmary.

**Gold Treatment.** Gold is given in the form of crisalbine or solganal B. oleosum. This was given in 7 cases; in 3 cases it was discontinued as having no effect, 1 patient had a full course, and in 3 the treatment is being continued.

**Dental Treatment.** The Dental Surgeon (Mrs. Keates) visits the Hospital regularly and performs very useful work. During the year, 15 patients had extractions and 17 had dentures supplied.

**X-Ray Examinations.** Full use is made of X-Ray facilities at the Doncaster Clinic.

**Staff.** The staff and the patients deeply deplore the sudden death of Sister Bennett, who for over ten years has been nursing at Crookhill Hall.

### ELDWICK SANATORIUM.

**Dr. Margaret Sharp, Medical Superintendent, reports:—**

During the year 50 children were admitted to this Institution, classified as follows:—

Pulmonary—Class T.B. Minus	...	...	...	...	20
Class T.B. Plus Group II	...	...	...	...	1
Non-Pulmonary	...	...	...	...	14
Observation	...	...	...	...	15

Eighteen cases admitted for diagnosis were discharged during 1937. Of these, 6 were suspected of abdominal tuberculosis, 1 of laryngeal tuberculosis, and the remainder pulmonary. The laryngeal case was not confirmed as such, but there were calcified (*i.e.*, quiescent) mediastinal glands present, which may have been a source of irritation. One case was considered to have definite symptoms of chronic appendicitis, but there were also calcified mesenteric glands present. These cases illustrate the difficulty that tuberculous conditions may often be present without being the direct cause of the symptoms observed. One case was removed by the mother within a week of admission and before a definite diagnosis had been made. Five cases were notified as definite cases of tuberculosis and were retained for treatment; of these, three were pulmonary and two abdominal.

One of the pulmonary cases came under the Workmen's Compensation Acts, having suffered an injury to her hand involving the amputation of a finger, and the question of the joint being tuberculous was raised. No evidence of this was found, but there was active disease present in the lungs. This girl was transferred to Scotton Banks Sanatorium.

**X-Ray Examinations.** Fifty of the children had had skiagrams taken before admission; in 14 of these the examination was repeated from one to three times according to whether changes were found to be occurring. Four were so examined for the first time after admission. The value of these examinations in active disease of the lungs cannot be exaggerated, and it tends to emphasise the importance of a prolonged stay in a sanatorium in these cases, as the general condition often becomes satisfactory long before evidence of spread of the disease has ceased in the skiagram.

**Tonsils and Adenoids.** Sixteen children had tonsils and adenoids removed owing to the presence of unhealthy tonsils, and in some cases to repeated attacks of tonsillitis. In only one of these was the improvement in the general condition, apart from the actual throat condition, such as to suggest that the tonsils were the principal cause of ill-health.

**Dental Treatment.** The dentist visited every three months, examined all the children, and gave the necessary treatment.

**Ultra-Violet Treatment.** Thirty-five children received treatment from either the carbon-arc or mercury-vapour lamp. Thirteen of these were pulmonary cases. The number of exposures given in each case varied from 17 to 58. In 10 cases definite improvement resulted from the use of the lamp; of which cases two were pulmonary, one abdominal, and seven glandular cases. In four cases results were disappointing; the remaining 21 cases all showed a satisfactory result which could not, however, be specially attributed to the use of the light.

**Infectious Diseases.** There were three cases of German measles, none of which was at all severe.

**Irregular Discharges.** Two boys were removed by their parents against advice; one after eleven weeks in the Institution, and one after only one week. Both cases were pulmonary, the latter having been admitted for observation.

#### Immediate Results of Treatment.

The following table shows the immediate results of treatment of patients discharged with tuberculosis in 1937. In one case the period of residence was less than 29 days and the results of treatment are not included in the table.

TABLE CVIII.

Classification on admission to the Institution.	Condition at time of discharge.	Period of Residence.				Total
		Under 3 months	3-6 months	6-12 months	Over 12 months	
PULMONARY :— Class T.B. Minus	Quiescent ... ..	—	7	14	1	22
	Not Quiescent ... ..	1	1	2	—	4
	Died ... ..	—	—	—	—	—
T.B. + Group II.	Quiescent ... ..	—	—	—	—	—
	Not Quiescent ... ..	—	—	—	1	1
	Died ... ..	—	—	—	—	—
NON-PULMONARY :— Abdomen	Quiescent ... ..	—	1	4	—	5
	Not Quiescent ... ..	—	1	1	—	2
	Died ... ..	—	—	—	—	—
Peripheral Glands	Quiescent ... ..	—	1	5	1	7
	Not Quiescent ... ..	—	—	—	—	—
	Died ... ..	—	—	—	—	—
	Totals ...	1	11	26	3	41

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ON THE

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*(Presented to the Child  
Welfare Sub-Committee  
May 11th - 1938)*

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### A.—Medical Officers at Schools.

Routine Inspections at Elementary Schools	...	...	...	...	...	46,534
Routine Inspections at Secondary Schools	...	...	...	...	...	6,746
Special Inspections at Elementary Schools	...	...	...	...	...	4,694
Special Inspections at Secondary Schools	...	...	...	...	...	456
Re-inspections at Elementary Schools	...	...	...	...	...	13,873
Re-inspections at Secondary Schools	...	...	...	...	...	1,234

### B.—Medical Officers at Clinics.

Inspections at Clinics (including Specialist Clinics)	...	...	...	...	28,423
Inspections under Employment of Children Bye-laws	...	...	...	...	1,101

### C.—Dental Officers.

Routine Inspections at Elementary Schools	...	...	...	...	...	102,969
do. do. Secondary Schools	...	...	...	...	...	5,713
Special Inspections at Elementary Schools	...	...	...	...	...	6,845
do. do. Secondary Schools	...	...	...	...	...	—
Attendances for Treatment at Clinics—Elementary	...	...	...	...	...	62,398
do. do. do. —Secondary	...	...	...	...	...	5,644

### D.—School Nurses and Health Visitors.

Visits to Schools	...	...	...	...	...	6,156
Examinations (including Cleanliness Inspections in Schools)	...	...	...	...	...	420,722
Visits to Homes	...	...	...	...	...	31,327

### E.—School Clinics.

Number of Minor Ailments Treated	...	...	...	...	...	49,696
Total Number of Attendances	...	...	...	...	...	164,438

## WEST RIDING EDUCATION COMMITTEE.

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The Chairman of the County Council.  
The Vice-Chairman of the County Council.  
The Chairman of the Finance Committee.

### ALDERMEN.

Armistead, J. H., M.A.	Grylls, R. M.	Smith, Lady Mabel
Brigg, J. J., M.A., LL.M.	Hyman, W. M.	Spence, T. F.
(Vice-Chairman).	(Chairman).	Tomlinson, T.
Eddy, H., M.B.E.	Lane, J. W.	Turner, W. H.
Foulstone, T. H.	Schofield, G.	

### COUNCILLORS.

Allan, J. T.	Fawcett, F. F.	Paling, W. T.
Archer, Rev. F.	Flavell, A.	Shaw, Rev. G. M.
Barber, A.	Hirst, F.	Smith, Mrs. J.
Blewitt, W. T.	Holmes, H., D.C.M.	Taylor, E.
Broadley, K., B.Sc.	Houldsworth, Mrs. H. F.	Townsend, A.
Brooks, T. J., M.B.E.	Johns, W. J.	Wilson, A.
Brooksbank, W. H.	Mather, Dr. J. de Ville	Wilson, Dr. A. G.
Campinot, A.	Middlebrook, H. A.	Wragg, Mrs. E., M.B.E.

### ADDED MEMBERS.

Green, Mrs. H., B.A.	Singleton, Mrs. M.	Glasier-Foster, F.
Hazelip, Mrs. E.	Baillie, Sir James	Pickard-Cambridge, Dr. A. W.
Hinchliffe, Miss M.	Everatt, W. T.	Spivey, T. W.

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## CHILD WELFARE SUB-COMMITTEE.

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### Members of West Riding Education Committee.

County Aldermen H. Eddy, M.B.E., J. W. Lane and G. Schofield.

County Councillors W. H. Brooksbank, Dr. J. de Ville Mather, Mrs. J. Smith and A. Townsend.

Added Members: Mrs. H. Green, B.A., Miss M. Hinchliffe, Mrs. M. Singleton, Mr. W. T. Everatt and Mr. F. Glasier-Foster.

### Members of West Riding Public Health and Housing Committee.

County Alderman G. Probert and T. Tomlinson.

County Councillors J. T. Allan, W. T. Blewitt (*Chairman*), H. S. Drake (*Vice-Chairman*), A. Fletcher, A. Fouchard, Mrs. M. Heald, W. J. Johns, W. E. Jones, J. Wilkinson and Mrs. E. Wragg, M.B.E.

### STAFF.

County Medical Officer and School Medical Officer—T. N. V. Potts, M.D., D.P.H.

Assistant School Medical Officer—Reginald Lawrence, M.D., D.P.H.

Assistant County Medical Officer—J. Wood Wilson, M.D., D.P.H.

### School Oculists.

Christina S. Stoddart, M.B. Hannah W. Murphy, M.B., D.P.H.  
Claudius G. Kay Sharp, M.D. (part time).

## Aural Surgeon.

HUGH M. PETTY, M.B. (part-time).

## School Medical Inspectors.

Centre	Name of Officer
Skipton ... ..	James M. Anderson, M.R.C.S., L.R.C.P.
Ilkley ... ..	Nora M. Allan, M.B.
Harrogate ... ..	Josephine Coupland, M.B., B.S., D.P.H.
Halifax ... ..	Janet M. Macmillan, M.B., D.P.H.
Wakefield ... ..	Gerald P. Holderness, M.B., D.P.H.
Leeds ... ..	Margaret E. Peaker, M.R.C.S., L.R.C.P.
Pontefract (East) ... ..	James W. Cairns, M.D., D.P.H.,
Huddersfield ... ..	Annabella Rennie, M.B.
Barnsley (West) ... ..	Jean V. Kirkwood, M.B., D.P.H.
Pontefract (West) ... ..	Gertrude M. Mayhall, M.R.C.S., L.R.C.P.
Barnsley (East) ... ..	Jean J. Smith, M.B., D.P.H.
Doncaster (West) ... ..	Bethia M. Newlands, M.B., D.P.H.
Doncaster (East) ... ..	Duncan C. Rice, M.B.
Sheffield ... ..	Stuart Lindsay, M.B.
Rotherham (North) ... ..	Joyce E. M. White, M.R.C.S., L.R.C.P.
Rotherham (South) ... ..	Rosie B. Becker, M.D., D.P.H.
Rotherham and Kiveton Park Rural Districts ... ..	John M. Watt, M.D., D.P.H. (part-time)

## Dental Staff.

BERNARD R. TOWNEND, L.D.S., Senior Dental Officer.

George O. Wood, L.D.S. ... ..	Oswald A. Long, L.D.S.
Richard E. Morgan, L.D.S. ... ..	Fred W. Buzza, L.D.S.
Bernard Sleight, B.Ch.D. ... ..	George Kilvington, L.D.S.
Marion M. Thom, L.D.S. ... ..	Kevern Batten, L.D.S.
Henry F. Jones, L.D.S. ... ..	James M. Macdonald, L.D.S.
Dorothy M. Phillips, L.D.S. ... ..	John Mackay, L.D.S.
Eric Thornton, L.D.S. ... ..	Joseph Jackson, L.D.S.
John H. N. Macdonald, L.D.S. ... ..	Rachel Selare, L.D.S.
Donald D. Allan, L.D.S. ... ..	Jas. R. Wishart, L.D.S.
Fred W. Sturgess, L.D.S. ... ..	Dorothy E. Smithson, L.D.S.
Fred Brabington-Perry, L.D.S. ... ..	William Rodger, L.D.S.
William P. Jones, L.D.S. ... ..	James Todd, L.D.S.
Marcus Hattan, L.D.S. ... ..	Mary M. Gibson, L.D.S.
Aloysius M. Moorhead, L.D.S. ... ..	F. C. Shenton, L.D.S.
J. G. Richardson, L.D.S.	

School Nurses who assist School Dentists (Whole-time) ... ..	10
Dental Attendants (whole-time) ... ..	20
School Nurses only (whole-time) ... ..	6
School Nurses and Health Visitors (whole time) ... ..	117
School Nurses and Health Visitors employed by District Nursing Associations and Local Authorities ... ..	69
Clerical Staff, School Medical Inspection Section... ..	9

# REPORT of the SCHOOL MEDICAL OFFICER. for the Year ended 31st December, 1937.

## 1. Area, Population, Staff.

The population of the Administrative County of the West Riding of Yorkshire in 1937, was 1,506,110. The County Council is the authority for education as follows:—

### (1) FOR ELEMENTARY EDUCATION.

The whole of the Administrative County (with the exception of the Boroughs of Batley, Brighouse, Harrogate, Keighley, Morley, Ossett, Pontefract, Pudsey and Todmorden, and the Urban Districts of Shipley and Spenborough) containing a population of 1,166,930.

### (2) FOR SECONDARY EDUCATION.

The whole of the Administrative County containing a population of 1,506,110.

The area in (1) above includes 794 elementary schools, with 1,097 departments, and on the 31st December, 1937, there were 165,133 children on the registers.

The area in (2) includes 49 secondary schools, and on the 1st October, 1937, there were 17,340 pupils on the registers. In addition, there are three schools, *viz.*: Barnsley Boys' Grammar School, Barnsley Girls' High School and Huddersfield Royds Hall Secondary School which are administered jointly by the County Council and the County Boroughs of Barnsley and Huddersfield respectively. The number of West Riding pupils in these three schools is included in the above figure of 17,340.

For educational purposes the County Education area is mapped out into 102 districts, in each of which there is a district sub-committee, and these again are grouped into 22 divisions, each with a Divisional Clerk as local representative of the Education Authority.

Owing to a re-arrangement of boundaries, 31 schools were transferred from the County to Part III Authorities and County Boroughs, on April 1st, 1937, and this necessitated an alteration in the areas of certain School Medical Inspectors and Dentists.

## STAFF.

The following is a summary of the medical, dental and nursing staffs employed in connection with School Medical Inspection during 1937:—

### (a) MEDICAL.

School Medical Inspectors (whole-time)	...	...	...	...	...	16
School Medical Inspector (part-time)	...	...	...	...	...	1
School Oculists (whole-time)	...	...	...	...	...	2
Do. (part-time)	...	...	...	...	...	1
Aural Surgeon (part-time)	...	...	...	...	...	1

### (b) DENTAL.

Senior Dental Officer (whole-time)	...	...	...	...	...	1
Assistant Dental Officers (whole-time)	...	...	...	...	...	29

### (c) NURSING.

School Nurses (whole-time)	...	...	...	...	...	6
School Nurses and Health Visitors (whole-time)	...	...	...	...	...	117
School Nurses and Health Visitors employed by District Nursing Associations and Local Authorities (part-time)	...	...	...	...	...	69
Dental Nurses (whole-time)	...	...	...	...	...	10
Dental Attendants (whole-time)	...	...	...	...	...	20

The following changes in the staff took place during 1937:—

### (a) MEDICAL.

- (i) *Appointments.*  
Dr. J. M. Watt (part-time).
- (ii) *Resignations.*  
Nil.

### (c) DENTAL ATTENDANTS.

- (i) *Appointments.*  
Miss A. W. Wray.  
Miss H. Redman.
- (ii) *Resignations.*  
Miss B. J. Middlebrook.

### (b) DENTAL.

- (i) *Appointments.*  
Mr. W. P. Jones.  
Mr. J. G. Richardson.  
Mr. F. C. Shenton.
- (ii) *Resignations.*  
Mr. C. Baines.  
Mr. S. E. Clarke.  
Mr. A. Topping.  
Mr. P. D. Copeland.

## 2.—Co-ordination.

### (a) MEDICAL SERVICES.

Every effort has been made to achieve full co-operation between the various branches of the County Medical Services, and improvements continue to be introduced, following upon altered circumstances, or the discovery of new methods in administration or treatment. Co-operation with the Tuberculosis Section in the diagnosis of difficult cases has been mentioned in previous years, and this has now been extended, by allotting to the Assistant Tuberculosis Officers a share in the "nutrition surveys." Another example is the allocation to School Medical Inspectors of the task of making periodic visits to children discharged from Open-Air Schools or Convalescent Homes. Dr. Wood Wilson's report on school dinners is an example of co-operation with the Education Department.

### (b) NURSING.

Co-operation from the standpoint of the nursing staff, is ensured by the fact that, with six exceptions, the school nurses are also health visitors, and thus obtain a wide and detailed knowledge of the children, many of whom they have followed up since birth.

It may be of interest to note that during 1937, the number of health visitors undertaking school nursing duties was 117, and the time given by them to school nursing work was equivalent to that of 46 whole-time school nurses.

Since the institution of nursery classes and the opening of a Nursery School, the nurses have instructions to keep in close touch with such classes, and to be available in a consultative capacity at almost any time with the Head Teachers. In connection with the special attention which is now being paid to the care of "children under 5," the work of the nurses constitutes the first step in the ascertainment of children with ocular or dental defects, and thus enable such children to secure the services of the county oculist or the school dentist.

### (c) CO-OPERATION WITH CHILD WELFARE CENTRES.

An increasing number of clinical records of children who have attended Child Welfare Centres, is being transmitted to schools, so that the information is available to the School Medical Inspector when carrying out his routine examination of entrants. The closer supervision of toddlers now being effected, will result in the records of such children being brought up to date, in as much as children, as a rule, have ceased attending the centre upon reaching their 2nd or 3rd year of life, and records have been limited to this period. The added information should prove of value at the school medical inspections, and subsequently to Panel Practitioners, who become responsible after the children have left school.

The County Medical Officer's Annual Report for the year, shows that the number of toddlers who attended at Child Welfare Centres during the year 1937 was 14,776, and the total number of attendances made was 135,593.

### (d) GENERAL HOSPITALS.

The General Hospitals in the County area continue to provide certain services for school children, and although these services do not form part of any defined county scheme, they are of great value in supplementing the work of school medical inspection and treatment. The conduct of the hospitals services for school children, has been expedited by the friendly relations which exist with the Lady Almoners of the large general hospitals.

### (e) DISTRICT MEDICAL OFFICERS OF HEALTH.

In the prevention and control of outbreaks of infectious disease, close touch is maintained between the School Medical Inspectors and the District Medical Officers of Health. Here again, the County scheme, which offers facilities for immunisation against diphtheria to all school children, has been successful in assisting the District Medical Officers of Health to combat outbreaks of diphtheria.

Further efforts are being made, in conjunction with the Education Department, to arrange for suitable accommodation for medical services in new schools, as and when they are built.

## 3.—The School Medical Service in Relation to Public Elementary Schools.

At the conclusion of school inspections, the School Medical Inspector takes the opportunity of inspecting the buildings and sanitary arrangements, and reports upon any defects are forwarded to the School Medical Officer, and transmitted through the Education Department to the District Sub-Committee or School Managers, responsible for the particular school. The defects to which attention is usually drawn, are:—

- (a) Structural.
- (b) Functional.
- (c) Mis-use of the facilities available.

It is noticed occasionally, that the sanitary conveniences are mis-used, and this is to some extent due to faulty training at home. Fewer complaints have been received about structural defects, or the inadequate working of the existing appliances.

Improvements in school premises have been accelerated, and the provision of better facilities for washing, including a supply of hot water, are very much appreciated. In a few of the newer schools, and in the Open-Air School there are shower baths. The brighter colours on the walls provide a very cheerful tone to the rooms. The subject of colour schemes, lighting, and arrangement of desks is shortly to be the subject of a psychological study by the Institute of Industrial Psychology, to determine the effects of these on the output of work.

School Medical Inspectors refer to the fact that in many schools, the arrangement of classes in rows is giving place to a group arrangement whereby the children sit round small tables. The question has been raised as to whether this might have any effect in spreading infectious disease, but no such result has been reported. Since the publication of the Board of Education's handbook on School Buildings, the County Health Department is notified not only of existing building programmes, but of projected programmes at the time of acquisition of sites. In addition, the recommendations of this handbook are being carried out in the provision of special accommodation for school medical inspection and dental treatment.

Further advances have been made in the removal of obsolete teaching materials that have been retained and which have served only to harbour dust, and to make effective cleaning of school premises difficult. There is still a number of schools where similar action could be carried out to advantage.

#### 4.—Medical Inspection.

The statistical tables on pages 44-50, provide an account of the number of children examined, and the results of the examinations. The total examined during 1937 was 65,101, made up of 17,354 "entrants," 15,650 "intermediates," and 13,530 "leavers"; other inspections were 4,694 "specials," and 13,873 "re-inspections." The figures in each group giving the defects found have varied very little from year to year in recent years, although in comparison with five years ago, a distinct improvement is noticeable.

#### 5.—Findings of School Medical Inspection.

**CLEANLINESS.** Where the inspection staff make reference to cleanliness in their reports, it is mainly to record steady improvement. Whether this is due to increased and improved facilities in the home and the school is not easy to determine, but there is unquestionably a growing change for the better in the outlook of the school child towards this important subject.

**CLOTHING.** The standard of clothing generally is fairly good. Girls' clothing in particular is light and hygienic, and contrives to be so without sacrifice of appearance. In an increasing number of schools girls are found to be wearing a "gym costume" for physical exercises. The case of the boys is not quite so good. Apart from their greater capacity for wearing out clothes there is the difficulty of providing boys with washable clothing. To some extent this difficulty is overcome in those schools where grey flannel shirts and shorts are being adopted.

There are reports from School Medical Inspectors of an improvement in the amount of clothing worn. The grotesque overloading of children with successive layers of clothing is not being reported so frequently, and presumably is not so often met.

**FOOTGEAR.** The provision of footwear is always a problem, owing to the expense of good boots. The footwear is always noted at "nutrition surveys" and is sometimes surprisingly good. There are, however, some instances where it is very bad, and teachers occasionally report the absence of children because their footwear is not even serviceable enough to enable them to come to school.

**Dr. Peaker** refers to the wearing of "Wellingtons." "Mothers find that 'Wellingtons' are the cheapest form of footwear they can buy, as they wear longer than the ordinary poor 'type of leather boot or shoe. Thus, during the winter, a large proportion of the children are 'in 'Wellingtons' the whole day through, in spite of ones efforts to get them to wear slippers 'in school. The feet of the children so shod, are always cold and damp."

A noticeable fact, however, is an increasing tendency to change out-door boots and shoes for slippers in school. This is probably due to the energy and initiative of certain individual teachers. The advantages are so great that the practice is likely to spread.

**NUTRITION.** The scheme introduced in March, 1937, to utilise the services of tuberculosis officers in a combined effort, with school medical inspectors and school nurses, to pass under review all children at frequent intervals, has been very successful.

The introduction of these additional medical officers for the purpose of assessing nutritional needs enables every school to be visited by a medical officer four times a year, and in addition, a visit is paid once a month by the school nurse.

At these nutrition surveys the children are not classified into the various groups, but the medical officer satisfies himself that any child requiring subsidiary nourishment or meals is certified accordingly.

The tuberculosis officers engaged in this work have been very helpful, and have taken an interest in the progress of the children in the groups of schools allocated to them. Practically all have been able to report a general rise in the standard of nutrition since the commencement of the scheme.

The classification of children inspected in the routine age groups, continues to be carried out by the School Medical Inspectors.

The children are now divided into four groups:—

- (a) Children in excellent condition.
- (b) Children who are satisfactory or normal.
- (c) Children who are unsatisfactory or sub-normal.
- (d) Those showing definite signs of malnutrition.

The Chief Medical Officer of the Board of Education, in his report for 1936, gives on page 15, a summary of the findings throughout England and Wales, as follows:—

A.	B.	C.	D.
%	%	%	%
14.6	74.1	10.6	0.7

From Table II (A) on page 45, the figures for the West Riding elementary school children are:—

A.	B.	C.	D.
%	%	%	%
14.06	70.23	15.2	0.59

These figures show a close relationship, especially in Classes A. and D., with the figures for the whole country. If the figures B. and C. in each are added, they give 84.7% for the whole country, and 85.43% for the West Riding. Probably the approximation of the figures in columns B. and C. respectively, would have been closer, but that the clinical assessment of standards of nutrition in the West Riding is influenced, to some extent, by a desire on the part of the school medical inspectors to ensure that subsidiary nourishment is given to all children who show even the slightest signs that they require it.

The selection of Group A. (the excellent children) is easily made. It includes those children who are physically well developed, eager, alert and active in their movements. The distinction between groups B. and C. is not so clear, and it is between these groups that different observers may produce somewhat different results. Group B. includes children who may be considered normal or satisfactory, and C. children who are in some respects sub-normal, and to that extent unsatisfactory. Group D. (those who are definitely ill-nourished), are children who display poor physique, a lack of subcutaneous fat, poor toneless muscles, allowing them to drop in to faulty attitudes, some anæmia, and a lack of vigour and spontaneous activity.

Some grave doubt has recently been thrown on the accuracy of this question of ascertaining the nutritional state of the child. The following quotation from an annotation in "The Medical Officer," 12th February, 1938, page 64, states the difficulties. "Mr. Jones has analysed the serious discrepancies in the assessment of nutrition by teams of observers on the same children, and the equally serious inconsistencies of individual members when assessing the same children on two occasions, separated by a short interval in time. He also stresses the fact that doctors may happen to agree in the totality of their results, and yet differ markedly in their judgments of individual children. A further investigation, which suggests itself, is the advisability of setting the doctors themselves to elucidate the problem of their respective differences."\*

\* (Physical Indices and Clinic Assessments of the Nutrition of School Children by R. Huws Jones, Royal Statistical Society, 4, Portugal Street, W.C.2.)

The suggestion in the last paragraph has long been anticipated in the West Riding, by School Medical Officers acting in concert and making surveys of the same schools, and discussing the classification of "border-line" children. In this way, the difficulties are very much narrowed down.

In spite of the doubt as to reliability of assessment, as outlined in the above quotation, there is good reason to think that very few children fail to receive subsidiary nourishment when they need it, except in the cases of children who have been recommended for milk, and subsequently, after investigation into the financial circumstances of the family, parents have been asked to contribute to the cost, but have refused to do so.

**Sir John Boyd Orr**, M.D., D.Sc., LL.D., F.R.S., the well-known expert on nutrition, when visiting the County Medical Officer during 1937, expressed a wish to see some school children in the West Riding. One object of his visit was to undertake certain experiments in connection with the subject of nutrition, which are being carried out at the present time in Scotland. His report is embodied in the following letter:—

Dr. T. N. V. Potts,  
County Health Department,  
County Hall, Wakefield.

Imperial Bureau of Animal Nutrition,  
The Reid Library,  
Rowett Institute,  
Aberdeen, Scotland.  
3rd December, 1937.

Dear Dr. Potts,

After considering the position in the West Riding with Dr. Magee, on the train from Wakefield to York, we came to the conclusion that, subject to your approval, the following work in connection with the Carnegie Dietary and Clinical Survey should be done in the West Riding.

(1) A dietary survey of as many families as possible, where the mothers are being subjected to the special examination of your staff engaged on the maternal welfare work, and Dr. Auchinachie, the Biochemist. This is an important public health investigation, and the completion of the work by doing a dietary survey would increase its value.

(2) **Feeding Experiment.** There is some difficulty with regard to this. Our idea is to take (a) a fairly good district, where the diet is pretty good, and (b) a poor district, where the diet is markedly deficient for health, and supplement the diet to bring it up to the new standard. This would show us how far it is possible to improve the diets which are considered fairly good, and also how far it is possible to improve diets which we know to be pretty bad.

We have already begun the experiment in Scotland with the moderately good diet, and had hoped to do (b), *i.e.*, families on a bad diet in the West Riding. We find, however, that in the school we selected, the children are already getting milk, and a large proportion of the children are already getting cod liver oil. These bring the poor diet up to the level of the fairly good diet, and make that district unsuitable for our purpose. I think, however, it would be interesting to do a dietary survey of some of these families and a clinical examination of the children by our method, and compare the results with some other districts where the children are not getting so much milk and cod liver oil. This would give us some indication of the beneficial effects of the milk and cod liver oil.

With regard to the feeding test, however, we would need to have a district where the beneficial effects of your public health services were not so marked. Have you anywhere in your district—out-of-the-way mining villages—where the children are not getting so much milk and cod liver oil? Perhaps you would be good enough to ask one of your assistants to review the whole area, and let us know whether there is such a district in the West Riding.

I am very glad to have had the opportunity of spending a day with your staff. I have several times recently called attention to the excellent work being done by Public Health Departments, and to the marked improvement in health and physique of children which has followed, as a result of the better feeding and better care of mothers and children. It must be a matter of great gratification to you that the West Riding is taking such a very leading part in this modern aspect of public health work.

With kind regards,

Yours sincerely,

(Signed) J. B. ORR.

The intention of Sir John Orr was to select a group of children who were definitely ill-nourished, and who therefore were suitable subjects for an experiment for supplementary feeding, as a test for malnutrition. The experiment would have been to add to their diet those components of a satisfactory food intake which were believed to be necessary, and after a given period to compare (a) the rate of growth and development of these children with their previous growth and development, and (b) with the general standard of contemporary children, whose diet had been of a consistently good quality. The object of these comparisons would have been to demonstrate any "lag" in growth, due to a faulty diet, and the quickening of progress when the default of food was made good.

It will be seen from the letter reproduced, that Sir John Orr could not find an adequate number of children of the type necessary for the investigation: and while the scientists may regret the inability to carry out an important experiment of this character, it is gratifying to know that the provision of subsidiary nourishment in the West Riding schools has already removed most of the children from the lowest group in our official classification.

The Education Committee made arrangements during 1937 for the provision of meals at 94 centres, and below is given a summary of the number of meals supplied.

**MEALS.**

	Certified Issues		Total
	Free	For payment	
Dinners ... ..	403,493	8,272	411,765

Subsidiary nourishment in the form of milk and cod liver oil is also provided to children.

In cases where children are certified by the School Medical Inspectors as being undernourished, a scale of income is operative and in other cases the parents pay for the milk.

The total number of issues of milk and cod liver oil during the year is set out in the following table:—

#### SUBSIDIARY NOURISHMENT.

	Number of Issues.			Total No. of Issues.
	Certified		Non-Certified	
	Free	For Payment	For payment	
Milk ... ..	7,806,707	1,051,873	11,742,800	20,601,380
Cod liver oil ... ..	2,526,822	68,421	119,855	2,715,098
Total ... ..	10,333,529	1,120,294	11,862,655	23,316,478

Subsidiary nourishment was supplied at 1,014 departments.

## DENTAL INSPECTION AND TREATMENT.

REPORT BY B. R. TOWNEND, L.D.S., SENIOR DENTAL OFFICER.

**CENTRAL CLINICS.** In pursuance of the policy to establish permanently equipped dental clinics in districts where the size of school population warrants them, two such clinics have been instituted during the past year, one at Dunford House, Wath-upon-Deane, and one as an extension to the County Health Department at Wakefield. The provision of permanent and convenient equipment, in the form of pump chair, electric engine, fountain spittoon, adequate light, etc., is a great boon to both operator and patient, and naturally tends to improve both the quality and quantity of the work. It would be a great aid to the efficiency of the service if each dental officer had at least one of these focal clinics in his area, to which emergency cases could be sent, special cases treated, and general anaesthetics administered. As a future development at these clinics, orthodontic treatment, namely the straightening of irregular teeth, may be carried out. This last type of treatment is being recognised more and more as of very great importance in our efforts to secure and maintain healthy mouths.

**X-RAY.** The efficiency of the school dental service has been considerably increased during the past year, by the establishment of facilities for making radiographic examinations, where such are required. The X-Ray apparatus used is of a dual nature. It can be used in a portable form, easily transportable by car to wherever it is required, and at the Central Clinic at Wakefield a permanent form of stand is used, by which more accurate radiographs can be taken if necessary. It has been found, that although a certain amount of convenience has had to be sacrificed in the use of the portable equipment, the results obtained are very good, and quite adequate for the purposes for which they are required. Many problems of diagnosis, which would either have had to go unsolved, or would have necessitated working, literally, in the dark, have been made clear by this almost essential aid to modern dentistry. In addition to this, many unsuspected and undiagnosable conditions, that is, undiagnosable by any other means, have been detected. In one particularly interesting case, it was found that a child of nine had no less than 8 teeth, 4 of which were buried in the jaw, where normally there should have been 4. Such a service is a completely new departure in County School dental work, and its value will continue to grow, and cannot be over-estimated.

#### ACCEPTANCE OF DENTAL TREATMENT.

There is considerable lack of appreciation by the general public, of the essential difference between removal of pain, and incidentally sepsis from the mouth, by the extraction of teeth and the preservation of the teeth by conservative methods, i.e., fillings, etc.

It is unfortunate that the first type of treatment is the general and only conception of dentistry by the greater proportion of people, and this limited conception leads to a great deal of difficulty in the administration of a scheme which has, as its ideal, something more than the pulling out of teeth. It has been said by Mr. H. T. Pitts that conservative dentistry is like the purchase of furniture on the hire purchase system, in that the ultimate possession of the furniture is contingent upon the regular payment of the instalments. The necessity for continuity of treatment is most urgent, this necessity being analogous to the provision of after-care for the orthopaedic patient, which forms such an essential part of that scheme. The "casual acceptor," that is the child whose parents refuse to co-operate with the dental surgeon, accepting one year and refusing the next, according to their own misguided views as to whether treatment is required or not, is one of the most, if not the most, urgent problems of a dental scheme with high ideals. These children waste the time and patience of the dental officer to a tremendous extent, and the time wasted would be more profitably employed giving more frequent and extensive attention to the cases where co-operation exists. The fact must be faced that the proportion of parents and children who are prepared to co-operate completely and unquestioningly is comparatively small. If, for the sake of argument, we take a figure of 50% as an acceptance rate, it might well be that half the children accepting have been driven to the dentist by the goad of toothache, which would mean that only 25% were taking full advantage of the scheme. Every effort is being made to overcome this difficulty by educative means, and a few extracts from the reports of several dental officers will indicate that the problem coupled with the problem of the complete refuser is realised, and is a matter of some concern. Mr. Jackson suggests that a special form should be sent to the parents of all children over 9 years of age who have refused treatment twice in succession. This form would point out that these refusals have taken place, and that a further refusal might exclude the child from the scheme. Mr. Jackson continues: "I think

"it is high time that steps were taken to impress on these parents that the dentist too, had his 'views on this matter of refusal of treatment.'" Miss Sclare, who has been able to cover her area several times during the last two years is now able to discriminate between her regular acceptors and her casual acceptors. After three visits, the persistent refusers were definitely excluded from the scheme, and were informed that they would no longer be offered treatment, nor would any request for treatment be granted. A strict record was kept of all these cases, and on the fourth visit she "rigidly kept her promise not to extract the aching teeth from those children who had withstood all our efforts to persuade them to accept dental treatment previously. These cases I used as a practical object lesson to the other children. The results were most gratifying." Such a procedure may appear somewhat Spartan, but Miss Sclare amply justifies it by an experience at a school where she relaxed her rule. The headmistress of the school informed her that 40 girls who had previously refused treatment, were so impressed by the appearance of the mouths of the other girls who had had regular treatment, that they wished to be treated. Only 10 eventually came up for treatment, the rest changed their minds at the last minute. Of these, 8 had 4 or more unsavable permanent teeth, and what is most significant, there was a drop in the usual percentage of acceptances. The valuable practical demonstration of the value of the advantages of early and systematic dental treatment had been thrown away. Miss Sclare concludes by saying "it is my experience that the casual patient is the bad patient, and the one who spreads false and evil reports of the treatment carried out by the school dentist, and so adversely affects the acceptance rate of the district."

Miss Phillips arrives at a similar conclusion, saying that such children are often "troublesome and naughty . . . with the result that other children are upset, and persuaded not to accept treatment. Furthermore, I find that these children invariably refuse treatment again the following year."

Mr Kilvington and Mr. Hattan suggest the advisability of a scheme by which the parents could have the choice of accepting for the school life of the child:—

- (a) Regular inspection and treatment.
- (b) Casual treatment if time permitted, after the needs of group (a) children had been attended to.
- (c) No treatment to be provided by the Authority.

The idea would be to concentrate on the group (a) children, and endeavour to bring group (b) and (c) into the fold by educative means.

Such a scheme would suggest that dental treatment is a privilege, which depends upon the co-operation of the parent. It emphasises the fact that each visit to a clinic is a link in a chain, correlated with other visits, and by dividing the school population into two clear cut groups, one inside the scheme and the other outside, the working thereof would be simplified to a considerable extent, and in the course of a few years would produce a group of children treated according to our ideals, which would form a valuable object lesson to the group outside the pale.

Dental treatment of school children is a costly business. If, for no other reason than the financial aspect, means can be found to improve in any way the efficiency of the scheme, even if these means may appear at first sight to be somewhat drastic, they are justified. The child who merely uses the service of the dental surgeon as a convenience, wastes valuable time and money, and eventually contributes nothing but discredit to the scheme, in the shape of a crippled mouth.

#### FOLLOWING-UP OF REFUSAL CASES.

The policy of employing the dental nurses and attendants during school closures, in carrying out home visits in cases where treatment is refused, has been continued during 1937. The results are very similar to those obtained last year, 4,046 visits were made, and 1,476 or 36.5% of these parents were persuaded to accept the treatment offered. 671 parents undertook to obtain treatment privately, but the promise is more often honoured in the breach than in the observance.

It has been reported many times in this Report and elsewhere that a very large proportion of refusals of treatment is the result of lack of parental control, the child having the last word in the matter. On every hand this unfortunate "spirit of the times" is met with, and it is a difficult barrier to surmount.

One attendant reports:—"In the majority of cases the parents have refused because the boys had told them that they did not desire treatment. The parents were willing but would not exert themselves and let the boys have their own way. In two homes I was able to talk to the boys themselves and had not much difficulty in getting them to accept treatment, which indicates that more would accept if parents would only exert themselves."

Another dental attendant reports as follows:—"After analysing the reasons for their refusal, I have reluctantly come to the conclusion that many parents are over-ruled by the will of their children. Most of them definitely stated that although they were willing to have the necessary treatment carried out, they were perfectly aware that should their child get to know that they had signed the consent form, the child would refuse to attend school until the Dental Officer had left the district . . . the big main problem is fear—an insurmountable barrier until the population at large can be induced to think that the dental chair is no longer a place of torture."

The heritage from the past that dentistry is something akin to the Spanish Inquisition is still very strong in the public imagination, and progress in overcoming such deep rooted ideas must of necessity be slow, but the advancement of modern dentistry with its steadily improving technique for controlling pain will gradually eliminate this cause of refusal.

It may be of interest to note the fatalistic attitude taken up by one parent who stated that she was quite sure "that if anything wanted doing to her children's teeth the Lord would do it."

#### DENTAL TREATMENT IN SECONDARY SCHOOLS.

The work in the Secondary Schools has gone on smoothly throughout the year and it is pleasing to report that there is an ever increasing appreciation by masters, mistresses and pupils of the value of the treatment. Requests for conservative work are very common, and it is regrettable that in many cases these requests come too late when disease has made too much headway to allow of conservative treatment being given.

Specific recommendations have been received from the Boards of Governors of two Secondary Schools that a dental fitness certificate should be made a condition of a child being granted a scholarship and that such certificates should be presented regularly, the parent having the option of either accepting the service of the School Dental Officer or of engaging their own dentist. Such a scheme would materially reduce the amount of time which pupils have to spend receiving dental treatment; it would mean that many teeth could be conserved which are now lost; it would form a very useful weapon for propaganda towards increasing the acceptances of treatment in the elementary schools; and finally it would without a doubt improve the health and physique of the children in the secondary schools, thereby enabling them to benefit more fully from a secondary education. It is of interest to note that this practice is actually carried out by several Authorities including the London County Council where no child is passed as "fit" who requires dental treatment and a fitness certificate is a condition of the award of scholarships.

A development of some interest which has been completed during the year is an arrangement with certain Part III Authorities whereby these Authorities take responsibility for the dental treatment of children attending the Secondary Schools within their area, the West Riding Education Committee paying them for the treatment carried out on a "per caput" basis. This scheme obviates the incongruity of the West Riding Dental Officer establishing an extemporised clinic to treat the secondary school children when a fully equipped permanent clinic with a dental officer in the employ of the Part III Authorities is in operation for the elementary school children.

The following table gives a detailed analysis of the conservation work carried out during the year in the West Riding:—

	Elementary.	Secondary.
No. of 6-year molars conserved ... ..	21,175	2,402
No. of other teeth conserved ... ..	7,213	3,618
Total ... ..	28,388	6,020
Cement fillings ... ..	1,122	260
Amalgam fillings ... ..	16,940	2,565
Compound cement and amalgam fillings ... ..	11,030	2,194
Porcelain fillings ... ..	3,214	1,378
Total ... ..	32,306	6,397
Dressings ... ..	1,251	330
Silver nitrate treatments ... ..	540	29
Scalings and polishings ... ..	3,495	552

It will be seen from the foregoing figures that in the elementary schools 74.6% and in the secondary schools 39.9% of the teeth conserved are six-year molars.

## 6.—Infectious Diseases.

### (a) SCHOOL CLOSURE.

The following table shows the number of schools and departments which have been closed during the year, either by order of the Local Sanitary Authority on public health grounds or by the Education Authority, acting on the advice or with the approval of the School Medical Officer.

Disease.	Closed by Order of Local Sanitary Authority.			Closed by West Riding Education Authority.	
	Schools.	Depts.	Children under five.	Schools.	Depts.
Measles ... ..	19	7	—	1	—
Influenza ... ..	400	36	—	1	—
Mumps ... ..	4	4	—	—	—
Chicken Pox ... ..	—	1	—	—	—
Scarlet Fever ... ..	6	1	—	1	—
Whooping Cough ... ..	1	4	—	—	—
Diphtheria ... ..	2	4	—	—	—
Poliomyelitis ... ..	1	—	—	—	—
	433	57	—	3	—

The Memorandum on Closure of and Exclusion from School, issued by the Ministry of Health and the Board of Education, is followed as far as possible by the School Medical Officer in advising as to the action necessary in times of epidemic.

From the foregoing table it can be seen that in only three instances was school closure recommended to the West Riding Education Authority at the direct instigation of the School Medical Officer. Nearly all the orders for closure of schools or departments were made at the instigation of the Local Sanitary Authorities, after consultation with the School Medical Officer.

By far the largest number of closures occurred in the first quarter of the year due to a widespread epidemic of influenza. Such an epidemic is vastly different from the other common epidemics of infectious conditions as it affects all age-groups to a much greater extent and so causes considerable disorganisation of school services.

As the greater part of the West Riding Education Authority Area is composed of rural and small urban populations it was felt to be in the best interests of those communities affected severely by epidemics of influenza to agree to school closure for a short period.

Epidemics of measles again caused a number of schools, mostly in rural areas, to be closed for short periods.

#### DIPHTHERIA IMMUNISATION.

The number of children who were immunised against diphtheria during the year 1937 is shown below:—

Sanitary District.	No. of children immunised.	Sanitary District.	No. of children immunised.
<b>URBAN DISTRICTS:—</b>			
Adwick-le-Street	380	Oxenhope	36
Aireborough	301	Pontefract B.	15
Altofts	22	Pudsey B.	57
Baildon	2	Queensbury and Shelf	68
Barnoldswick	33	Ripon City	5
Batley B.	313	Ripponden	13
Bentley-w-Arksey	173	Rothwell	38
Bingley	4	Saddleworth	16
Brighouse B.	246	Selby	37
Castleford	128	Shipley	155
Colne Valley	6	Silsden	36
Conisbrough	3	Skipton	66
Cudworth	23	Sowerby	16
Darton	165	Spenborough	1
Dearne	382	Stanley	266
Dodworth	32	Swinton	94
Elland	10	Wath-upon-Deane	41
Emley	14	Whitley Upper	17
Featherstone	282	Whitwood	1
Flockton	3	Wombwell	284
Goole B.	270	Worsborough	149
Harrogate B.	74		
Haworth	110	<b>RURAL DISTRICTS:—</b>	
Hebden Bridge	120	Barnsley	18
Heckmondwike	148	Bowland	52
Hemsworth	129	Doncaster	728
Holmfirth	109	Goole	105
Horbury	63	Gt. Ouseburn	3
Horsforth	132	Hemsworth	166
Hoyland Nether	286	Keighley	6
Ilkley	13	Kiveton Park	5
Keighley B.	3	Knarborough	40
Kirkburton	33	Pontefract	278
Kirkheaton	1	Ripon and Pateley Bridge	17
Knarborough	86	Rotherham	236
Knottingley	67	Selby	7
Lepton	35	Settle	189
Maltby	139	Skipton	180
Meltham	58	Tadcaster	256
Mexborough	91	Thorne	350
Mirfield	86	Todmorden	1
Morley	10	Wakefield	98
New Mill	11	Wetherby	8
Normanton	21	Wharfedale	80
Oakworth	77	Wortley	105
Ossett B.	58		
Otley	4		
			9,095

## 7.—Following-up.

This work is undertaken by the school nurses who are supplied with a list of children found by the School Medical Inspectors to be suffering from defects. The nurses interview the parents and give advice regarding the treatment required.

There are 6 nurses who devote their whole time to school nursing, 117 health visitors who devote two-fifths of their time to school work and 69 district nurses who give a proportion of their time to school nursing and health visiting.

The duties carried out under the heading of "School Nursing" comprise the following.

### AT SCHOOLS.

- (a) Systematic cleanliness surveys.
- (b) Investigations of outbreaks of infectious disease.
- (c) Following up cases to see that treatment is being given, or has been carried out; that spectacles are worn regularly or are repaired if necessary, and that special exercises, etc., are carried out.

### AT CLINICS.

- (a) Attendance with the Medical Officer at the Treatment Clinic.
- (b) Attendance at the Clinics on specified mornings to treat minor ailments.

### VISITING HOMES.

- (a) Following-up children whose defects have not been remedied.
- (b) Interviewing parents concerning defects found; such as uncleanness, bad clothing, etc.
- (c) Ascertaining cause of irregular attendance at Clinics.

A summary of the work of the School Nurses is shown below:—

(1) Total number of visits paid to Schools	...	...	...	...	...	6,156
(2) Total number of examinations of children	...	...	...	...	...	420,722
(3) Total number of individual children found unclean	...	...	...	...	...	3,353
(4) Total number of visits paid to homes	...	...	...	...	...	31,327

## 8.—Medical Treatment.

The various schemes of medical treatment provided for school children by the County Council cover a very wide field as shown by the following table:—

- (1) School Clinics for minor ailments.
- (2) School Oculist.
- (3) School Dentist.
- (4) Ultra-violet Ray Clinics.
- (5) Aural Clinics.
- (6) Open Air Schools.
- (7) Sanatoria.
- (8) Hospitals for surgical tuberculosis.
- (9) Special hospital schools for crippling defects.
- (10) Grants to hospitals for operative treatment of tonsils, adenoids, ear disease and squint.

The grant to hospitals is £2,000 annually and this sum is allocated to the Voluntary Hospitals in proportion to the cases which are treated under the County's scheme. The total number of children treated under the County's scheme in 1937 was 2,747, made up as follows:—

Tonsils and Adenoids	...	2,493
Squint	...	76
Middle Ear Disease	...	178
Total	...	2,747

A certain amount of orthopaedic work is being undertaken in the West Riding and the after care of these patients devolves on the school medical inspectors and health visitors.

The cases of errors of refraction treated by the Oculists (see Table IV) are about the same as last year. The Oculists examined in addition 785 adult persons under the Blind Persons Act, during the year.

The following classes of cases have been examined by the County Oculists:—

- (1) School children referred by school medical inspectors.
- (2) Children under school age referred from Child Welfare Centres (this co-operation is very much encouraged, to secure early treatment of strabismus).
- (3) Secondary School children, most of them being children who have been awarded scholarships and are about to enter a Secondary School.
- (4) Children who are candidates for Schools for the Blind, or for special schools. These are high myopes and partially blind.
- (5) Children who are leaving such institutions and entering upon training.
- (6) Adult applicants for registration under the Blind Persons Act.
- (7) Adults in Public Assistance Institutions.
- (8) Mentally Defectives in Institutions.

## AURAL CLINIC, DONCASTER.

REPORT BY MR. H. M. PETTY (AURAL SURGEON).

I beg to make the following report on the work done by the Aural Clinic at Edenfield, Thorne Road, Doncaster, for the past year.

The number of children attending the Clinic is less than the previous year which I think can be accounted for by the large number of cases awaiting treatment during the initial twelve months following the inauguration of the Clinic.

The results of the treatment of discharging ears continue to be highly satisfactory both from my own observation and the reports of the school nurses.

Parents are generally very willing for their children to attend the Clinic and in many cases now endeavour to attend with the child.

I should like to place on record the conscientious manner in which the school nurses have carried out the treatments as borne out by the good results obtained.

A total of 464 children attended the Clinics as against 583 attendances in 1936.

## ULTRA-VIOLET RAY TREATMENT.

The Clinics which have been established by the County Council are at Hemsworth, Conisborough, Holmfirth, Swinton and Sowerby Bridge.

Arrangements have also been made with the Bingley and Wombwell Urban District Councils, the Clayton Hospital, Wakefield, and the General Infirmary at Leeds.

The reports of the medical officers in charge of the Clinics are given in the following pages:—

### BINGLEY.

REPORT BY DR. O. T. WADE.

During the year 1937, the attendance of cases at the Bingley Sunlight Clinic has been as follows:—

Number of Meetings.	135
Number on Register.	126
Total number of attendances.	3,041
Total number of treatments.	3,590
Average attendance.	22.5

Good results have been obtained in the treatment of Anæmia, Debility, and Glands of the Neck. Other conditions such as chronic coughs have been moderately successful.

Attendance has had to be broken in many cases because of infectious diseases, skin diseases, and colds.

Patients were sent from the schools, private doctors and the Infant Clinic for a course of the sunlight.

Massage and exercises were given for postural defects, and results of Infantile Paralysis.

### WOMBWELL.

REPORT BY DR. J. C. PICKUP.

The wave of enthusiasm which made artificial sunlight so popular a few years ago, has spent itself. Formerly curiosity prompted many parents to bring their children for treatment, but this is no longer true. Children are now brought because their parents—after previous experience—know of the good it will do them. One no longer hears extravagant claims about it but experience is gradually revealing its use, because there is no doubt that in suitable cases it is of immense value.

During the past year, many of the parents have asked for a further course of treatment for their children, as they have seen how much good they have derived from it.

During 1937, 97 children were treated at the centre (45 boys and 52 girls). Out of these only 6 did not gain weight whilst under treatment.

Most of the children treated were suffering from Debility and this included children not normally gaining weight, and children suffering from the results of illness, or poor home conditions, as well as children with a pre-disposition to tubercular affections. The average gain in weight in these cases was higher than the normal gain for children of a corresponding age. Improved appetite, with improvement in general vitality and sleep, were again features noticed by the parents in these cases.

The experience at this clinic has been that in cases of Bronchitis, artificial sunlight is of definite value. At the beginning of the year 2 new Alpine Hanovia sun lamps were installed at the Clinic, and during the year an Infra-Red (Sollux) Lamp together with a dark element were purchased.

## HEMSWORTH.

## REPORT BY DR. D. C. RICE.

During the year 147 clinics were held, the doctor being present on 41 occasions. 201 cases were referred for treatment of whom 58 were still in attendance at the year end. 143 cases were discharged, of which 23 left of their own accord, giving a balance of 120 cases, in respect of whom clinical results can be assessed. Below is a resumé of the results of treatment:—

Disease	No. of Cases	Results
Suppurative Cervical Adenitis	2	Both healed well
Abdominal Tuberculosis	1	Much improved
Enuresis	2	No change in condition
Recurrent Colds	1	Cured
Chronic Bronchitis	3	1 much improved 2 no change in condition
Conjunctivitis	1	Cured
Warts	1	No change in condition
Eczema	1	Cured
Alopecia	2	Both cured
Recurrent Boils	2	Both cured
Impetigo	4	4 cured
Sub-acute Chorea	8	8 cured
Sub-acute Rheumatism	12	7 cured 3 improved 2 No change in condition
Lack of Progress (Infants)	12	12 very great improvement
Rickets	7	5 much improved 2 slightly improved
Knock Knees	1	Slight improvement
Debility	60	30 cured 19 improved 11 poor results

## CONISBOROUGH.—REPORT BY DR. D. C. RICE.

During the year 115 clinics were held, the doctor being present on 39 occasions. 89 cases were referred for treatment of which 28 were still in attendance on December 31st. 61 cases were discharged, and of these 12 left of their own accord, thus results can be assessed in 49 cases. Below is a resumé of the results of treatment:—

Disease	No. of Cases	Result
Marasmus	1	Much improved
Recurrent Boils	1	Cured
Chronic Bronchitis	1	Much improved
Paresis of Legs	1	Cured
Abscess	1	Healed well
Lack of progress (Infants)	2	Both became normal
Bow Legs	1	Slight improvement
Rickets	2	Both much better
Alopecia	1	Cured
Cervical Adenitis (not Tubercular)	1	Cured
Cervical Adenitis (Tubercular)	3	1 cured 1 improved 1 no change in condition
Chorea	7	4 cured 3 improved
Eczema	1	Cured
Nervous Debility	1	Much better
Debility	25	12 cured 10 much improved 3 little or no result

## HOLMFIRTH.—REPORT BY DR. MURIEL WILBY.

The Holmfirth Sun Ray Clinic was open for 5 months during 1937, two sessions being held weekly during that time. Thirty-five children made 445 attendances.

Seven of those discontinued for various reasons before sufficient attendances were made. Five cases were sent by the child's private Doctor.

The main type of case treated was the debilitated, underweight or anæmic child. Of 22 children treated for debility nearly all derived considerable benefit:—

- 1 lost weight;
- 3 no gain in weight.

The smallest gain of the others was 7-oz. and the largest 2½-lbs.

Two children sent because of frequent attacks of bronchitis did well.

Two cases of Cervical Adenitis were treated. One had operation for excision of gland during its course of treatment, and the other showed considerable improvement.

**SOWERBY BRIDGE.—REPORT BY DR. JANET M. MACMILLAN.**

This treatment was commenced in 1936, at first with one lamp, later with two lamps which has made it possible to treat twice the number of children in the same time. The treatment is given on three afternoons per week, the length of time of treatment varying considerably according to the condition treated and the response to treatment.

The types of cases treated have been for the most part (1) the rather debilitated, anæmic-looking chronic catarrhal child, often so unsatisfactory to deal with short of complete change of home and surroundings, such as is possible with residential open-air school treatment (2) cases of enlarged glands with and without septic foci in teeth, tonsils, etc.

(3) Rheumatic cases.

(4) Skin cases.

Many of the children showed more than one defect, e.g., the frequency of bronchitis and asthma in a debilitated child often also with glands in the neck. Such cases in the classification are grouped under the heading of the defect which seemed to be the primary one, or the one causing most trouble.

One remarkable feature in the majority of the cases treated has been the increase in liveliness, happiness and mischievousness noticeable at quite an early stage in the treatment. Mothers have frequently volunteered the information that their children are eating much better and sleeping much better since commencing the treatment and this curiously enough in cases which present very little obvious improvement in appearance, weight, condition of glands and so forth.

Cases are referred by the local practitioners, referred from school inspections and clinics, etc., and are sometimes brought by the parents to see if they might have sunlight treatment as they have seen improvement in other cases undergoing such treatment.

I am first giving the children who completed their course of treatment during 1937:—

**41 cases of bronchitis** including **10 asthmatics**, all chronic in type, were treated. These can be grouped under the following headings:—

Improved.	Greatly improved.	No appreciable difference.	Too short period of treatment.
10 (incl. 2 asthmas)	22 (5 asthmas)	5 (3 asthmas)	4

**Rheumatism.**—8 cases were treated, three of these had definite valvular lesions.

All these cases showed remarkable improvement. One of them with mitral regurgitation has been under observation for four or five years and I have never known him so well as he is now. He is a thin pale child, but now able to be active and mix with other children and get about in a way that I certainly had not thought possible a few years ago. His improvement is being maintained up to date.

Three of the cases were suspected of being early choreas showing in addition to throat trouble very slight choreiform movements. None have developed typical chorea, and all 3 are greatly improved.

**Glands.**—8 cases were treated for enlarged glands with the following results:—

Cured	Improved	Too short treatment
3	3	2

**Cases of General Debility and Anæmia, 35.**

Improved	Greatly improved	Too short treatment	Showing little apparent change
6	13	7	9

Of these 9 cases showing no apparent change in condition the parents think they are on the whole better.

Several other oddments of cases were treated, the most interesting one being a baby with T.B. peritonitis. This child first began treatment 2/12/36. She was so ill that I was almost afraid to do anything. She had been seen by the family doctor and also by the consultant tuberculosis officer, and very little hope was given. She certainly seemed an utterly hopeless case, with chest full of moist rales, glands in the neck, dreadful wasting and a great distended abdomen. The mother was in a sanatorium most of the time of time of treatment, the baby being brought to the clinic by the grandmother. She is now a pretty normal little child except that she is still underweight for her age. Her colour is good; she is bright and active and walking well, and limbs "firming up" nicely. The family doctor took some convincing that she was the child he had sent for U.V. treatment a year ago.

2 cases of alopecia were improved but are not cured.

**1 chronic impetiginous condition of the scalp and ears** which has been troublesome for years cleared up entirely except for slight dryness behind the ears.

1 case of psoriasis became greatly improved during treatment.

1 case of Raynaud's Disease in a nervous debilitated child improved so much that it has been possible to have the lad operated on for undescended testicles. This has been a very interesting case and is likely to remain under observation for some years on account both of the circulatory disturbances and the mental condition and nervous instability.

1 case of allergic eczema and bronchitis cleared up entirely during the year and has kept clear so far.

Other cases which continue under treatment are as follows:—

Rheumatic Cases	...	6	5 definitely improved. 1 still too short time to say.
Glands	...	...	5 improving. 3 not yet showing change, but only been coming short time.
Debility and Anæmia	...	8	All improving generally. 1 also has alopecia.
Chest Conditions	...	7	1 with slight bow legs. 6 greatly improved. 1 not yet much change.

I certainly feel that this method of treatment has proved of very great value, and as time goes on we may be able to select cases with a greater degree of certainty as to which are likely to improve.

I have been particularly struck by the rheumatic cases and their ready response to the treatment.

Amongst the asthmatic cases I found none where the condition was aggravated by the treatment, though I was at first on the look-out for any "flare-up" among these cases.

Among the cases that for various reasons attended too short a period, none were stopped by me for any untoward effect and only two were stopped by the parents because they were said to have got cold. Most of them were due to genuine difficulty in maintaining the treatment, 2 coming from Hebden Bridge and 2 from Mytholmroyd. In others the children had moved, or the parents started work and were unable to bring the children for the treatment.

#### WAKEFIELD ULTRA-VIOLET RAY CLINIC (LOCALISED THERAPY).

REPORT BY DR. J. WOOD WILSON.

Towards the end of the year 1936 a clinic was established in the County Health Department, Wakefield, in connection with the acquisition of a Kromayer Lamp. This lamp was obtained primarily for the purpose of treating diphtheria carriers but the number of such cases within convenient travelling distance of the clinic proving very small, other conditions likely to benefit from local ultra-violet treatment were also dealt with.

**DIPHTHERIA CARRIERS.**—The total number treated at the clinic during 1937 was six, of which four were nasal and two aural carriers. Treatment consisted of local irradiation with the appropriate applicator for periods of two to ten minutes, usually twice per week.

Swabs were taken for control purposes of the secretions before and after treatment.

Three patients (carriers of the gravis type), were discharged cured after five consecutive negative swabs followed by a month's rest without treatment, and a sixth negative swab. Two patients ceased to attend before completion of the tests and one was referred back to the Aural Clinic with Ozæna.

The average duration of treatment including the tests for cure in the three successful cases was about four months.

**OTORRHOEA.**—Thirty children with chronic ear discharges were treated during the period under review.

Treatment consisted of local irradiation for two to ten minutes after cleansing, and the application of a few drops of Mercurochrome 2%. This treatment was generally given twice weekly for an average period of 4 to 5 months.

In six patients it was considered that cure had resulted and of the remainder all showed considerable improvement.

One case of Impetigo responded quickly to four half-minute exposures of the lamp.

There appears to be an assured future for the use of local ultra-violet treatment in many common affections, but it is realised that the numbers of patients dealt with in this report are too small to allow of definite conclusions being drawn.

#### CHILD GUIDANCE.

A Child Guidance Clinic was established by the Sheffield Education Authority during 1937 for the treatment of children who present problems of behaviour, or who exhibit any peculiar difficulties in school work.

The West Riding Education Committee undertook to pay a proportion of the annual cost of this Clinic in return for the treatment of children in the South and South-West portions of the County.

Below is a short report by **Dr. F. J. S. Esher**, the Medical Director of the Clinic, on the work done during the year:—

The Child Guidance Clinic which was opened in Sheffield on August 23rd, 1937, serves five Authorities, the Corporations of Sheffield, Barnsley, Doncaster and Rotherham and the County Council of the West Riding of Yorkshire. The staff consists of one (man) psychiatrist, one (woman) psychologist, and two (women) social workers, all of whom have been specially trained for the work. One clerk (woman) is employed.

Application for treatment of children in the clinic is made to the School Medical Officer, but children of pre- and post-school age are accepted.

The aim of the Clinic, to quote from the report of the Chief Medical Officer of the Board of Education (1936), is to give "skilled psychological advice on children who present problems of 'behaviour or of disordered personality, or even on those children who have peculiar difficulties in 'school work which are not due to mere dullness of mental defect.'"

We are at present dealing with the following problems:—nervousness, baseless fears and anxieties, peculiar mannerisms, asthma of psychological origin, migraine, travel sickness, temper tantrums and screaming, extreme overactivity, sex difficulties, speech difficulties, feeding difficulties, persistent incontinence, lying, stealing, truancy and wandering from home, cruelty to animals or other children, disobedience, specific educational disabilities not due to dullness, in arithmetic, spelling, reading, etc.

Such problems cannot be solved in one or two interviews, and the treatment should therefore extend over a period of months. With the children living at a great distance from the Clinic, treatment is hampered by the expense and inconvenience of travelling.

We have been exceedingly busy ever since the opening of the Clinic. 194 children have been referred in all, of which 56 are from the West Riding. (Until 31/12/37.)

In conclusion we should like to say how much the co-operation of our colleagues in the Education Service has been appreciated.

### School Clinics.

The following is a list of School Clinics established by the County Council, all of which, with the exception of those marked \* being in conjunction with the Infant Welfare Centres. The Clinics are chiefly held in the mornings at 9-30 by the School Nurses, who refer any cases requiring medical advice to the Medical Officer of the Welfare Centre.

Name and Address	Day of Meeting	Average Attendance
Adwick-le-Street, Woodside Methodist Chapel, Woodlands	Monday, Thursday	23
Airedale, Holy Cross Hut	Monday, Friday	44
Armthorpe, Miners' Welfare Institute	Monday, Thursday	33
Allerton Bywater, Miners' Welfare Institute	Monday, Thursday	8
Askern, Baptist Chapel, Sutton Road	Tuesday	20
Baildon, Methodist Sunday School.	Wednesday	9
Bentley, Welfare Pavilion	Wednesday, Friday	19
Bramley, Miners' Welfare Hall	Wednesday	15
Birdwell, United Methodist Church, Chapel Street	Wednesday	8
Chapelton, Miners' Welfare Pavilion	Wednesday, Friday	6
Carcroft, Presbyterian Sunday School	Thursday	32
Catcliffe, Rotherham Road	Monday	23
Conisbrough, Army Hut, Balby Street Council School	Mon., Tues., Wed. (Afternoons) Thurs., Fri. (Mornings)	61
Conisborough Upper, Miners' Welfare Institute	Monday	15
Cortonwood, Methodist Church	Thursday	20
Crofton, Council School	Monday	15
Cudworth Wesley Hall	Wednesday, Friday	18
Dalton, Primitive Methodist Chapel	Wednesday, Friday	26
Darfield, Methodist Sunday School, Barnsley Road	Wednesday, Friday	14
Darton (Staincross) Wesleyan Sunday School, Barnsley Road, Mapplewell	Thursday	19
Darton (Gawber) Adult School	Tuesday	17
Dinnington, Wesleyan Sunday School	Tuesday, Friday	14
Dodworth, Mechanics' Institute, High Street	Tuesday, Thursday	17
Dunscoft, Church Hall	Tuesday, Friday	52
Ecclesfield, Gatty Memorial Hall	Thursday	17
Elland, Drill Hall, Jepson Lane	Wednesday	24
Edlington, New Church Hall	Tuesday	28
Earby, Old Grammar School	Wednesday	3
Ferrybridge, Wesleyan Chapel	Thursday	17
Garforth, St. Mary's Hall	Monday	15
Guiseley, Baptist Church, Oxford Road	Thursday	14

Name and Address	Day of meeting	Average Attendance
Glasshoughton, St. Paul's Institute	Monday, Wednesday, Friday	24
Golcar, Council Offices	Wednesday	7
Greetland, Clay House	Tuesday, Thursday	16
Haworth, Hall Green Baptist School	Tuesday, Friday	13
Hebden Bridge, Old Secondary School	Wednesday, Friday	18
Hemsworth, Army Hut, West End Council School	Every morning	10
Hemsworth (Fitzwilliam) Church Hut	Monday, Wednesday	67
High Green, Methodist Chapel Sunday School	Tuesday	26
Horbury, Wesleyan Sunday School	Monday, Friday	6
Hoyland, Miners Welfare Institute	Tuesday, Friday	23
Hoyland Common, Wesleyan Chapel	Thursday	10
Holmfirth, Town Hall	Thursday	4
Horsforth, St. Margaret's Hall	Wednesday	8
Kippax, Wesleyan Sunday School	Tuesday (Thursday, alternate)	21
Kirkburton, Council Offices	Tuesday	1
Knaresborough, Fysche Hall Cottage, Isles Lane	Monday, Thursday	19
Knottingley, Secondary School, Chapel Street	Monday, Wednesday, Friday	17
Lepton, Liberal Club	Tuesday, Thursday	8
Slaithwaite, United Methodist Sunday School, Carr Lane	Wednesday Friday	14
Maltby, Congregational Chapel, Carlyle Road	Monday, Thursday	30
Meltham, Baptist Church	Tuesday	23
Mirfield, Ings Grove	Monday, Friday	11
Marsden, Conservative Club	Thursday	4
Milnsbridge, Bungalow, 93, Manchester Road	Tuesday	13
Normanton, Park Pavilion	Monday, Wednesday	15
Otley, Primitive Methodist Chapel, Station Road	Thursday, Friday	18
Oulton, Village Institute	Thursday	18
Outwood, Church Institute	Tuesday, Friday	9
Penistone, Shrewsbury Methodist Chapel	Monday, Wednesday, Friday	18
Queensbury, Cricket Pavilion	Monday	13
Rawmarsh Spiritual Temple, Ashwood Road, Parkgate	Tuesday, Friday	4
Ripon City, Alma House	Monday, Tuesday	46
Royston, Wesleyan Sunday School	Wednesday, Friday	22
Rossington, United Methodist Church	Monday, Thursday	12
Saddleworth, Mechanics' Institute, Uppermill	Wednesday, Friday	38
Selby, Museum Hall, Park Street	Tuesday, Thursday	4
Sharlston, St. Luke's Hall	Wednesday	24
Stainforth, Wesleyan Sunday School, Church Road	* Tuesday, Friday	10
Silsden, Ambulance Station, Kirkgate	Tuesday, Friday	24
Skipton, Wesleyan Methodist Sunday School	Tuesday	11
Water Street	Wednesday, Friday	10
Stocksbridge, Mozart House, Manchester Road, Deepcar	Tuesday, Friday	28
Sowerby Bridge, Allan House	Tuesday, Thursday	16
Sprothorough, New Council School	Monday	3
Stannington, Underbank Chapel	Wednesday	12
Swinton, Rock House	Monday, Thursday, Friday	23
Stanley, Zion Congregational Chapel	Monday	14
Tadcaster, Shann House	Tuesday, Friday	3
Thorne, Temperance Institute	Monday, Wednesday	29
Thorne (Moorends) Wesleyan Chapel	Tuesday, Thursday	26
Thurcroft, Wesleyan Chapel	Monday, Thursday	22
Thurnscoe, Central Hall	Monday	35
Wath-on-Dearne, Dunford House	Monday, Wednesday	14
Whitwood, Memorial Hall	Thursday	16
Wath-on-Dearne, West Melton, Wesleyan Chapel	Tuesday	10
Worsborough, Wesleyan Sunday School (Dale)	Monday, Wednesday	15
Yeadon, Town Hall	Tuesday, Thursday	13
*Bingley, Technical School	Friday	26
*Bolton-on-Dearne, Highgate Council School	Monday, Friday	20
*Castleford, Wesley Street	Tuesday, Wednesday	49
*Featherstone, Tradesmen's Club	Every morning	25
*Goole, Dunhill Road	Every morning and Thursday afternoon	53
*Heckmondwike, Green Side	Monday, Wednesday, Friday	11
*Kilnhurst, Church Hall	Every morning	16
*Mexborough, New Evening School	Thursday	26
*Robin Hood, Infants' Council School	Every afternoon	14
*Rothwell, New School Clinic	Friday afternoon	13
*South Elmsall, Miners' Institute, Moorthorpe	Friday morning	23
*Stourton, Council School	Tuesday, Friday	31
*Wombwell, Free Library	Wednesday, p.m.	13
*Wombwell, Jump Council School	Monday p.m., Tuesday a.m., Wednesday p.m.	26
	Thursday a.m. Friday p.m.	

\*School Clinics only.

**List of Special Schools and Special Classes to which Defective children  
are sent and the types sent to each school:—**

Name of School	No. of W.R. children in attendance on 31st December, 1937
<b>DELICATE CHILDREN.</b>	
Children's Sanatorium, Nr. Holt	2
Mitchell Memorial Home, Rawdon (W.R.C.C. School)	21
West Kirby Convalescent Home, Nr. Liverpool	28
Oak Bank Open Air School, Sevenoaks	37
Brighthouse Open Air School	—
Wombwell Open Air School (W.R.C.C. School)	60
Leasowe Children's Hospital	—
York Fulford Road Special School	1
	<b>149</b>
<b>MENTALLY DEFECTIVE CHILDREN.</b>	
Nottingham, Hopewell Hall Special School	1
Pield Heath House, Middlesex	1
Leeds, Armley Park Special School	1
Northamptonshire Home for Girls	2
Knotty Ash Horticultural Special School, Nr. Liverpool	3
Allerton Priory R. C. Special School, Liverpool	1
Oldham, Chaucer Street Special School	2
Bradford, Margaret McMillan Special School	1
York Fulford Road Special School	—
Halifax, Quarry House Special School	—
Leeds, Hunslet Hall Road Special School	1
Clapham Park School, London, S.W.4.	1
Nottingham, Sutton Fields House Special School	1
Lichfield, Beacon School	1
	<b>16</b>
<b>BLIND AND PARTIALLY BLIND CHILDREN.</b>	
Leeds, Blenheim Walk Home	36
Henshaw's Institution for the Blind, Manchester	2
Royal Blind School, Sheffield	18
Fulwood Homes for the Blind, Preston	3
Bradford, Daisy Hill Myopic School	1
Southport Sunshine Home for Blind Babies	—
Oldham, Gower Street	2
Court Grange Special School, Abbotskerswell, Devon	3
	<b>65</b>
<b>DEAF CHILDREN.</b>	
Penn Rayners Residential School for the Deaf	1
Yorkshire Institution for the Deaf, Doncaster	100
Leeds Blenheim Walk Home for the Deaf	25
Royal Schools for the Deaf, Manchester	14
St. John's Institution for the Deaf, Boston Spa	5
Oldham, Gower Street Special School	2
Derby, Royal Institution for the Deaf	1
	<b>148</b>
<b>CRIPPLED CHILDREN.</b>	
Bethesda Home, Manchester	—
Leasowe Children's Hospital	17
Heritage Craft Schools, Chailey	19
St. Michael's Orthopaedic Hospital, Clacton-on-Sea	1
Heswall Hospital, Liverpool	11
Heatherwood Hospital, Ascot	1
Marguerite Home, Thorp Arch	—
Children's Rest, Sefton Park, Liverpool	3
St. Vincent's Orthopaedic Hospital, Pinner, Middlesex	1
St. Roses R. C. Special School, Stroud	—
Halliwick Cripples Home, Winchmore Hill, London	4
Yorkshire Children's Hospital, Kirby Moorside	2
Lister Lane, School for Cripples, Bradford	—
W. J. Sanderson Home, Gosforth	3
Ethel Hedley Hospital, Windermere	1
Bradstock-Lockett Hospital, Southport	13
	<b>76</b>
<b>EPILEPTIC CHILDREN.</b>	
Maghull Home for Epileptics	5
Lingfield Epileptic Colony, Surrey	4
St. Elizabeth's Home, Much Hadham	1
	<b>10</b>

## 9.—Open-air Education.

### WOMBWELL OPEN-AIR SCHOOL, 1937.

REPORT BY DR. JEAN V. KIRKWOOD.

The school has accommodation for sixty children and both boys and girls are admitted. The ages average from 7—14 years.

During the last year the children have been drawn from a wider area than previously, but the number has been limited owing to the difficulties of transport.

#### AREA SERVED.

The children attending the school at the end of the year came from the following areas:—

Wombwell, Hemingfield and Jump	27
Wath	12
Bolton-on-Deane	4
Hoyland and Elsecar	5
Mexborough	1
Brampton	3
Darfield	2
Goldthorpe	2
Swinton	2
Tannersley	1
Worsborough Dale	1
	<hr/> 60 <hr/>

#### GENERAL ROUTINE.

The children start work at 9-0 a.m. and at 9-30 a.m. they have a bottle of milk and a ration of cod liver oil. They cease work at 11-40 a.m., have an interval for play and then receive a hot dinner. From 12-30 p.m. till 1-15 p.m. they rest and at 3-30 p.m. before leaving, they receive another bottle of milk. Every child has a shower bath once a week.

#### TEACHING STAFF.

During the past year the teaching staff was increased and there are now three teachers.

#### LIGHT TREATMENT.

The ultra-violet light treatment provided by the Wombwell Urban District Council has been of great benefit and a considerable number of children from the school have received treatment at the centre.

#### ASCERTAINMENT OF DEFECTS.

The children are frequently inspected by the School Medical Inspector, the School Dental Officer and the School Nurse, so that any defects receive immediate attention.

#### RESULTS OF ATTENDANCE.

The children usually show a marked improvement in health after a short stay at the school. Not only do they increase in weight but they appear much more alert mentally and show more social activity. Quite a number have been able to leave after only a short stay as they had improved so greatly.

#### PHYSICAL TRAINING.

The physical training is much the same as in ordinary schools but slightly simplified. The children have about 20 minutes physical training a day. Nine children have been unable to take part owing to their poor state of health.

#### GARDENING.

A considerable amount of gardening has been done by the children during the year.

#### INCIDENTAL DISEASE.

There have been 10 cases of infectious disease. One girl was absent for several months with keratitis. There were three cases of scabies.

#### TABULATED RESULTS OF TREATMENT.

29 children left the school during 1937. 16 girls and 13 boys. 13 children left the school on attaining the age of 14 years.

GIRLS. 7.

- |   |  |
|---|--|
| 1. Only at school a few months.         | Debility improved.                                   |
| 2. Gained 14½-lbs. in 2 years.          | Glands cured, spectacles provided.                   |
| 3. Gained 41½-lbs. in 4 years 8 months. | Debility cured.                                      |
| 4. Gained 45-lbs. in 4 years 8 months.  | Chronic bronchitis much improved.                    |
| 5. Gained 17½-lbs. in 2 years.          | Anaemia improved.                                    |
| 6. Gained 27½-lbs. in 3 years 1 month.  | Anaemia—refused treatment for teeth for a long time. |
| 7. Gained 36½-lbs. in 2 years 9 months. | Debility improved.                                   |
- Average gain 31-lbs. Average stay 3 years 4 months.

Boys 6.

- |   |  |
|---|--|
| 1. Gained 14½-lbs. in 3 years.          | Debility improved.   |
| 2. Gained 20½-lbs. in 4 years 5 months. | Debility improved. Refused to have tonsils out or get new glasses. |
| 3. Gained 21½-lbs. in 5 years 1 month.  | Anaemia and glands improved.                                       |
| 4. Gained 43½-lbs. in 4 years 9 months. | Glands improved.   |
| 5. Gained 8-lbs. in 1 year 6 months.    | Debility and anaemia improved.                                     |
| 6. Gained 32½-lbs. in 4 years 1 month.  | Debility and anaemia much improved.                                |
|   | Glasses provided.  |

Average gain 23½-lbs. Average stay 3 years 7 months.

16 children left the school during the year as cured or greatly improved.

GIRLS 9.

- |   |                                     |
|---|-------------------------------------|
| 1. Gained 9½-lbs. in 2 years 6 months.  | Debility cured.                     |
| 2. Only at school a few months.         | Debility and glands cured.          |
| 3. Gained 20½-lbs. in 3 years.          | Debility and blepharitis cured.     |
| 4. Gained 12½-lbs. in 3 years.          | Old T.B. hip cured.                 |
| 5. Gained 18½-lbs. in 3 years 1 month.  | Bronchial catarrh greatly improved. |
| 6. Gained 23½-lbs. in 3 years.          | Had tonsils out.                    |
| 7. Gained 40½-lbs. in 4 years 8 months. | Glands much improved.               |
| 8. Only short time at O.A.S.            | Anaemia and glands much improved.   |
| 9. Gained 9-lbs. in 1 year 4 months.    | Debility cured.                     |
|   | Debility much improved.             |
- Average gain (excluding 2 and 8) 19-lbs. Average stay (excluding 2 and 8) 2 years 11 months.

Boys 7.

- |  |   |
|--|---|
| 1. Only short time at O.A.S.             | Paralysis of legs and debility—now Under D.T.O. |
| 2. Gained 2½-lbs. in 7 months.           | Debility cured.                                 |
| 3. Gained 21½-lbs. in 5 years 1 month.   | Glands and anaemia much improved.               |
| 4. Gained 10½-lbs. in 1 year 6 months.   | Debility much improved.                         |
| 5. Gained 27½-lbs. in 4 years 11 months. | Debility much improved.                         |
| 6. Gained 14½-lbs. in 1 year 7 months.   | Anaemia and debility much improved.             |
| 7. Gained 19½-lbs. in 3 years.           | Debility cured.                                 |

Average gain 16½-lbs. Average stay 2 years 9 months.

Number of children at school December 1937:—Girls 36, Boys 24.

Progress of children who have been at the school since 1932:—

- |  |  |
|--|--|
| 1. Boy gained 49½-lbs. in 5 years 7 months.  | Debility and glands much improved.       |
| 2. Girl at school 10 months in 1932, re-admitted 31/9/36. Gained 6½-lbs. in 1 year 3 months. | Glands cured.                            |
|  | Debility.                                |
|  | Glasses provided—had pneumonia recently. |

Progress of children admitted during the year 1934:—

GIRLS 7.

Between 5-6-lbs.	1
" 10-11 "	1
" 18-19 "	1
" 21-22 "	1
" 25-26 "	1
" 28-29 "	1
" 49-50 "	1

Average gain 16½-lbs.

Boys 6.

Between 12-13-lbs.	1
" 21-22 "	2
" 24-25 "	1
" 25-26 "	2
Average gain 21½-lbs.	

Progress of children admitted during the year 1935:—

GIRLS 4.

Between 11-12-lbs.	2
" 17-18 "	1
" 21-22 "	1
Average gain 15½-lbs.	

Progress of children admitted during the year 1936 :—

Boys 6.			GIRLS 5.		
Between	3- 4-lbs.	1	Between	5- 6-lbs.	2
"	4- 5 "	1	"	8- 9 "	1
"	5- 6 "	2	"	11-12 "	1
"	6- 7 "	1	"	17-18 "	1
"	10-11 "	1	Average gain 9½-lbs.		
Average gain 5½-lbs.					

Progress of children admitted during the year 1937 :—

GIRLS 18.			Boys 12.		
Lost ¼-lb.	1		No gain	1	
No gain	1		Between 0- 1-lbs.	2	
Between 0- 1-lbs.	3		" 1- 2 "	2	
" 1- 2 "	1		" 2- 3 "	5	
" 2- 3 "	5		" 3- 4 "	1	
" 3- 4 "	3		One child not weighed owing to absence.		
" 4- 5 "	1		Average gain 1¾-lbs.		
" 5- 6 "	1		Average stay 5½ months.		
" 7- 8 "	1				

One child not weighed owing to absence.

Average gain 2½-lbs.

Average stay 5½ months.

Defects for which children were admitted were :—

Debility	29
Debility and anæmia	11
Anæmia	4
Bronchitis	2
Enlarged glands and anæmia	2
Debility and glands	2
Debility, anæmia and glands	2
Anæmia, debility and bronchitis	1
Debility and bronchitis	2
Old T.B. spine	2
Cardiac debility and anæmia	1
Asthma	1
Debility and Otorrhœa	1

Total 60

Co-existing physical defects were :—

Enlarged tonsils	10	
Tonsils and adenoids	1	
Defective vision	8	Wearing glasses or have had glasses ordered.
Otorrhœa	2	
Heart disease	1	
Nephritis	1	
Blepharitis	1	
Epilepsy	2	
Sores	1	
Rheumatism	1	
Scabies	3	
Keratitis	1	Absent a long time.
Pneumonia	1	

13 children were leaving school at the end of the year 1937 :—

GIRLS 10.		
1.	Being sent to Convalescent Home by Tuberculosis Officer.	
2.	Gained 28½-lbs. in 3 years 10 months.	Debility and anæmia cured.
3.	Gained 8½-lbs. in 1 year 8 months.	Debility cured.
4.	Gained 10½-lbs. in 3 years 11 months.	Bronchial catarrh and debility cured.
5.	Gained 5½-lbs. in 2 years 10 months.	Old tuberculous spine cured.
6.	Gained 21-lbs. in 1 year 10 months.	Debility cured.
7.	Gained 49½-lbs. in 5 years 7 months.	Debility and glands much improved.
8.	Only short time at O.A.S.	Delicate—cured.
9.	Gained 18½-lbs. in 3 years 10 months.	Debility cured.
10.	Gained 11½-lbs. in 2 years 4 months.	Debility cured.

Average gain 17¼-lbs. Average stay 2 years 10 months.

Boys 3.		
1.	Gained 25-lbs. in 3 years 10 months.	Debility cured.
2.	Gained 22-lbs. in 3 years 7 months.	Debility and anæmia cured.
3.	Gained 6½-lbs. in 1 year 1 month.	Debility cured.

Average gain 17¼-lbs. Average stay 2 years 10 months.

## MITCHELL MEMORIAL HOME, RAWDON.

The following is a report by **Dr. H. B. Sproat**, the Medical Officer of the Home:—

At the end of December, 1937, 15 boys were in residence—45 boys were admitted and 38 discharged during 1937. The average length of stay was 5·8 months. The type of case with a few exceptions was malnutrition. On admission to the Home the children were very difficult to control but after a few weeks of discipline, good food and plenty of sleep (the latter a most important factor) they rapidly improved and they lived the lives of normal children and I feel very strongly that in most cases their ill-health was due to poor home conditions and lack of knowledge on the part of the parents as to the proper method of bringing up their children.

### 10.—Physical Education.

SELECTED AND ADAPTED FROM THE REPORT OF THE SENIOR ORGANISER OF PHYSICAL TRAINING FOR THE YEAR ENDED 31ST DECEMBER, 1937.

**ELEMENTARY SCHOOLS.** The year ending December 1937 has been noteworthy for an increased interest in the subject both in the official sphere of teaching in the West Riding and in the Press. The "Playing Fields" movement and the new building recommendations of the Board of Education which approve the provision of gymnasiums in new schools have been factors in the advance. The re-organisation of elementary schools has made the teaching of more advanced work possible in the senior schools and facilitated the organisation of work in junior schools on lines laid down in the 1933 syllabus. Along with the provision of gymnasiums in elementary and secondary schools has been the provision of necessary materials and the extension of swimming facilities.

The Keep Fit Movement has extended throughout the country and has led to increased attention being bestowed on physical fitness. This has in the Press been linked up with the question of nutrition and of the provision of meals.

The staff consists of a senior organiser, three whole-time men, two whole-time women, and a part-time woman organiser.

There are now 92 schools which are wholly senior schools or include senior classes or departments, and in these schools the work is generally of a more advanced character varying with the accommodation available, the qualifications of the teachers, and the clothing and footgear of the pupils. There are now two fully equipped gymnasiums and the building programme of the Education Committee for 1935-1939 includes the provision of gymnasiums in schools at Wombwell, Rawmarsh, Normanton, Goole, Stainforth, Bramley, Hemsworth (West End), Kinsley, Woodlands, Askern, Bentley, Queensbury, Thorne, Thurnscoe, Ilkley, Skipton, Mirfield, Knaresborough, etc.

All junior schools, rural schools and "all-standard" schools follow the syllabus of Physical Training issued by the Board of Education in 1933. The lessons are usually taken in the open air.

One of the most urgent requirements of children taking physical training, whether in the gymnasium or out-of-doors, is suitable footgear. Special gymnasium shoes are now supplied to re-organised senior schools on the basis of 100 pairs to departments with over 150 children on the roll, and 50 pairs to those with under 150 on the roll. The shoes are kept on the school premises and are used by all the children during physical training as required.

All re-organised senior schools have had their first supply and renewals have been supplied in some cases.

**PLAYGROUNDS** in non-provided schools often leave much to be desired as sites for games. To remedy their shortcomings grants not exceeding a third of the total cost have been made. The number of schools benefiting has been as follows:—

1933-34	...	...	...	...	...	22
1934-35	...	...	...	...	...	5
1935-36	...	...	...	...	...	11
1936-37	...	...	...	...	...	7

The expenditure in the last year was £585 3s. 2d. toward which £195 1s. 0d. was paid in grants.

**PLAYING FIELDS** attached to schools provide the best media for games. The following senior schools are built on sites large enough to provide several acres of playing space:—Armthorpe, Bentley (High Street), Bolton-on-Dearne, Boroughbridge, Conisboro', Dinnington, Ecclesfield High Green, Ecclesfield Lound, Edlington, South Featherstone, Airedale, Goole, Hoyland Kirk Balk, Maltby Hall, Normanton, Skellow, Rawmarsh, Rossington, Royston, Stainforth, Stocksbridge, Thorne Mooreds, Thurnscoe The Hill, Brampton Bierlow, Whitwood Mere, Wombwell.

Other senior schools possess or rent fields a short distance from the school, such as the following:—Highfields, Cudworth, Darton Hall, Guiseley, Haworth, Holmfirth, Kirkburton, Knaresborough, Mexborough, Silsden, Moorthorpe, Thorne, Upton.

A large number of recreation grounds are used by the schools such as the following:—Addingham, Baildon, Burley-in-Wharfedale, Earby, Grenoside, Garforth, Greetland, Ilkley, Mirfield, Otley, Rawdon, Rawmarsh, Skipton, Sowerby Bridge, and Tadcaster.

A certain number of Miners' Welfare Grounds are used by elementary schools, and certain non-provided schools have fields of their own.

**SWIMMING INSTRUCTION IN ELEMENTARY SCHOOLS.** During the season instruction has been given at 42 Centres as against 44 Centres during the season 1936. The following Centres have been available for the first time (1) Ilkley (open air) available for children from Ilkley and Burley Schools; (2) Ripon Spa for children from Ripon and Sharow.

The following are the comparable figures for the seasons 1937 and 1936:—

	Total No. of children who have received instruction.			Total No. of attendances made		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
1937 ... ..	12,161	11,812	23,973	129,582	117,727	247,309
1936 ... ..	12,890	12,387	25,277	137,139	125,688	262,827
COUNTY COUNCIL CERTIFICATES OBTAINED.						
	25 yards.			75 yards.		
1937 ... ..	1,607	1,471	3,078	1,418	1,211	2,629
1936 ... ..	1,653	1,288	2,941	1,644	1,297	2,941

The West Riding Education Committee makes use of baths provided by County Boroughs, Non-County Boroughs, Urban District Councils, Miners' Welfare Organisations, Mill Institutes, Collieries and privately owned baths.

Instruction is given by the baths manager or by a local teacher of swimming and occasionally by a member of the school staff.

The accommodation at the baths is usually overtaxed in the summer months and in one case a not unsuccessful experiment has been made of extending the teaching to the early winter months September to November.

#### SECONDARY SCHOOLS—STAFF.

There are 52 secondary schools aided or provided by the West Riding Education Authority. Of these 11 are girls' schools, 12 boys' schools and 29 dual schools.

The issue of circular 1445 and the general development of physical training in all types of schools has had a considerable effect on the staffing of secondary schools. Considerable difficulty has been experienced in staffing girls' secondary schools and the applicants for vacant posts have been few in number. It has been somewhat easier to staff boys' schools with trained gymnastic teachers, especially early in the year, but posts advertised late have had few applicants.

During the year 1937 additions have been made to the playing field accommodation as follows:—

	Acres.
Castleford Grammar ... ..	·806
Heckmondwike Grammar ... ..	1·48
Morley Grammar ... ..	5·784
Thorne Grammar ... ..	8·703
Shipley Salt High ... ..	18·911 (including the site for the proposed new Shipley Secondary School.)
Brighouse Secondary ... ..	12·58

**SWIMMING INSTRUCTION.** Only four West Riding secondary schools possess swimming baths, namely Ilkley, Skipton and Ripon Grammar Schools and Guiseley Secondary School. Other schools use public swimming baths.

**TECHNICAL AND EVENING CLASSES.** In the winter session commencing September, 1937, 497 classes were established, of which 193 were for men and boys and 304 for women and girls.

Four-fifths of the teachers are drawn from the staffs of elementary schools—the others being secondary school teachers.

The scheme of work generally consists of free standing exercises, vaulting and jumping, games, skipping and dancing. Folk dance classes and lessons in swimming are given by specialist teachers. During the year "keep fit" classes have become popular. They develop the recreational side and with the aid of music and attractive outfits, appeal to women and girls particularly.

### 11.—School Baths.

During the year 1937, 106 samples of swimming bath waters were examined bacteriologically. Of these, 65 proved satisfactory and 40 unsatisfactory, 1 doubtful. A report with regard to the water in swimming baths was presented, in February, 1938, to the West Riding Housing Sub-Committee.

## 12.—Co-operation of Parents.

The co-operation of parents has been specially invited by the issue of a pamphlet on a child's requirements in the matter of sleep. It is not certain how far it will succeed in persuading parents of the very great importance of sleep but it will at least remove the excuse of ignorance.

A copy is given below of the pamphlet:—

### SLEEP FOR CHILDREN.

The importance of sleep for children is not always recognised, especially in the case of older children.

Babies should spend most of the day asleep, only being awake at feeding times.

At the age of one year, 14 to 16 hours sleep is required and at 2 years 12 to 14 hours is necessary. In the case of toddlers not all the hours of sleep need be taken at night but about 2 hours should be given over to rest in the morning or the afternoon. As the child approaches 5 years of age the mid-day rest is best given after dinner.

At the age of 5 years 10 to 12 hours sleep should suffice; at the age of 10 years 10 to 11 hours, and at the age of 16 years 9 hours. From 5 years of age onwards the hours of sleep should be unbroken.

During the long summer evenings parents might find difficulty in getting their children to bed at a sufficiently early hour, but the importance of ensuring the proper amount of sleep should not be forgotten and the children should be put to bed at the proper time for their age.

Lack of sleep causes children to be listless, cross, pale, easily tired and unable to take part with zest in their school work or games.

To ensure sound sleep children should not be played with just before they are put to bed as they tend to become too excited. It is also unwise to overfeed a child at night as this produces disturbed sleep owing to indigestion.

If you want to help your children to be healthy and strong, train them to go to bed early so that they may have sufficient sleep.

T. N. V. POTTS,  
School Medical Officer.

## 13.—Co-operation of Teachers.

The co-operation of teachers is of first rate importance because of their extensive knowledge of the children under their charge. There are several matters associated with the work of School Medical Inspection which are almost entirely their own separate responsibility, for example:—

1. Selection of children for special examination.
2. The selection of children to have subsidiary nourishment in the intervals between the visits of the School Medical Inspectors.
3. Teachers have a great deal of influence in persuading the parents to persevere in the treatment of children's defects and they almost alone can ensure children wearing spectacles provided for them.

Through the "Consultative Committee" the teachers have put forward several suggestions in connection with the direction of school medical inspection, and although a number of the proposals could not be accepted, discussion enabled the teachers to see some of the central administrative difficulties which prevented their adoption, while at the same time the central office staff were placed in a better position to envisage the difficulties which beset the teaching profession when implementing the various new developments of school medical work which take place almost every succeeding year.

Two points on which some measure of agreement was reached was in the direction of finding some means of shortening the time lost from instruction when children attend those School Clinics situated elsewhere than within the school grounds; and the lessening of the exposure to dangers of the road in the case of children going to School Clinics. One of the means of overcoming these difficulties is the provision of a School Clinic for minor ailments within the school itself. To some extent this possibility is being realised owing to a certain amount of accommodation becoming redundant partly by reason of the re-organisation and partly because of the fall in the school population.

## 14.—Co-operation of School Inquiry Officers.

The work of the School Inquiry Officers forms an essential part of the administration of school medical inspection, particularly in connection with medical certificates for exclusion from school issued by School Medical Inspectors.

Quite recently a scrutiny of exemption certificates granted by medical men in one district revealed a number of children exempted on grounds of rheumatism (in some of its manifestations) and some of these children were not recorded on the "rheumatism register." It appeared therefore a desirable move to ask the Education Department for the further co-operation of School Inquiry Officers by which they should report to the School Medical Officer those children who are granted exemption on account of rheumatism. As a result the Inquiry Officers were provided with a list of the complications and variations of the terms used in certification so that they could select from their certificates those which might lead to the discovery and ascertainment of children who should be on the register of rheumatic complaints.

The Inquiry Officer also obtains from teachers particulars of infectious disease and immediately transfers such information to the Medical Officers of Health.

### 15.—Co-operation of Voluntary Bodies.

The School Medical Inspectors make use of the National Society for the Prevention of Cruelty to Children in obstinate cases where the parents persistently refuse to obtain spectacles for their children or do not keep the children clean. During 1937, 32 cases were reported to the Society with good results.

### 16.—Blind, Deaf and Epileptic Children.

These children are classified in various sections of Table III. They are kept under the supervision of the School Medical Inspectors or School Oculists until admitted to special schools. Upon discharge from special schools the names are forwarded to the officers concerned with instructions to again keep them under supervision.

### 17.—Nursery Schools.

The County Council have approved the erection of three Nursery Schools, and the first one completed at Castleford was opened for the reception of 80 children on February 1st, 1937. The School Medical Inspector makes periodic visits of inspection, and the School Nurse holds a weekly clinic on the school premises.

In addition to this school there are 52 nursery classes provided in schools in different parts of the County.

### 18.—Secondary Schools.

Medical inspection is carried out in all the secondary schools and also in the Keighley and Batley Junior Art Schools. In these schools the rule operating—in accordance with the desire of the Committee—is for a male inspector to examine the boys and a female for the girls. This is difficult to arrange as the proportion of male Medical Officers to female, *viz.* :—  $5\frac{1}{2}$  to 11, is so small that a considerable amount of travelling is involved.

### 19.—Continuation Schools.

Three Junior Instruction Centres were in operation during the year at Mexborough (400 boys), Pontefract (200 boys), and Selby (30 girls). Arrangements for medical inspection were made and the School Medical Inspectors after two or three visits decided that a monthly visit was sufficient. The examination consists of a routine inspection of all entrants and recommendations are made to the Superintendent of each Centre regarding treatment required. In the case of pupils over 16 years of age, such treatment can be obtained from the panel doctor as the pupils are insured, but under that age treatment is given at the school clinics.

Dental treatment was also offered but very few students availed themselves of this service.

### 20.—Employment of Children and Young Persons.

During 1937 the School Medical Inspectors examined 1,101 children who desired to be employed out of school hours in the delivery of newspapers or milk, and of these, 11 were rejected as being unsuitable for such work.

### 21.—Miscellaneous.

#### CLINICAL PATHOLOGY.

The following specimens were taken by the school medical staff and submitted to the County Laboratory for examination:—

Throat Swabs	...	...	...	...	...	...	...	...	257
Hairs and Scales for Ringworm	...	...	...	...	...	...	...	...	135
Miscellaneous Specimens	...	...	...	...	...	...	...	...	268
									<hr/> 660 <hr/>

## MEDICAL EXAMINATIONS, ETC.

Special examinations were made by the School Medical Inspectors of mentally and physically defective children, teachers, candidates for bursarships and others in addition to their ordinary duties. A summary of these is given below:—

(a) Cases examined under the Mental Deficiency Acts and the Education Act 1,395	
(b) School Absentees	127
(c) Teachers, Bursars, etc.	27
(d) Children for Licences for Entertainments	30
	<hr/> 1,579 <hr/>

The School Oculists examined 785 cases under the Blind Persons Act, in addition to their work in schools. Medical certificates were submitted to the School Medical Officer in respect of 85 applicants for admission to Bingley Training College.

## BINGLEY TRAINING COLLEGE.

Special visits were made to the college in May by **Dr. Allan** to examine 84 students who were about to complete their second year of training.

The candidates, after examination, were classified as follows:—

A.1, 55; A.2, 29.

In September, **Dr. Allan** again visited the college to examine 84 newly admitted students. These were classified as under:—

A.1, 53; A.2, 31.

## 22.—Special Report.

**Dr. J. Wood Wilson** has written the following Special Report.

### SCHOOL DINNERS.

#### REPORT ON VISITS TO CERTAIN FEEDING CENTRES.

As a result of the School Medical Officer's circular letters to school medical inspectors, tuberculosis medical officers, health visitors and school nurses early in the year 1937, pointing out the value of periodic nutritional surveys and arranging for more frequent review of the nutrition of school children, the number of children recommended to receive meals at school speedily increased.

Names of children for whom school dinners are requested are forwarded to the Education Officer who makes the necessary arrangements for the establishment of feeding centres. The large increase in the number of recommendations has, of course, resulted in many more feeding centres being provided.

The feeding centres, which are situated in many districts of the County, are under the control of the Education Officer but school medical inspectors and school nurses exercise a general supervisory function on the suitability of meals provided.

As a few complaints had been received that meals provided appeared to be inadequate or badly planned the school medical officer requested information as to the type of meal provided at the centres.

Visits were accordingly paid to the larger feeding centres in order to obtain the necessary information at first hand. In all, thirteen centres were visited. The day of the visit was chosen at random and previous notice of the intention was not given. At each centre a general impression of the adequacy and suitability of the meal provided was obtained by observation of the following factors:—A general survey of the dishes in preparation for the meal, the size of portion to each child (taking into account age), the quantity of meat in proportion to potatoes, the supply of vegetables, a note as to the suitability of the meal for the season of the year and the relationship between first and second courses. The menu for the week of the visit was also obtained in order to see if there was sufficient variety provided.

It is necessary to explain that the methods of providing dinners to school children in an area such as the West Riding do not follow one type but embrace many; for example, the food may be prepared and served at the centre which may be in a school or a hall, it may be supplied in containers by caterers, and in the case of the provision of dinners to one or two children it may be served at a private house.

With such varied methods of preparation of meals it was not to be expected that there would be uniformity of results in this investigation but eleven of the thirteen centres were considered to supply satisfactory meals, one an ill-planned meal, and one a meal deficient in protein.

The two unsatisfactory centres were reported to the Education Officer who arranged for a supervisor of domestic subjects to visit.

These views regarding the adequacy of the meals were founded on observation only, and the question of definite standards for a school dinner was raised. On this point there does not appear to be much information. The memorandum to the Minister of Health on "The Criticism and Improvement of Diets" gives standards for children of varying ages but they are expressed in terms of calories per day. The amount of first-class protein is also given in terms of daily requirements. "School Dinners," a book obtainable from the Association of Teachers of Domestic Subjects, while giving a standard daily requirement for first-class protein goes further and states—"It is generally agreed that it is better for growing children to have their principal meal in the 'middle of the day, and that a good proportion of the day's ration of animal protein should be 'included in it.'" Going further still in the search for a standard the Chief Medical Officer in his Annual Report on the Health of the School Child (1935) states that in London the dinner provided has "a minimum calorie value of 750 and contains 25 grammes of first-class protein."

In the course of this investigation particulars were taken at five centres of the amount of food stuffs used in the preparation of meals.

From an analysis of this information the following table was prepared.

Name of Feeding Centre.	No. of Pupils expected.	Total Calories of food prepared.	Total amount of first-class protein. Gms.	No. of Calories per head.	First-class protein per head. Gms.
A	20	13,487	140.9	674	7
B	35	28,717	671.1	820	19
C	46	32,630	715.1	709	16
D	80	55,360	1044.2	692	13
E	90	75,980	1124.0	844	12

As a result of this investigation the School Medical Officer recommended to the Education Officer that in order to obtain uniformity throughout the area the following standards for school dinners might be adopted:—

First-class protein 5—10 years: minimum of 16 gms.

10—14 years: minimum of 20 gms.

In addition, the meals to be well planned, suitable for the season and containing sufficient vegetables and fruit.

It is, of course, impossible for these standards to be introduced at once owing to the large number of feeding centres in the County Area, and the different methods of providing the meals.

SPECIAL REPORT.

TO

WEST RIDING COUNTY COUNCIL.

PUBLIC HEALTH AND EDUCATION COMMITTEES

AND

MATERNITY AND CHILD WELFARE SUB-COMMITTEE.

REPORT OF COUNTY MEDICAL OFFICER

UPON

EXCEPTIONAL CHILDREN.

(certain groups.)

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MAY, 1937.

REPORT OF COUNTY MEDICAL OFFICER  
on  
CERTAIN EXCEPTIONAL CHILDREN.

I. RHEUMATISM IN CHILDREN.

PROVISION OF CONVALESCENT HOSPITAL SCHOOL OF RECOVERY.

Rheumatism is one of the most crippling diseases of modern times. It is a condition found principally among school children and adults and infrequently among pre-school children. The incidence is assuming increasing proportions year by year.

*Damage in school life.*

Research work undertaken in connection with the incidence of rheumatism goes to show that much of the initial damage caused by this disease takes place during school life, the permanent after-effects such as joint conditions and heart disease manifesting themselves at a later date.

*Danger of masking of early symptoms.*

The onset of rheumatism, particularly in children, is usually of an insidious character, for whilst the child becomes "off colour" or ill to a greater or lesser extent, the symptoms of the illness are frequently misinterpreted and attributed erroneously to a variety of childish ailments. Thus, for comparison, in scarlet fever or measles the diagnosis can be made readily because the patient develops a sore throat or coryza and a characteristic rash. In rheumatism, however, the early symptoms may be anaemia of varying degree, loss of appetite, sore throat, occasional sickness or an occasional rise of temperature. These minor symptoms may or may not be followed by a typical attack of acute rheumatic fever, the symptoms of which cannot be easily mistaken. On the other hand they may persist, recurring at intervals over a number of years so producing a state of chronic invalidity at varying periods of life.

*Recurrent attacks.*

*Little action taken by Local Authorities.*

Owing largely to the insidious character of the disease and the difficulties of its recognition in the early stages, there has been very little action taken by either Local Authorities or voluntary bodies in the way of preventive measures, and efforts to deal with this problem have been confined chiefly to hospital treatment of established cases, e.g., acute rheumatic fever and chronic rheumatic affections. A few authorities, for example, Kensington, in an effort to obtain more exact information as to the incidence of the disease in the community have made the disease in its early stage "notifiable" by general medical practitioners, and have introduced special rheumatic clinics at which early cases can be kept under medical supervision. From the reports produced, however, it is by no means certain that "notification" of the disease has been of any appreciable value in increasing the knowledge regarding incidence which is already available at child welfare centres and the clinics set up in connection with schemes for school medical inspection and treatment.

*Notification of rheumatism.*

*Voluntary hospitals—pressure on beds.*

As regards hospital treatment of the established case, it should be noted that in the past, and to a large extent at the present time, the voluntary general hospitals of the country have accepted responsibility for the medical and nursing care of these cases, but it is well known that in the treatment of this condition, as in most other cases of sickness, the pressure upon voluntary beds has been so heavy that it has been necessary to discharge cases immediately the acute attack has subsided, and long before cure or even a satisfactory degree of improvement has taken place. For acute rheumatism in children a much longer period of convalescence is essential than with a large majority of other acute infective processes, because of the predilection of the disease for the tissues of the heart and joints. In fact in a high proportion of cases of rheumatic fever the patient should be receiving convalescent hospital treatment for 9, 12 or 18 months, depending upon the severity of the initial attack.

*Cases discharged too early.*

*Long convalescence essential.*

As indicated above, the present practice is for the patient to be admitted to an acute hospital for a short period, possibly a fortnight or three weeks, after which he is discharged home in a weakly condition, frequently without adequate nourishment and medical care, and there is great risk of heart or joint lesions becoming permanently established or of recurrent attacks of acute rheumatism supervening at a later date.

*Board of Education recommendation.*

In the Annual Report of the Board of Education for 1935, this unsatisfactory state of affairs is referred to, and Education Authorities are invited to give consideration to the provision of convalescent hospital schools of recovery. The estimate of the number of beds required in such institutions has been calculated by various authorities, and the figure generally agreed is that 2 beds should be provided per 1,000 of the average school attendance.

Taking the statistics supplied for the year 1936 by the County School Medical Inspectors, it has been found that over 2,000 West Riding elementary school children were suffering from symptoms suggestive of early rheumatism, while nearly 400 children were found to be suffering from established rheumatic heart and joint affections. Confirmatory evidence that a large number of cases of acute rheumatism is being discharged after short periods from general hospitals has been obtained from the voluntary hospitals serving the geographical County.

*Incidence of cases in the West Riding.*

In estimating the number of beds which should be provided in a "convalescent hospital school of recovery" for rheumatic cases for elementary school children chargeable to the West Riding Education Committee, due regard has been paid to the fact that a large part of the County is rural in character, where the incidence of rheumatism is naturally less in proportion, and to the declining school population. These factors and the statistics referred to in the previous paragraph being borne in mind, it is considered that a reasonable number of beds to provide in the first place in a convalescent hospital school for rheumatism is 150.

*Estimate of No. of beds required.*

Inseparably associated with a complete scheme for the supervision and treatment of rheumatism are the supervisory centres to which may be sent rheumatic conditions either before or after they have received appropriate treatment. As yet no such clinics have been provided in the West Riding Administrative County, the supervision of rheumatic children taking place variously in the schools or at the school clinics under the direction of the School Medical Inspectors, at the surgeries of private practitioners or in the out-patient departments of voluntary hospitals. Some such provision is necessary, particularly after convalescent hospital accommodation has been provided, and in this connection it should be noted that the Child Welfare Sub-Committee has before it a proposal to set up a number of multi-clinics providing accommodation for school medical, dental, ante-natal functions, and at a number of these centres it will be desirable to set up facilities for supervising children afflicted with rheumatism.

*Rheumatism clinics.*

*Association with multi-clinics.*

#### RECOMMENDATION.

It is recommended that a convalescent hospital school of recovery should be provided in the Administrative County, and that consultation with other Part III Education Authorities in the County (including County Boroughs) should take place in order to secure joint action in the provision of beds.

## II. AN ORTHOPÆDIC SCHEME.

### PROVISION OF "SHORT STAY" ORTHOPÆDIC HOSPITAL.

### PROVISION OF "LONG STAY" ORTHOPÆDIC HOSPITAL.

On a previous occasion (in June, 1931), a report was presented to a combined Sub-Committee of the Education and Public Health Committees upon the necessity for a complete orthopædic scheme being established in the County. Shortly after this date it became necessary to defer consideration of recommendations contained in this report on account of:—

*Previous report deferred.*

- (1) The National Economy Act.
- (2) The proposal on the part of the County Council to erect general hospital accommodation, which proposal must be considered at the same time, being inseparably associated with orthopædic hospital provision.
- (3) Alternative suggestions were advanced:—
  - (a) To adapt the Mitchell Memorial Home as an orthopædic hospital.
  - (b) To provide an orthopædic unit within the same curtilage as the new sanatorium at Scotton Banks.
  - (c) To provide an entirely new *ad hoc* hospital building on a site to be selected.
  - (d) It was suggested that joint provision might be made with other authorities.

*Reasons for postponement of action previously.*

It is not proposed to reproduce in these pages the details set out in the previous report beyond summarising the four essential requirements for a complete orthopædic scheme as follows:—

- (a) A system or organisation for ascertainment of persons physically defective. This is ordinarily provided through the medical and nursing services of maternity and child welfare and school clinics, together with information received from medical practitioners and hospitals.
- (b) A treatment centre (1) orthopædic hospital for short stay patients; (2) orthopædic hospital for long stay patients.

*Essential requirements of orthopaedic scheme.*

- (c) The after-care organisation which includes the provision of orthopaedic clinics at convenient points in the County, attached to which are orthopaedic surgeons, orthopaedic nurses, masseurs, and voluntary workers (usually).
- (d) Vocational training scheme and centre at which cripples partially or completely cured of their disability receive training in various forms of employment best suited to their needs.

*County Council's proposals for general hospitals.*

At the present time the County Council is entering upon a big scheme of general hospital development and it is desired that in conjunction with the provision of general hospitals either by the County Council alone or by extension of existing voluntary hospitals the requisite number of beds for orthopaedic cases for persons of all ages should be included.

*Existing arrangements in the County.*

The present arrangement permits School Medical Inspectors or Child Welfare Medical Officers to make recommendations in individual cases that patients requiring orthopaedic advice or treatment should be sent to a particular orthopaedic surgeon or orthopaedic hospital, and for this purpose a sum of money is included in the annual estimates of the Department. This arrangement is satisfactory so far as it goes, but it is not a scheme which can be suitably merged into the future machinery of a large orthopaedic organisation with its associated hospital beds and facilities for supervision and after-care.

*Division of County into orthopaedic areas.*

In order to make the scheme more complete, having regard to future developments, it is proposed to divide the County into five areas corresponding to the present tuberculosis dispensary areas, and to allocate at certain of the dispensaries, preferably those at which an X-ray plant has been installed, one or more rooms for the purpose of holding an orthopaedic clinic periodically.

The school medical inspectors, child welfare medical officers and general practitioners would be invited to send cases of all ages to these clinics for advice or treatment from an approved orthopaedic surgeon.

*Panel of orthopaedic surgeons.*

The chief difficulty in operating this scheme in the initial stages will be the absence of general hospitals conveniently situated and within reasonable distance of the area to be served. Also it will be essential to appoint orthopaedic surgeons who are already on the staff of general hospitals, in order that patients whom they decide require orthopaedic treatment can be admitted to hospital without delay.

*"Short stay" and "long stay" hospitals.*

At a later date when orthopaedic beds have been provided in County Council general hospitals serving in this respect as the "short stay hospital" or in the "long stay hospital," which is usually situated in open country where fresh air and sunlight can be obtained, this difficulty of the provision of specialist services will tend to disappear.

*Orthopaedic nurses and masseuses.*

An essential part of the proposed scheme will be the appointment of a number of trained orthopaedic nurses and masseuses, at least one for each division of the County, whose duties would include attendance at the clinic upon those days when they are open, and at other times visiting patients for the purpose of "following up," giving massage, etc., at the patients' homes.

*"Short stay" hospital outside the scope of this report.*

The foregoing suggestions are in the nature of the provisional arrangements which should be made pending the construction of adequate orthopaedic hospital accommodation. In the latter regard it will be recalled that the County Council has under consideration a proposal to erect a large "general" hospital in South Yorkshire. If this proposal matures it will be essential to provide a special block within the curtilage of this hospital for "short stay" orthopaedic cases. The "short stay" cases are those which require immediate operation and can be quickly drafted afterwards either to the patients' homes or to the "long stay" hospital, thus avoiding any serious congestion of beds in the acute general hospital. As this matter (the provision of orthopaedic beds for "short stay" cases) is one which will come up for consideration by the Public Health Committee in connection with the general hospital question it is not proposed to enter into further detail in this report but to confine remarks to the provision of beds for "long stay" cases.

#### ORTHOPAEDIC HOSPITAL FOR "LONG STAY" CASES.

*Nuffield Trust.*

It is particularly appropriate that the subject of "long stay" beds should receive consideration at the present time because it is known that the matter is receiving the attention of the Lord Nuffield Trust, through the medium of the "Central Council for the Care of Cripples." This Council is viewing the requirements of an orthopaedic scheme to provide a complete service for the whole of the three Ridings of Yorkshire, including the County Boroughs, and unofficial intimation has been received that the Trust is likely to make substantial grants towards the cost of one or more future orthopaedic hospitals.

As regards orthopaedic hospital accommodation already in existence in the geographical county of the West Riding, a few beds are provided at most of the voluntary hospitals situated in the County Boroughs, and a limited amount of orthopaedic surgery is undertaken, and patients are retained in the surgical wards of these hospitals for varying periods, but for the "long stayers" it is the general practice for both County Council and County Borough authorities to send their cases some distance away, e.g., Kirbymoorside; Leasowe; Heswall, in Cheshire; Lord Mayor Treloar's Home, Alton; Stanmoor, Middlesex, etc. A limited amount of orthopaedic accommodation at Grassington (Bradford Corporation), The King Edward Hospital, Sheffield, and Thorp Arch (near Leeds) respectively, but these beds are usually fully occupied.

*Existing provision of beds.*

In estimating the number of orthopaedic beds required for an area it should be remembered that crippling defects are not notifiable as is the case with certain infectious diseases and, therefore, the information available is bound to be incomplete. Taking England and Wales as a whole, the following extract from a pamphlet issued by the Central Council for the Care of Cripples is illuminating:—

"It is estimated that there are at least 195,000 cripples in England and Wales; that at least 8 out of every thousand children under the age of five are 'crippled or require orthopaedic treatment; at least 9 out of every thousand children 'aged 5 to 16; and at least 3 out of every thousand adults; making in all at least 4 cripples out of every thousand of the total population."

*Estimate of beds required.*

Recently in order to obtain direct up-to-date evidence of the incidence of crippling defects in the Administrative County, an enquiry was made from medical officers of health, school medical inspectors, child welfare medical officers, nurses and others, and the total number of cripples of all ages ascertained in this way was nearly 2,000.

*Enquiry in the West Riding.*

Obviously this record is very incomplete, as little account is taken of the incidence of cases among well-to-do families, while it is known that there are many cases of muscular, tendon or bone deformity occurring among all classes of the community which are never brought to the notice of the doctor or nurse.

A few years ago when a report was presented to the Education and Public Health Committees a questionnaire was sent to the medical officers of health of the County Boroughs and Part III Education Authorities in the West Riding in order to ascertain to what extent it was likely that these authorities would join with the County Council in the provision of an orthopaedic hospital and the replies received went to show that several of the larger authorities required beds and would favour the idea of a joint scheme. Obviously if a joint scheme were adopted for the geographical County of the West Riding, for the three Ridings taken together, or for a number of local authorities in Yorkshire, such a scheme would be likely to be more efficient and more economical than for a number of authorities to be working independently in this matter. Such increased efficiency is particularly apparent in connection with after-care work where voluntary committees are required; for example, it would be ridiculous to arrange for one voluntary committee to take the after-care work in the less populous districts on the periphery of a number of County Boroughs and a separate voluntary committee to undertake similar work in areas in the Administrative County immediately adjoining, but which from the point of view of community of interest are indistinguishable.

*Joint scheme with County Boroughs, etc.*

Mr. Broomhead (orthopaedic surgeon to the Leeds General Infirmary) says:—

"The present situation here is bad, though the outlook is improving. At present there are 80 beds available for children at the Marguerite Home, Thorp Arch. This accommodation may be enough for Leeds alone, but it is certainly not enough for Leeds and the West Riding. The Marguerite Home Committee have decided to enlarge the hospital to 150-200 beds and thus provide enough accommodation for the children of Leeds and the surrounding country. As yet there is no provision for 'long stay' adult cases. Such provision is almost pathetic in its necessity and unless there is much clear thinking and co-operation in the county, the outlook for adults is indeed a gloomy one."

*Mr. Broomhead's (Leeds) opinion.*

For the population of the Administrative County alone the initial number of orthopaedic beds (excluding children chargeable to Part III Education Authorities and apart from tuberculosis cases) required for a "long stayers" hospital is estimated at 200, of which 150 would be allocated to children and 50 to adults. If the requirements of those county boroughs that have signified their willingness to enter into a joint scheme are taken into account it is likely that an appreciable increase in this number will be necessary.

*Beds required for Administrative County.*

*Selection of site.*

*Consultations with County Boroughs.*

*Board of Education Report.*

*Recommendation in the Report of the Board of Education.*

#### RECOMMENDATION.

If the Committee agree to the principle of the foregoing suggestions it is recommended that a suitable site should be selected for a "long stayers" hospital and in order to decide upon the optimum number of beds to provide, consultations should be arranged with County Borough and Part III Education Authorities in the County and possibly also with the County Councils of the North and East Ridings.

### III. PARTIALLY-SIGHTED CHILDREN—PROVISION OF SPECIAL HOSPITAL SCHOOL.

In the "Report of the Committee of Enquiry into problems relating to partially-sighted children" issued by the Board of Education in 1934, reference is made (Page 59) to the provision of a "Special Hospital School" for partially-sighted children. The following quotation is an extract from this Report:—

"In a complete survey of the special provision for partially-sighted children the special hospital school must be considered, though as an educational unit it is less important than as an agent in the treatment of certain acute and sub-acute diseases of the eye and in the provision of permanently damaged vision arising from these diseases.

There are a number of diseases of the eye which require skilful and prolonged medical treatment which to be effective can only be given under hospital conditions. A brief survey of these diseases may be given.

- (1) CONJUNCTIVITIS AND BLEPHARITIS are common forms of external eye disease in school children which respond fairly readily to treatment. Occasionally they are more severe, intractable and of long duration . . . .
- (2) TRACHOMA . . . . This is a disease which needs prolonged institutional treatment both on account of its contagious nature and the long periods during which treatment must be given to effect a cure.
- (3) PHLYCTENULAR KERATITIS is a mild but persistent infection which is associated with sub-normal nutrition and health . . . . Treatment under hospital conditions is desirable if the ocular manifestations are predominant. Attention to the general health is essential, however, and in cases in which the eye symptoms are not severe, admission to a convalescent home or open-air school may effect a cure.
- (4) INTERSTITIAL KERATITIS is a disease usually affecting both eyes. The acute or sub-acute stage may last a year or more and the resulting opacity of the corneæ may persist for a much longer period. During the active inflammatory stage treatment under hospital conditions is desirable.

The corneal opacities resulting from the inflammation may cause such visual disability as to necessitate the child being admitted to a special school for the partially-sighted.

For these acute and sub-acute diseases a special institution is required which is something between a hospital and a special school for partially sighted children, with the hospital side predominating. It must be residential, preferably situated in country surroundings and its buildings should be of a nature to permit of the isolation of the infectious from the non-infectious cases or from those of low infection.

Though there are ophthalmic hospitals and clinics throughout the country which are doing much in combating the diseases we are considering, there is only one institution, namely The White Oak Hospital for Ophthalmia, Swanley, Kent (360 beds) maintained by the London County Council, which fulfils all the requirements of treatment and education.

The advantages of treating chronic infectious diseases of the eye in a residential institution such as Swanley are that treatment can be made more effective and the duration of the disease reduced; moreover, education can be provided. The facilities at Swanley are, however, used by only a few authorities outside London. In other areas, children suffering from chronic infectious diseases of the eye are dealt with usually as out-patients at the local hospital.

We therefore recommend that the Board of Education should consider whether it is desirable for an institution similar to that at Swanley to be established in the North of England.

The Report on the Prevention of Blindness by the Standing Committee on the Prevention of Blindness of the Union of Counties Associations for the Blind, includes the following statement:—

"We have been unable to gather conclusive evidence of a demand for another special hospital-school in a different part of England, but an ophthalmic surgeon in a Midland County expressed the opinion that cases which had to be treated at a large eye hospital in a very crowded area would benefit immeasurably from such treatment and environment as is at present only provided by the White Oak Hospital, Swanley."

It should be noted that the proposal to provide a hospital school for the partially-sighted is quite distinct from the day or residential special school to which ordinarily children whose defective sight is due to inflammatory conditions should not be sent.

*Hospital school for inflammatory conditions only, and not for myopes.*

The comparatively small number of cases of intractable inflammatory conditions of the eye among school children reported in the West Riding Administrative County would not justify the provision of a hospital unit of sufficient size to be efficient and economical and, therefore, the County Medical Officer addressed a letter of enquiry to all medical officers of health of the northern counties and county boroughs.

*Joint action necessary with other authorities.*

(NOTE.—Municipal boroughs, urban and rural districts who are "Part III" authorities were not communicated with as it was thought that the information supplied by the larger authorities should suffice when discussing the essential principles involved in this report.)

From the replies received to the circular letter it was ascertained that no provision for hospital-school treatment of the partially-sighted is made in the Counties of Lancashire, Northumberland, Cumberland, Westmorland, Durham and the three Ridings of Yorkshire; and the only county boroughs in these eight counties where it was stated that some provision is made are:—Liverpool, Oldham, Salford, Barnsley, and Bradford. In these five towns modified facilities such as open-air schools and ophthalmic departments at hospitals or clinics are provided.

As regards the possibility of any of the larger authorities joining with the West Riding County Council in meeting the capital cost of providing a hospital school, the replies offer little hope, but it will be observed that nearly half of the medical officers of health give it as their personal opinion that their authorities would be glad to use a number of beds upon a user basis.

*Joint action with other authorities.*

The following tabular statements have been extracted from the Annual Reports for 1934 and 1935 of the West Riding School Medical Officer. The figures give some idea of the incidence of the type of cases it is proposed should be admitted to a hospital-school, although by no means all these cases require treatment in a hospital-school.

#### WEST RIDING ELEMENTARY SCHOOL CHILDREN.

Defect or Disease.	ROUTINE INSPECTIONS.		SPECIALS.	
	No. referred for treatment.	No. requiring to be kept under observation but not referred for treatment.	No. referred for treatment.	No. requiring to be kept under observation but not referred for treatment.
1934.				
Blepharitis ... ..	650	37	229	17
Conjunctivitis ... ..	99	2	37	—
Keratitis ... ..	—	2	1	—
Corneal Ulcer ... ..	8	1	6	2
Corneal Opacities ... ..	44	43	31	27
1935.				
Blepharitis ... ..	739	55	183	25
Conjunctivitis ... ..	88	7	23	—
Keratitis ... ..	3	1	5	—
Corneal Ulcer ... ..	10	—	4	2
Corneal Opacities ... ..	39	40	25	15

Estimate of  
number  
requiring  
treatment.

It will be seen from these extracts that approximately 1,000 children appearing before the school medical inspector annually for routine examinations are found to have inflammatory conditions of the eye, that a substantial number of these cases are referred specially for treatment, and that approximately 200 require to be kept under observation although they may not require special local treatment for the eye condition.

Assuming that the conclusion arrived at in the "Report of the Special Committee" is sound (*viz.*, that a hospital-school is an essential factor in the treatment of this type of case), it can be stated without hesitation that the above statistics relating to West Riding children is definite evidence in support of the view that beds are necessary for children in the area of the West Riding Education Committee.

Duration of  
stay in  
hospital.

Number of beds  
required.

The average duration of stay in a hospital-school for these cases is approximately 9 months per patient. An approximate estimate of the number of cases attending the schools of the West Riding Education Committee that would require treatment according to reports of recent years from school medical inspectors is 60 per annum. It will be seen, therefore, that if the average duration of stay per patient is taken as 9 months, the number of beds required by the County Council would be 45.

The idea of a hospital-school will be a new one undoubtedly to most education authorities in the North of England, and possibly many authorities will for this reason regard such a new venture askance. Reference however to the Reports of School Medical Officers confirm that the incidence of inflammatory conditions of the eye among elementary school children appears to be no higher on an average in the West Riding than in other counties and county boroughs and, therefore, it is probable that once a hospital-school is established to serve the North of England, there will be a definite demand for beds and there is good reason to believe that such provision would be a valuable adjunct in the prevention of blindness, partial or complete.

#### RECOMMENDATION.

It is recommended that a hospital-school for partially-sighted children be provided, such an institution to contain not less than 45 beds (requirements of West Riding County Council only) the precise number being determined after consultation with other Part III Authorities in the North of England.

#### IV. PARTIALLY-SIGHTED CHILDREN SUITABLE FOR SPECIAL CLASSES OR SPECIAL SCHOOLS.

The type of  
case referred to.

As indicated on page 38 of this Report, the foregoing proposals regarding the provision of a special hospital-school are quite distinct from the day or residential school to which ordinarily cases of myopes and others whose visual defect can be readily corrected by spectacles are sent. The "hospital" school is intended more particularly for chronic inflammatory conditions of the eye, whereas the day or residential school for partially-sighted children is intended for severe cases of myopia and hypermetropia which, while they require special school accommodation do not require hospital facilities.

Non-segregation  
if possible.

The Board of Education recommends that wherever possible myopes should be educated along with children with normal vision, hence for oral tuition and recreation they should mix in the same class, but for reading, etc., where eyesight is essential they should be grouped in a special class by themselves. Obviously this is possible only for those cases of myopia (uncorrected by spectacles) who are not so severe as to require admission to special schools for partially-sighted.

The "special  
class" and  
"special school."

The dividing line is not always easy to draw between those cases which should be admitted to a special class in an elementary school and those which should be sent to a special school, as there are so many borderline cases clinically; and individual and local circumstances have an important bearing on the question. A "two-class" school is not of sufficient size to justify a special myope class, whereas a "four-class" school is large enough. This is an important factor in a county area where schools frequently are small, and few and far between. In such cases it is understood that the Board may make an exception and permit provision of a special school, residential or otherwise, to serve a wide area.

The use of  
an "open-air  
school."

Some ophthalmic experts state that one big contributory cause of myopia is constitutional disturbance and therefore that the rational treatment is to provide a prolonged period of residence in a residential open-air school. There is good evidence adduced to support this view.

Parents'  
refusals.

In considering the action to be taken upon this report it should be borne in mind how difficult it is to persuade parents to permit their children to be removed any appreciable distance away from their homes to "Day" or "Residential" schools, particularly so when the disability is so crippling as defective sight.

From the Chief Medical Officer of the Board of Education's Report for 1934, out of a total of 1,217,520 children examined in elementary schools, 95,599 were found to have errors of refraction (excluding squint). These refractive errors included hypermetropia and myopia usually in the proportion of 3 to 1. It should be noted, however, that the majority of these cases would be dealt with satisfactorily by the provision of spectacles.

*Incidence of "partial sight" in England and Wales.*

According to the "Report of the Committee of Enquiry into Problems relating to Partially-Sighted Children" issued by the Board of Education (page 31) "The proportion of partially-sighted children in England and Wales if selected on the basis of the Committee's standards would be not less than one per thousand children on the school registers." Upon this basis the number of places in special classes or special schools for children chargeable to the West Riding Education Committee would be approximately 180 to 200.

*Estimate for West Riding based on figures for England and Wales.*

Taking the actual figures available in the medical records for 1935 of West Riding school children, the number of myopes in attendance was 1,827.

*West Riding statistics.*

- (a) The number of these suitable for special classes in elementary schools was ... .. 190

(NOTE.—The number of children in special classes is nil.)

- (b) The number suitable for a special school for partially-sighted was 113

(NOTE.—33 are already in such schools at Leeds, Bradford, Oldham; and 80 are on the waiting list.)

- (c) The number suitable for a special school for the totally blind was 49

(NOTE.—44 are already in such schools and there are 5 on the waiting list.)

- (d) The approximate number suitable for ordinary elementary schools after spectacles have been suggested ... .. 1,475

To the foregoing 113 myopes suitable for admission to special schools may be added 30 other children suffering from visual defects other than myopia who can be regarded as suitable cases for admission to special schools.

It will be noted that there is fairly close approximation between the estimate arrived at by the "Committee of Enquiry" and the actual figures ascertained from the records of the West Riding school medical inspectors and oculists inasmuch as the Committee's findings suggest that not less than one per thousand places were required and the West Riding statistics (items (a) and (b) above) show that the number of children in need of special accommodation is in the ratio of 1.5 children to 1,000 of the average school attendance.

*Close approximation of findings for England and Wales with those of West Riding.*

Thus to sum up, there is accommodation required for 190 myopes in special classes; for 80 myopes in special schools (these two groups are interchangeable to some extent); for 30 children with other visual defects in special schools and for 5 totally blind children in special blind schools.

*Recommendation and estimate of accommodation required in West Riding.*

If the County Council should decide to go forward with a proposal to provide accommodation of the type referred to above, it will be essential to consult with County Boroughs and Part III Authorities in order to secure joint action wherever this is expedient.

## V. DELICATE CHILDREN.

### "DAY" OR "RESIDENTIAL" OPEN-AIR SCHOOLS. HOSPITAL FOR DELICATE CHILDREN.

The term delicate children is used to describe a large group of the child population who are mal-nourished (not necessarily through lack of food) and in regard to whom a precise diagnosis pointing to the cause of malnutrition cannot usually be made. Generally the factors contributing to the lowered state of health in this type of case can be summed up as environmental in character and probably it is a number of these factors taken together in the majority of cases which combine to produce the lowered vitality. The more important of these causes are well-known; overcrowding, absence of sunlight, lack of sleep and exercise, and badly balanced diet are common factors, while latent tuberculosis infection, carious teeth, diseased tonsillar and adenoid tissue and the after-effects of disease, particularly the acute infectious diseases play an important part.

*Causes of "malnutrition."*

*Present  
available  
accommodation.*

It has been observed frequently that merely to give milk, cod liver oil or meals to many children of this type has produced little or no effect in ameliorating the condition, although when they have been removed from unsatisfactory home surroundings to institutions such as open-air schools where fresh air, sunlight, graduated exercise, rest and regular habits are available or taught, a marked improvement has been noticeable within a comparatively short space of time. The number of places or beds provided by the West Riding Education Committee at the present time is 60 at Wombwell Day Open-air School and 22 at the Mitchell Memorial Home (a residential open-air school).

To give some idea of the demand which is evident in the West Riding for special accommodation for delicate children, it should be mentioned that during the years 1934, 1935 and 1936, there were 140, 180 and 177 children respectively recommended for open-air school accommodation. It is true that in a fair number of cases parents refused treatment of this character, nevertheless the total number of children awaiting admission was 123. There can be no doubt that the foregoing estimate of children requiring attention is very much understated, for when it is known that there is no accommodation available there is naturally a tendency not to make the appropriate recommendation except in severe cases.

*Joint provision  
of accommodation  
for different  
purposes.*

On page 40 of this Report the suggestion is made that it might be possible in a number of areas to provide day or residential open-air school accommodation jointly for partially-sighted and delicate children. This proposal would require careful consideration along, where necessary, with county borough or Part III Education Authorities. A decision as to whether "day" open-air or "residential" open-air schools should be provided is not easy to make for a county area, one of the chief reasons being the difficulty in persuading parents to allow their children to travel long distances to the nearest day open-air school or to remain some distance away from home for an extended period in a residential open-air school, but it is considered that some expression of opinion on the general policy to be observed by the County Council in this matter is necessary before examining the project in further detail.

#### HOSPITAL TREATMENT.

*Statement by  
Dr. Vining of  
Leeds.*

The following quotations are extracted from a recent report by Dr. Vining. His remarks refer to Leeds children but they apply equally well to children in the West Riding Administrative County, and coming as they do from one of the leading specialists in children's diseases in the country who is seeing children from all parts of the West Riding almost every day, I could not produce better evidence to substantiate the necessity for the provision of special hospital accommodation for delicate children.

##### "CHRONIC RESPIRATORY DISEASE (NON-TUBERCULAR)."

"This is a very important and considerable group of cases who suffer from 'chronic residual infective processes of the bronchial tubes (bronchiectasis) which 'if not dealt with at an early age become established respiratory disease and pass 'on as such into adolescence and adult life. This condition is usually the result 'of broncho-pneumonia, measles, whooping cough, influenza and acute infective 'respiratory disease generally. It is probably related in an important way to 'social conditions as most of the cases are found among the poorer grades of 'society and are due to the inability of the children to throw off residual infections 'following the diseases I have mentioned. In my opinion provision should be 'made for the institutional care of such cases in the very young in some institution 'away from the centre of the city where a child could be kept for possibly one year 'or two—certainly for several months—under the very best conditions and in 'conjunction with skilled medical treatment and nursing care. Possibly 12 cots 'would be sufficient."

##### "CASES OF SEVERE MALNUTRITION."

"From the view point of a hospital physician I am quite sure that there 'are in Leeds a large group of children suffering from severe malnutrition. Mal- 'nutrition does not necessarily mean starvation. Actually starvation is rare. 'Malnutrition is usually due to prolonged defective feeding and bad hygienic 'surroundings. Such children form a large group from which cases of rheumatism, 'respiratory disease and infective processes generally are recruited. Two or 'three weeks' stay at a convalescent home is quite inadequate to meet this serious 'state. I would urge the provision of beds for some of these children in some 'institution apart from the active infective diseases and under the very best 'conditions."

*Estimate of  
beds.*

From the records available at infant welfare centres and school clinics together with details supplied by certain hospitals, I estimate that the initial number of beds required to serve the Administrative County (excluding Part III Education Authorities) is 120.

I have been in communication with the Medical Officer of Health for Leeds and he expressed the opinion that his Committee would be likely to co-operate with the County Council in the provision of "long-stay" accommodation for the foregoing groups of cases and accordingly I recommend that special "long stay" hospital accommodation for cases of chronic respiratory diseases and severe malnutrition should be provided, and in order to decide upon the precise number of beds to set apart for this purpose consultations should take place with representatives of the Leeds Public Health and Education Committees and possibly with corresponding Committees of other West Riding County Boroughs and Part III Education Authorities.

*Recommendation.*

## SUMMARY.

In this report a number of recommendations have been made for the provision of institutional accommodation, and while it has been necessary to refer separately to each type of accommodation required, it is not necessarily intended that a number of institutions separate and distinct from one another should be provided. It might, in fact, be preferable in the interests of efficiency and economy to set up a less number of institutions upon the same site for the purpose of serving more than one of the services enumerated in this report. A decision on the policy to be adopted in this matter cannot be arrived at until after a consultation has taken place with other authorities as is suggested.

The recommendations contained in this report are as follows:—

- (1) It is recommended that the County Council should consult with County Borough Councils, and, if appropriate, with Part III Education Authorities in the County, in order to ascertain whether or not joint action is desirable and can be secured in the provision of the following types of accommodation.
- (2) It is recommended that the following accommodation should be provided to serve the Administrative County:—
  - (a) Convalescent hospital school of recovery for rheumatic cases ... .. 150 beds.
  - (b) Orthopædic hospital for "long stay" cases (including 50 beds for adults) ... .. 200 „
  - (c) "Hospital school" for partially-sighted children (inflammatory type) ... .. 45 „
  - (d) "Day" or "residential" schools for partially-sighted children (myopes, etc.) ... .. 300 places.
  - (e) "Day" or "residential" open-air schools for delicate children.

In a county area there are certain difficulties connected with the provision of this type of accommodation, chief of which are transport arrangements for young children where long distances have to be travelled, and the numerous refusals of parents to allow their children to be removed from their home towns.

There is need, however, for such provision in the majority of industrial areas in the County. In the case of "residential" schools especially it will be desirable to secure joint action with other Part III Education Authorities including County Boroughs wherever possible.

- (f) Special hospital for delicate children ... .. 120 beds.

T. N. V. POTTS.

**TABLE I.**  
**Return of Medical Inspections (Elementary).**

<b>A. ROUTINE MEDICAL INSPECTIONS.</b>									
Entrants	...	...	...	...	...	...	...	...	17,354
Intermediates	...	...	...	...	...	...	...	...	15,650
Leavers	...	...	...	...	...	...	...	...	13,530
Total									46,534
Number of other Routine Inspections									—
Grand Total									46,534
<b>B. OTHER INSPECTIONS.</b>									
Number of Special Inspections	...	...	...	...	...	...	...	...	4,694
Number of Re-inspections	...	...	...	...	...	...	...	...	13,873
Total									18,567
<b>C.—Number of individual Children found at Routine Medical Inspection to Require Treatment (excluding Uncleanliness and Dental Diseases.)</b>									
Code Groups—									
Entrants	...	...	...	...	...	...	...	...	3,581
Intermediates	...	...	...	...	...	...	...	...	3,868
Leavers	...	...	...	...	...	...	...	...	3,151
Total (code groups)									10,600
Other Routine inspections									—
Grand Total									10,600

**TABLE I. (a).**  
**Return of Medical Inspections (Secondary).**

<b>A. ROUTINE MEDICAL INSPECTIONS.</b>									
Entrants	...	...	...	...	...	...	...	...	4,250
Age Group 15	...	...	...	...	...	...	...	...	2,496
Total									6,746
<b>B. OTHER INSPECTIONS.</b>									
Number of Special Inspections	...	...	...	...	...	...	...	...	456
Number of Re-inspections	...	...	...	...	...	...	...	...	1,234
Total									1,690
<b>C.—Number of individual Children found at Routine Medical Inspection to Require Treatment (excluding Uncleanliness and Dental Diseases.)</b>									
Code Groups—									
Entrants	...	...	...	...	...	...	...	...	935
Age Group 15	...	...	...	...	...	...	...	...	555
Total (code groups)									1,490
Other Routine inspections									—
Grand Total									1,490

TABLE II. (A)

Return of Defects found in the course of Medical Inspection of Elementary School Children in 1937.

DEFECT OR DISEASE.					Routine Inspections.		Specials.		
					Number referred for treatment.	No. requiring to be kept under observation, but not referred for treatment.	Number referred for treatment.	No. requiring to be kept under observation, but not referred for treatment.	
Skin	Ringworm	Head	...	1	22	—	15	1	
		Body	...	2	14	—	3	—	
	Scabies	...	...	3	76	2	41	1	
	Impetigo	...	...	4	346	3	111	8	
	Other Diseases (Non-Tubercular)	...	...	5	393	103	97	15	
Total (Heads 1 to 5)					851	108	267	25	
Eyes	Blepharitis	...	...	6	366	31	127	18	
	Conjunctivitis	...	...	7	67	1	24	—	
	Keratitis	...	...	8	2	—	1	—	
	Corneal Opacities	...	...	9	30	19	17	17	
	Other Conditions (excluding defective vision and squint)	...	...	10	118	31	29	10	
Total (Heads 6 to 10)					583	82	198	45	
Ears	Defective Vision (excluding squint)	...	...	11	3,130	990	1,761	500	
	Squint	...	...	12	529	278	158	53	
	Defective Hearing	...	...	13	166	53	46	20	
	Otitis Media	...	...	14	307	29	121	17	
	Other Ear Diseases	...	...	15	100	15	22	10	
Nose and Throat.	Enlarged Tonsils	...	...	16	1,417	4,456	310	583	
	Adenoids	...	...	17	173	153	38	10	
	Enlarged Tonsils and Adenoids	...	...	18	1,274	457	354	78	
	Other Conditions	...	...	19	274	155	66	51	
	Enlarged Cervical Glands (Non-Tubercular)	...	...	20	75	2,775	50	167	
Heart and Circulation	Defective Speech	...	...	21	59	114	13	29	
	Heart Disease	Organic	...	22	112	261	51	104	
		Functional	...	23	30	255	3	56	
	Anæmia	...	...	24	1,120	602	585	51	
	Bronchitis	...	...	25	615	334	45	9	
Lungs	Other Non-Tubercular Diseases	...	...	26	75	479	8	38	
	Pulmonary	Definite	...	27	5	3	3	3	
		Suspected	...	28	47	58	11	17	
		Glands	...	29	29	97	10	31	
		Bones and Joints	...	30	3	8	—	3	
Tuberculosis	Non-Pulmonary	Skin	...	31	1	—	—	—	
		Other Forms	...	32	16	28	3	6	
	Total (Heads 29 to 32)				49	133	13	40	
	Nervous System	Epilepsy	...	...	33	12	20	3	9
		Chorea	...	...	34	33	34	12	13
Other Conditions		...	...	35	62	197	18	65	
Rickets		...	...	36	47	96	6	4	
Spinal Curvature		...	...	37	103	263	24	95	
Deformities	Other Forms	...	...	38	136	143	38	36	
	Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)				39	729	2,754	217	1,135
	TOTAL				12,113	15,297	4,441	3,263	

Classification of the Nutrition of Children Inspected during the year in the Routine Age Groups.

Age Groups.		Number of Children Inspected.	A. (excellent.)		B. (normal.)		C. (slightly sub-normal.)		D. (bad.)	
			No.	%	No.	%	No.	%	No.	%
Entrants	...	17,354	2397	13.8	12301	70.9	2569	14.8	87	0.5
Intermediates	...	15,650	1819	11.6	11062	70.7	2639	16.9	130	0.8
Leavers	...	13,530	2327	17.2	9317	68.9	1828	13.5	58	0.4
Other routine inspections	...	—	—	—	—	—	—	—	—	—
TOTAL		46,534	6543	14.06	32680	70.23	7036	15.12	275	0.59

West Riding County Council. Medical Inspection Department.

TABLE IIa.—A.

Return of defects found in the course of Medical Inspection of Secondary School Children in 1937.

DEFECT OR DISEASE.					Routine Inspections.		Specials.		
					Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.	Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.	
Skin	Ringworm	(Head	...	1	...	1	—	—	—
		(Body	...	2	...	—	—	—	—
	Scabies	...	...	3	...	2	—	—	—
	Impetigo	...	...	4	...	6	—	1	—
	Other Diseases (Non-Tubercular)	...	...	5	...	66	24	6	1
	Total (Heads 1 to 5)				...	75	24	7	1
Eyes	Blepharitis	...	...	6	...	36	8	3	—
	Conjunctivitis	...	...	7	...	4	—	2	—
	Keratitis	...	...	8	...	1	—	—	—
	Corneal Opacities	...	...	9	...	2	3	—	—
	Other Conditions (excluding defective vision and squint)	...	...	10	...	12	1	1	—
	Total (Heads 6 to 10)				...	55	12	6	—
Ears	Defective Vision (excluding squint)	...	...	11	...	643	437	143	73
	Squint	...	...	12	...	13	19	—	—
	Defective Hearing	...	...	13	...	15	2	1	2
	Otitis Media	...	...	14	...	16	2	5	—
	Other Ear Diseases	...	...	15	...	22	3	2	—
Nose and Throat.	Enlarged Tonsils	...	...	16	...	103	326	12	14
	Adenoids	...	...	17	...	6	9	1	—
	Enlarged Tonsils and Adenoids	...	...	18	...	29	12	3	1
Enlarged Cervical Glands (Non-Tubercular)	Other Conditions	...	...	19	...	19	19	4	1
	Defective Speech	...	...	20	...	18	52	1	7
Heart and Circulation	Heart Disease	(Organic	...	21	...	4	14	—	1
		(Functional	...	22	...	23	50	15	31
	Anaemia	...	...	23	...	20	76	5	9
	Bronchitis	...	...	24	...	206	9	34	2
Lungs	Other Non-Tubercular Diseases	...	...	25	...	14	2	—	2
	Pulmonary	Definite	...	26	...	6	17	—	2
Tuberculosis		Suspected	...	27	...	—	—	—	—
		Glands	...	28	...	1	1	—	2
		Bones and Joints	...	29	...	1	8	—	1
	Non-Pulmonary	Skin	...	30	...	2	1	—	—
		Other Forms	...	31	...	1	—	—	—
	Total (Heads 11 to 32)				...	1,162	1,059	226	148
Nervous System	Epilepsy	...	...	32	...	—	1	1	1
	Chorea	...	...	33	...	—	4	—	—
	Other Conditions	...	...	34	...	6	22	4	4
Deformities	Rickets	...	...	35	...	2	5	—	—
	Spinal Curvature	...	...	36	...	49	89	5	11
Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)	Other Forms	...	...	37	...	230	170	15	7
		...	...	38	...	101	286	21	21
TOTAL					...	1,680	1,672	285	193

Classification of the Nutrition of Children Inspected during the year in the Routine Age Groups.

Age Groups.		Number of Children Inspected.	A. (excellent.)		B. (normal.)		C. (slightly sub-normal.)		D. (bad.)	
			No.	%	No.	%	No.	%	No.	%
Entrants	...	4,250	754	17.8	3202	75.3	290	6.8	4	0.1
Age-group 15	...	2,496	538	21.5	1839	73.7	119	4.8	—	—
TOTAL	...	6,746	1292	19.16	5041	74.71	409	6.07	4	0.06

TABLE III.

Return of all Exceptional Children in the West Riding,  
31st December, 1937.

<b>BLIND CHILDREN</b>		
At Certified Schools for the Blind	41	
At Public Elementary Schools	—	
At Other Institutions	1	
At no School or Institution	6	
	48	
<b>PARTIALLY BLIND CHILDREN</b>		
At Certified Schools for the Blind	23	
At Certified Schools for the Partially Blind	1	
At Public Elementary Schools	52	
At Other Institutions	1	
At no School or Institution	27	
	104	
<b>DEAF CHILDREN</b>		
At Certified Schools for the Deaf	117	
At Public Elementary Schools	7	
At other Institutions	—	
At no School or Institution	5	
	129	
<b>PARTIALLY DEAF CHILDREN</b>		
At Certified Schools for the Deaf	31	
At Certified Schools for the Partially Deaf	—	
At Public Elementary Schools	3	
At other Institutions	—	
At no School or Institution	2	
	36	
<b>MENTALLY DEFECTIVE CHILDREN</b>		
(Feeble-minded Children)		
At Certified Schools for Mentally Defective Children	16	
At Public Elementary Schools	273	
At Other Institutions	12	
At no School or Institution	187	
	488	
<b>EPILEPTIC CHILDREN</b>		
(Children suffering from Severe Epilepsy)		
At Certified Special Schools	10	
At Public Elementary Schools	16	
At other Institutions	—	
At no School or Institution	31	
	57	
<b>PHYSICALLY DEFECTIVE CHILDREN</b>		
(Children Suffering from Pulmonary Tuberculosis—including Pleura and Intra-Thoracic Glands)		
At Certified Special Schools	21	
At Public Elementary Schools	300	
At other Institutions	45	
At no School or Institution	27	
	393	
(Children suffering from Non-Pulmonary Tuberculosis)		
At Certified Special Schools	78	
At Public Elementary Schools	602	
At other Institutions	53	
At no School or Institution	49	
	782	
(Delicate Children)		
At Certified Special Schools	148	
At Public Elementary Schools	253	
At other Institutions	6	
At no School or Institution	153	
	560	
(Crippled Children)		
At Certified Special Schools	55	
At Public Elementary Schools	146	
At other Institutions	—	
At no School or Institution	128	
	329	
(Children with Heart Disease)		
At Certified Special Schools	22	
At Public Elementary Schools	79	
At other Institutions	—	
At no School or Institution	62	
	163	

## CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Combination of Defect	At Certified Special Schools	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
Feeble Minded and Cripple ...	—	4	—	13	17
Feeble Minded and Epileptic ...	—	2	1	16	19
Feeble Minded and Blind ...	—	—	—	2	2
Feeble Minded and Heart Disease ...	—	—	—	1	1
Epileptic and Cripple ...	—	—	—	1	1
Feeble Minded and Deaf ...	—	—	—	1	1
TOTAL ...	—	6	1	34	41

TABLE IV.

Return of Defects Treated during the year ended 31st December, 1937.

## TREATMENT TABLE.

## Group I.—Minor Ailments (excluding Uncleanliness).

Disease or Defect. (1)	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme. (2)	Otherwise. (3)	Total. (4)
<b>Skin.</b>			
Ringworm—Scalp			
(1) X-Ray Treatment ... ..	8	16	24
(2) Other Treatment ... ..	201	17	218
Ringworm—Body ... ..	178	11	189
Scabies ... ..	900	135	1,035
Impetigo ... ..	7,787	196	7,983
Other skin diseases ... ..	1,973	315	2,288
<b>Minor Eye Defects</b> ... .. (External and other, but excluding cases falling in Group II).	3,706	195	3,901
<b>Minor Ear Defects</b> ... ..	2,936	103	3,039
<b>Miscellaneous</b> ... .. (e.g., minor injuries, bruises, sores, chilblains, etc.).	32,007	694	32,701
<b>TOTAL</b> ...	49,696	1,682	51,378

## Group II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).

NUMBER OF DEFECTS DEALT WITH.			
Defect or Disease.	Number of Defects dealt with.		
	Under the Authority's Scheme.	Otherwise.	Total.
Errors of Refraction (including Squint) (Operations for Squint are recorded separately in the body of the Report) ...	5,939	39	5,978
Other Defect or Disease of the eyes (excluding those recorded in Group I) ...	—	—	—
<b>TOTAL</b> ...	5,939	39	5,978
Number of children for whom spectacles were			
(a) Prescribed ... ..	4,261	39	4,300
(b) Obtained ... ..	2,979	25	3,004

**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)					
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(4)	(5)
91	48	2354	178	155	44	426	298	246	92	2780	476	176	3770

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and adenoids. (iv) Other defects of the nose and throat.

**Group IV.—Orthopædic and Postural Defects.**

	Under the Authority's Scheme. (1)			Otherwise (2)			Total number treated
	Residential treatment with education	Residential treatment without education	Non-resi- dential treatment at an ortho- pædic clinic	Residential treatment with education	Residential treatment without education	Non-resi- dential treatment at an ortho- pædic clinic	
	(i)	(ii)	(iii)	(i)	(ii)	(iii)	
Number of children treated	81	—	—	—	67	126	274

**Table V.—Dental Inspection and Treatment (Elementary).**

(1) Number of children inspected by the Dentist.

(a) Routine age-groups.

AGE.	5	6	7	8	9	10	11	12	13	14	TOTAL.
Number	12127	12967	13372	13714	13671	12732	9968	7133	5835	1450	102969

(b) Specials ... .. 6,845

(c) TOTAL (Routine and Specials) ... .. 109,814

(2) Number found to require treatment ... .. 74,158

(3) Number actually treated ... .. 46,289

(4) Attendances made by children for treatment ... .. 62,398

(5) Half-days devoted to:—

Inspection ... .. 1,261

Treatment ... .. 8,516

TOTAL ... 9,777

(7) Extractions:—

Permanent Teeth 19,796

Temporary Teeth 88,621

TOTAL ... 108,417

(8) Administrations of general anaesthetics for extractions 257

(6) Fillings:—

Permanent Teeth 32,306

Temporary Teeth ... 933

TOTAL ... 33,239

(9) Other Operations:—

Permanent Teeth 5,286

Temporary Teeth 547

TOTAL ... 5,833

Table Va.—Dental Inspection and Treatment (Secondary).

(1) Number of children inspected by the Dentist.

(a) Routine age-groups.

AGE	8	9	10	11	12	13	14	15	16	17	18	TOTAL
Number	27	52	198	721	1090	1038	1042	855	449	180	61	5713

(b) Specials ... .. —

(c) TOTAL (Routine and Specials) ... .. 5,713

(2) Number found to require treatment ... .. 4,553

(3) Number actually treated ... .. 3,059

(4) Attendances made by children for treatment ... .. 5,644

(5) Half-days devoted to:—

Inspection ... .. 75

Treatment ... .. 967

TOTAL ... .. 1,042

(7) Extractions:—

Permanent Teeth 2,423

Temporary Teeth 774

TOTAL ... .. 3,197

(8) Administrations of general  
anæsthetics for extractions 27

(6) Fillings:—

Permanent Teeth ... .. 6,397

Temporary Teeth ... .. —

TOTAL ... .. 6,397

(9) Other Operations:—

Permanent Teeth 911

Temporary Teeth —

TOTAL ... .. 911

Table VI.—Uncleanliness and Verminous Conditions.

(1) Average number of visits per School made during the year by  
the School Nurses ... .. 7.8

(2) Total number of examinations of children in the Schools by  
School Nurses ... .. 420,722

(3) Number of individual children found unclean ... .. 3,353

(4) Number of children cleansed under arrangements made by  
the Local Education Authority ... .. 276

(5) Number of cases in which legal proceedings were taken—

(a) Under the Education Act, 1921 ... .. —

(b) Under School Attendance Bye-laws ... .. —



