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COUNTY COUNCIL OF THE WEST RIDING  
OF YORKSHIRE.


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FORTY-EIGHTH  
ANNUAL REPORT

OF THE  
County Medical Officer,  
FOR THE YEAR, 1936.

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*Printed by Order of the the Public Health and Housing  
Committee, 21st June, 1937.*



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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, C.B.E.
Eddy, H., M.B.E.	Unwin, Miss H.
Lomas-Walker, Sir Bernard, K.B.E. <i>(Chairman of the County Council.)</i>	York, Col. E., D.L.

## COUNTY COUNCILLORS

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



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 1936.

The minimum requirements of the Report were prescribed by Circular 1,561, dated 16th October, 1936, issued by the Ministry of Health, which indicated that the Report for this period should be an "ordinary" report and not a "survey" report.

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

The Report has been issued earlier this year and is being presented to the County Council along with the Annual Report of the School Medical Officer. Much of the subject matter of these two Reports is complementary the one to the other.

*Influenza Epidemic.*

*General Death Rate.*

*Infant Mortality  
Rate.*

The vital statistics of the year present a fairly satisfactory picture in comparison with those of other large Administrative Counties and County Boroughs of similar industrial character. Unfortunately towards the end of the year an epidemic of influenza became widespread throughout the country and the effect of the ravages of this disease are to be observed in the slight increase in the general death rate which was 12.3 for 1936 compared with 12.1 for England and Wales for 1936, and 11.9 for the Administrative County for 1935. Similarly the epidemic accounted for an increase in the Infant Mortality Rate which rose to 63 compared with 59 for England and Wales. This is the first check in the gradual reduction in the number of deaths under one year of age which has taken place during the last six years; in 1931 the rate was 74; in 1932, 70; in 1933, 70; in 1934, 58 and in 1935, 58.

*Birth Rate.*

The birth rate remained steady at the level of 15.1 per thousand population. In comparison the rate for England and Wales was 14.8; while for the West Riding Administrative County for the year 1935 the birth rate was 15 and for the year 1934 it was 15.2.

*Cancer.*

In common with England and Wales as a whole a further slight increase was registered in the death rate of Cancer. This upward trend in the recorded mortality has taken place throughout the country without remission during the last 85 years, (i.e., since shortly after the first National Registration of Births and Deaths came into operation), and put in plain language, it is to be noted that out of every 100 deaths which take place daily, 14 are due to some form of this malignant disease.

*Heart Disease.*

*Expectation of Life.*

*Rheumatism and  
Heart Disease.*

*Environment and  
Heart Disease.*

*Rheumatism;  
Scientific Research.*

A dangerous rival to Cancer is to be found among the heart and circulatory group of diseases. From Table II on page 18 it will be seen that they obtained first place in the field of killing diseases. This remark, however, requires some qualification for it must be remembered that to-day the average expectation of life is about 15 years greater than it was 40 years ago, and in consequence a larger number of people are enjoying their allotted span of three score years and ten; and as the senile decay of ripe old age is associated inevitably with deterioration of the heart and circulatory system a higher incidence of deaths attributable to this cause can be anticipated. While making due allowance for the number of deaths associated in this way with natural causes, the more serious aspect of the question must not be overlooked. Increased longevity and senile decay do not account entirely for the whole of the increased mortality from heart and circulatory diseases; there are certain other insidious factors or causal conditions of cardio-vascular disease which constitute two of the most important problems of modern preventive medicine. The first of these is rheumatism, a disease which still remains a mystery, but the most serious manifestation of which is heart involvement; and the second relates to the present-day environment of hustle and mental strain, which, when not compensated by due relaxation, produces in so many people abnormal blood pressure and arterial thickening.

In the case of rheumatism there is a dire need for increased scientific research, and there is reason to believe that at some time in the near future an organisation representing university and public authorities, and a number of other influential bodies



will be set up in Yorkshire to initiate and control a scheme for scientific research into rheumatism and the methods of its prevention.

As regards the second or environmental factor, its prevention or remedy is just as much the province of the man in the street, the business man or the politician as of the scientist. It is to be hoped that the present investigations of Government Departments into the nutrition of the people, the impetus which has been given by the Board of Education to physical training in the schools, and recent calls made by the Minister of Health for greater interest in physical training by the country as a whole, should each play a useful part in improving national well-being. *Future improvement in Nation's Health.*

At the time of writing (May, 1937), the new Scotton Banks Sanatorium, Knaresborough, has been opened for the reception of cases. The Sanatorium is constructed to receive 100 women and 100 children suffering from pulmonary tuberculosis. As a result of this new institutional provision, patients will be transferred from sanatoria not directly controlled by the County Council. This change is welcome, because certain accommodation provided hitherto has been far from satisfactory. *New Sanatorium at Knaresborough.*

On account of increased loan charges upon the new institution, there will be a proportionate increase in the cost of the tuberculosis scheme for a number of years to come. In this connection however it is appropriate to direct the attention of the County Council once again to the present position of tuberculosis in the County and the expenditure involved in the Council's anti-tuberculosis scheme. *Tuberculosis Scheme.*

In 1931 the County Council adopted a report upon re-organisation of the Tuberculosis Scheme. The proposals contained in this report involved considerable increases in expenditure upon the provision of medical staff, dispensary premises, equipment, microscopes and 6 X-ray plants. That the County Council's policy in approving the new scheme and meeting the increased expenditure has been sound is shown conclusively by the considerable reduction in the number of cases of tuberculosis recorded in the dispensary registers during the last six years. In 1931 when the re-organised scheme was put into operation there were 14,106 cases upon the registers of the dispensaries and on 31st December, 1936, this number was reduced to 8,806. A certain amount of this reduction is attributable to the natural decline in the incidence of the disease but it is obvious by comparison with the records of other Counties and County Boroughs that only a small part of the decrease can be explained in this way. Expressed in terms of financial saving the annual budget for the prevention and treatment of tuberculosis was nearly £145,000 in 1931 and for the year 1935-36 the expenditure was just over £133,000, giving a reduction of nearly £12,000 compared with 1931, a proportionate reduction in expenditure taking place in each of the intervening years. *Large reduction in number of Tuberculous Patients.* *Financial Saving.*

In each Annual Report during recent years I have made special reference to the maternal mortality rate for the Administrative County, and both in 1934 and 1935 attention was drawn to successive decreases in the number of deaths of mothers following upon confinement. The County Council will view with justifiable gratification the further reduction in this rate for the year 1936, for I think there can be no question that the intensive efforts of the Maternity and Child Welfare Committee during recent years are now being rewarded. *Maternal Mortality.*

The Midwives Act, 1936, should prove to be a valuable measure to secure a still further reduction in the number of deaths among women in childbirth, and of almost equal importance it should have the effect of lowering the incidence of chronic invalidity which is known to have supervened too frequently upon incompetent and meddlesome midwifery. The provisions of this Act will come into actual operation in the Administrative County in July, 1937, and as will be seen from the schedules contained in pages 75-80 of this report the action proposed to be taken by the County Council will be to appoint 189 whole-time midwives for domiciliary midwifery, while in addition the services of 161 district nurse-midwives employed by 124 District Nursing Associations will be utilised in the more rural areas of the County. *Midwives Act, 1936.*

The great size of the Administrative Area, the considerable variation in density of population and the industrial, rural and agricultural character of different districts rendered the West Riding scheme one of the largest and most complicated in the country, and I should like to place on record the thanks and appreciation of my staff and myself for the valuable assistance and co-operation given so readily by nursing *Acknowledgments.*



associations and welfare councils, the medical profession, representatives of midwives and other individuals. Without such assistance it would have been quite impossible for the scheme to have been presented to the County Council in time to enable it to be brought into operation on the appointed day.

*General Hospital  
Accommodation.*

After holding several meetings, the Composite Committee of the County Council dealing with general hospital accommodation arrived at the stage when it considered it was in a position to hold an official consultation with representatives of the governing bodies, medical and surgical staff of voluntary hospitals serving the County, and the first of these statutory consultations actually took place in January of the present year (1937). As a first step in developing and modernising the general hospitals scheme the sick wards at the County Public Assistance Institutions at Wakefield and Batley are being appropriated by the Public Health Committee for administration under the Public Health Acts. The Ministry of Health gave its sanction to this proposal in May, 1937.

*Consultation with  
Voluntary  
Hospitals.*

*"Appropriation" of  
two Hospitals.*

*The "Toddler."*

In May 1936, the Ministry of Health issued Circular 1550 in reference to the health of children under school age. Attention is drawn by this circular to the serious gap which has existed hitherto between the time when the child received medical inspection during its first and second years of life and the age of 5 when it receives systematic school medical inspection upon entering the elementary school. The Circular enjoined Maternity and Child Welfare Authorities to bridge this gap by the provision of nursery schools, additional clinics for "toddlers," and increased home-visiting by health visitors.

*Additional Nurses  
required.*

A preliminary report upon this important question has been presented to the Maternity and Child Welfare Committee of the County Council. This report drew attention to the necessity for increasing the number of sessions at existing clinics in order that "toddlers" may receive special attention. In addition, the report contained a statement of necessary increases in the health visiting staff not only on account of increased clinic duties and home visiting for toddlers, but also in order to cope with the large increase in the volume of work which has devolved upon the County Council nursing staff as the result of the steady issue of recommendations made by the Ministry of Health and Board of Education during the last ten to fifteen years.

*Action deferred until  
Review of County  
Districts Scheme  
settled.*

The final decisions of the Ministry of Health in connection with the Review of County Districts Scheme have not yet been received by the County Council and for this reason the Maternity and Child Welfare Committee have deemed it inadvisable to put forward at this stage any definite proposals to augment the nursing staff as the effect of the Review of County Districts in a number of areas autonomous under the Maternity and Child Welfare Act, 1918 will be to increase the size of such autonomous districts thereby reducing the area for which the County Council is at present the responsible authority and, *vice versa*, other autonomous districts will relinquish this autonomy and transfer their Maternity and Child Welfare administration to that of the County Council.

*Appointment of  
whole-time  
M.O.H.*

During the year the first establishment of a post of whole-time Medical Officer of Health took place since the passing of the Local Government Act, 1929. This was the combined appointment made by the Kiveton Park and Rotherham Rural District Councils; and by an arrangement with the County Council, the officer appointed will devote a certain amount of his time to school medical work in the area of the two rural districts, being designated for this purpose "Assistant County Medical Officer."

It is with regret that I place on record the resignation on account of ill-health of Miss A. E. Williams, one of the inspectresses of nurses and midwives. Miss Williams was appointed to the County Council staff in 1920 at a time when the Maternity and Child Welfare service was in its infancy. Since then the number of whole-time health visitors and nurses has grown from 105 to 169, and the number of child welfare centres has increased from 46 to 126. Her devotion to her work and unremitting zeal no doubt contributed to her breakdown in health, but she will be consoled in her retirement by the great improvement that has been registered in the health of West Riding mothers and children during her period of office.

I have the honour to be,

Your obedient servant,

T. N. V. POTTS,

County Medical Officer.

County Hall, Wakefield,  
May, 1937.

**Staff.**

(June, 1937).

**County Medical Officer and School Medical Officer.**

T. N. V. Potts, M.D., B.S., B.Hy., D.P.H.

**Administrative Assistant Medical Officers of Health.**P. L. Sutherland, M.B., Ch.B.,  
D.Sc. (Pub. Health).J. A. Fraser, M.B., Ch.B., D.P.H.  
R. Lawrence, M.D., Ch.B., D.P.H.G. S. Johnston, M.D., Ch.B., D.P.H.  
J. Wood Wilson, M.D., Ch.B., D.P.H.  
J. L. G. Iredale, M.B., Ch.B., D.P.H.

County Bacteriologist and Pathologist.

Senior Administrative Assistant.

Chief Assistant School Medical Officer, and  
Child Welfare Medical Officer.

Chief Clinical Tuberculosis Officer.

Administrative Assistant County Medical Officer.

Assistant Bacteriologist.

**Consultant Tuberculosis Officers.**H. E. Raeburn, M.D., M.B., B.S.  
V. Ryan, M.D., Ch.B., D.P.H.  
E. Ratner, M.D., Ch.B., D.P.H.

H. A. Crowther, M.A., M.R.C.S., L.R.C.P.

S. R. Wilson, M.D., Ch.B., D.P.H.

**Assistant Tuberculosis Officers.**G. A. Crowley, B.A., M.D., B.Ch., D.P.H.  
J. E. Gething, B.A., M.B., Ch.B.  
E. J. C. Groves, M.B., Ch.B.  
D. S. Hayes, M.R.C.S., L.R.C.P.  
A. Leitch, M.B., Ch.B., D.P.H.

N. J. S. Nathan, M.R.C.S., L.R.C.P.

A. D. Rankin, M.B., Ch.B., D.P.H.

T. W. Ruttledge, M.B., Ch.B., D.P.H.

E. A. Wilson, M.D., M.R.C.S., L.R.C.P.

S. P. Wilson, M.D., Ch.B., D.P.H.

**Sanatorium Medical Staffs.**

G. S. Johnston, M.D., Ch.B., D.P.H.

H. E. Raeburn, M.D., M.B., B.S.

J. N. Hill, M.B., Ch.B., D.P.H.

W. Guthrie, M.B., Ch.B.

A. Cubie, M.B., Ch.B., D.P.H.

E. Ratner, M.D., Ch.B., D.P.H.

M. S. Sharp, M.B., Ch.B.

V. Ryan, M.D., Ch.B., D.P.H.

E. M. Holmes, M.B., Ch.B.

M. Mulvein, M.B., Ch.B.

(Chief Clinical Tuberculosis Officer), Medical  
Superintendent, Cardigan Sanatorium.

Medical Superintendent, Middleton Sanatorium.

Senior Assistant M.O. do. do.

Junior Assistant M.O. do. do.

Junior Assistant M.O. do. do.

Medical Superintendent, Crookhill Hall Receiving  
Home.

Medical Superintendent, Eldwick Sanatorium.

Medical Superintendent, Scotton Banks  
Sanatorium.Senior Assistant M.O. and Deputy Medical  
Superintendent, Scotton Banks Sanatorium.

Assistant M.O. do. do. do.

**Sanatorium Nursing Staff.**

Middleton Sanatorium

Cardigan Sanatorium

Crookhill Hall Receiving Home

Eldwick Sanatorium

Scotton Banks Sanatorium

Matron, J. Pegg.

Nursing Staff, 63.

Matron, E. Marvin.

Nursing Staff, 7.

Matron, M. A. Toogood.

Nursing Staff, 6.

Matron, A. M. Pierce.

Nursing Staff, 5.

Matron, M. Heslop.

Nursing Staff, 27.

**Venereal Diseases Officers.**

T. M. Edward, M.B., Ch.B.,

Acting V.D. Officer.

There are 17 part-time Medical Officers of V.D. treatment centres; see page 31 for  
list of centres.**School Oculists.**

C. S. Stoddart, M.B., Ch.B.

H. W. Murphy, M.B., Ch.B., D.P.H.

C. G. K. Sharp, M.D., Ch.B. (Part-time).

**Aural Surgeon.**

H. M. Petty, M.B., Ch.B., D.L.O. (Part-time).

**School Medical Inspectors.**

N. M. Allan, M.B., Ch.B.

J. M. Anderson, M.R.C.S., L.R.C.P.

R. B. Becker, M.D., Ch.B., D.P.H.

J. W. Cairns, M.D., Ch.B., D.P.H.

J. Coupland, M.B., B.S., D.P.H.

G. P. Holderness, M.B., Ch.B., D.P.H.

J. V. Kirkwood, M.B., Ch.B., D.P.H.

S. Lindsay, M.B., Ch.B.

J. M. Macmillan, M.B., Ch.B., D.P.H.

G. M. Mayhall, M.R.C.S., L.R.C.P.

B. M. Newlands, M.B., Ch.B., D.P.H.

M. E. Peaker, M.R.C.S., L.R.C.P.

A. Rennie, M.B., Ch.B.

D. C. Rice, M.B., Ch.B.

J. J. Smith, M.B., Ch.B., D.P.H.

J. E. M. White, M.R.C.S., L.R.C.P.

J. M. Watt, M.D., Ch.B., D.C.H., D.P.H.

(part-time).



**Senior Dental Officer.**

B. R. Townend, L.D.S.

**School Dentists.**

D. D. Allan, L.D.S.	A. M. Moorhead, L.D.S.
K. Batten, L.D.S.	R. E. Morgan, L.D.S.
F. Brabington-Perry, L.D.S.	Miss D. M. Phillips, L.D.S.
F. W. Buzza, L.D.S.	J. G. Richardson, L.D.S.
S. E. Clarke, L.D.S.	W. Rodger, L.D.S.
P. D. Copeland, B.D.S.	Miss R. Sclare, L.D.S.
Miss M. M. Gibson, L.D.S.	B. Sleight, B.Ch.D.
M. Hattan, L.D.S.	Miss D. E. Smithson, L.D.S.
J. Jackson, L.D.S.	F. W. Sturgess, L.D.S.
H. F. Jones, L.D.S.	E. Thornton, L.D.S.
G. Kilvington, L.D.S.	J. Todd, L.D.S.
O. A. Long, L.D.S.	Miss M. M. Thom, L.D.S.
J. H. N. Macdonald, L.D.S.	J. R. Wishart, L.D.S.
J. M. Macdonald, L.D.S.	G. O. Wood, L.D.S.
J. Mackay, L.D.S.	

**County Analyst.**

F. W. Richardson, F.I.C., F.C.S.

**Bio-Chemist.**

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

**Consultant Obstetricians and Gynaecologists.**

The following is a list of consultant obstetricians and gynaecologists 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.	642.
J. P. Semple.	65, Thorne Road, Doncaster.	302.
L. D. Callander.	Danum House, South Parade, Doncaster.	242.
<b>HARROGATE.</b>		
C. D'Oyley Grange.	2, Lancaster Road, Harrogate.	4548.
T. V. Pearce.	2, Brunswick Drive, Harrogate.	2898.
<b>HUDDERSFIELD.</b>		
W. D. Galloway.	Sunnybank, Holmfirth.	74.
W. S. Dickson.	Wentworth House, Huddersfield.	2335.
<b>LEEDS.</b>		
Mrs. R. H. B. Adamson.	24, Park Square, Leeds.	22848.
Prof. A. M. Claye.	25, 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. 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
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.

John Chisholm.	430, Glossop Road, Sheffield.	SHEFFIELD.	61980 (Broomhill)
G. A. Davies.	Jessop Hospital for Women, 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.	Don Bank, Manchester Road, Sheffield.		60837 (Broomhill)
L. B. Patrick.	5, Burngreave Road, 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.

Whole-time Medical Officers of Health	...	...	...	...	...	...	3
School Medical Inspectors	...	...	...	...	...	...	11
Part-time Medical Practitioners in general practice	...	...	...	...	...	...	62
Part-time Medical Women in general practice	...	...	...	...	...	...	18
Part-time Medical Women not in general practice	...	...	...	...	...	...	13

## School Nurses and Health Visitors, etc.

Miss A. Brooke—Assistant Inspector of Nurses and Midwives.	
Miss A. M. Clarke	do.
Miss M. Davenport	do.
Miss R. O'Brien (temporary)	do.
112 Child Welfare Nurses.	
6 School Nurses.	
29 Dental Nurses and Attendants.	
22 Tuberculosis Nurses.	
63 Part-time Child Welfare Nurses.	

## 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. J. B. Marshall.

4 Junior Assistants, 7 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>
36 Clerks, 18 Typists.			

## Medical Officers of Health.

There are 14 whole-time and 77 part-time Medical Officers of Health of County Districts.  
 (June, 1937).



## 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
		Arncliffe	17998	260
<b>No. 2.—Staincliffe Area.</b>				
C. Clyne	M.D., Ch.B., D.T.M. & H.	Kildwick	11327	6586
W. L. Crabtree	L.S.A., L.M.S.S.A.	Addingham	20785	2761
G. D. G. Cameron	M.R.C.S., L.R.C.P.	Grassington and Kettlewell	60502	3245
N. A. MacLeod	M.D., Ch.B.	Skipton	21978	15471
A. M. Niven	M.B., Ch.B.	Thornton	10002	6667
J. W. Pickard	M.B., Ch.B.	Barnoldswick	6572	12131
M. Purcell	M.B., Ch.B., B.A.O.	Silsden	7101	4919
H. Wales	M.B., Ch.B.	Gargrave	20994	1941
<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. Thomas	B.M., B.Ch.	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	8861	8544
J. S. Dudgeon	M.D., B.Ch., B.A.O., D.P.H.	Acomb	16081	2553
R. C. Davison	M.B., B.S.	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	6411	3515
*C. H. Sykes	L.R.C.P., L.R.C.S., L.R.F.P.S.	Aberford	17315	10142
†J. B. Young	M.B., Ch.B.	Kippax	10167	12475
†C. C. Hargreaves	M.B., Ch.B., D.P.H.	Sherburn	22009	5448
Wm. Murphy	M.B., Ch.B., M.R.C.S., L.R.C.P.	Ryther	22902	6184
J. P. Scatchard	M.B., B.S., M.R.C.S., L.R.C.P.	Tadcaster	11100	4178
R. W. Lee	M.B., Ch.B.	Boston Spa	19233	3547
H. B. Cook	M.D., Ch.B.	Harewood	7058	2685
O. D. Beetham	M.B., Ch.B.	Kirkby Overblow	27247	6366
†J. A. Hargreaves	M.B., C.M.	Thorner		
†E. R. Hargreaves	M.B., B.Ch., D.P.H.	Tockwith		
		Wetherby		
<b>No. 5.—Skearck Area.</b>				
D. W. E. Burridge	M.B., Ch.B.	Horsforth	5758	18221
†A. J. I. Muschamp	M.B., Ch.B.	Yeadon	4568	13943
†G. E. Macvie	M.D., Ch.B.	Baildon	5558	12179
*E. G. Firth	M.R.C.S., L.R.C.P.	Ilkley	11646	10226
*T. Browne-Header	M.B., C.M.	Otley	37111	24478
†A. W. Gott	M.B., B.S., M.R.C.S., L.R.C.P.			
*W. H. Galloway	M.R.C.S., L.R.C.P.			
†H. V. Horsfall	M.B., Ch.B.			
<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.	Bingley	9522	18780
W. A. Lochhead	M.B., Ch.B.	Cullingworth	1215	1790
J. E. Baird	M.B., Ch.B., B.A.O.	Haworth	9991	10716
C. Clyne	M.D., Ch.B., D.T.M. & H.	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	2399	15340
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
*O. D. Ballinger	B.M., B.Ch.	Shipley	2182	30670
†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. Moreck ...	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 ...	9749	32152
†H. N. Middleton ...	M.B., B.Ch., B.A.O.	Hipperholme ...		
†J. H. J. V. Coats ...	M.B., B.Ch.	Rastrick ...		
C. M. Stallard ...	M.D., Ch.B.	Elland ...	3431	15150
A. G. Gamble ...	L.M.S.S.A.	Stainland ...	2320	4065
†N. C. Beaumont ...	M.R.C.S., L.R.C.P.	Queensbury ...	1402	5780
G. C. Sharp ...	M.B., Ch.B.	Todmorden ...	12770	21210
H. Thorp ...	M.B., Ch.B., D.P.H.	Hedden 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.—Spen 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 ...	696	8948
W. A. Mair ...	M.B., Ch.B., F.R.C.S.E.	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.			
†W. L. René Wood ...	M.R.C.S., L.R.C.P.			
<i>No. 10.—Lower Agbrigg Area.</i>				
†T. Stephens ...	B.Sc. M.R.C.S., L.R.C.P.	Kirkhamgate ...	5471	12050
K. S. MacDonald-Smith ...	M.B., B.Ch., F.R.C.S.	Ardsley, E. and W. Thorpe ...		
††D. Bell ...	M.B., Ch.B., D.P.H.	Crigglestone ...	5261	5079
C. H. Smith ...	M.B., Ch.B.	Emley ...	8076	5974
J. N. U. Russell ...	M.B., B.Ch., B.A.O.	Flockton ...	1280	7825
†M. Melvin ...	M.B., Ch.B.	Horbury ...	6239	19706
J. D. Bottomley ...	M.B., Ch.B.	Lofthouse and Stanley ...		
†F. J. G. Tocher ...	M.B., Ch.B.	Walton ...	2662	1773
D. Downie ...	M.B., Ch.B.	Altofts ...	3068	19824
††H. Scholefield ...	M.B., Ch.B.	Normanton ...		
N. S. Twist ...	M.B., Ch.B.	Sharlston and Crofton ...	4612	6611
†J. G. Munro ...	M.B., Ch.B.	Oulton ...	1178	4219
*T. E. Lister ...	M.B., Ch.B.	Rothwell ...	3500	9322
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 ...	9939	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.	Castleford ...	3728	36632
†M. I. Prangnell ...	M.B., Ch.B.			
†G. T. W. Sloan ...	M.B., B.Ch., B.A.O.	Featherstone ...	4431	14440
*W. Steven ...	M.B., C.M.	Methley ...	3493	4482
†J. Duncan ...	M.B., Ch.B.	Hemsworth ...	4163	13070
E. W. L. White ...	M.B., Ch.B.	Ackworth ...	8036	5869
*M. B. Taylor ...	M.R.C.S., L.R.C.P.	Smeaton ...	5504	872
T. C. A. Sweetnam ...	M.D., B.Ch.	Stb. Kirkby ...	7019	23935
W. L. Gardner ...	M.B., B.S.	Ryhill ...	4297	6259
J. Malloch ...	M.B., Ch.B.	Brierley ...	3413	8260
E. J. H. Sullivan ...	M.D., M.Ch., L.M.	Houghton ...	2318	3295
*H. J. Hacker ...	M.R.C.S., L.R.C.P.			
S. Hodgkinson ...	M.B., Ch.B., D.T.M.			
†J. L. Elliott ...	L.S.A., L.M.S.S.A.			
†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.	Adlingfleet ...	5425	344
*J. C. T. Crowden ...	M.B., Ch.B.	Selby and Cawood	26354	14176
†P. Eardley ...	M.B., Ch.B.			
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 (Arksey, etc.)	7983	19597
†W. L. Walker ...	M.B., Ch.B.			
*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 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-Deane	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.	Adwick-le-Street	3605	19650
*A. M. McArthur	M.B., Ch.B.			
†J. J. Huey	L.S.A., L.M.S.S.A.	Mexborough	4511	17423
†S. P. Bhatia	M.B., B.S., M.R.C.S., L.R.C.P.			
†A. C. Lindsay	M.B., Ch.B.	Tickhill	12768	3176
C. D. Walker	M.B., Ch.B.	Hatfield	16188	7624
R. M. L. Anderson	M.B., Ch.B.	Stainforth	8800	9303
*†J. M. Taylor	M.B., Ch.B., D.P.H.			
†W. Henry	M.B., Ch.B.	Thorne	13425	15456
<i>No. 14.—Staincross 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	2099	10695
†H. A. L. Banham	L.R.C.P., L.R.C.S.	Worsborough	3288	7650
†R. Millar	M.B., Ch.B., D.P.H.	Darton	3968	8783
†J. C. Pickup	M.B., Ch.B., D.P.H.	Wombwell	3567	18117
†H. B. Pare	M.B., Ch.B.	Royston	5602	9823
†J. L. Elliott	L.S.A., L.M.S.S.A.	Cudworth	1746	9301
†J. W. Whitworth	M.B., Ch.B.	Darfield	2881	5411
J. Smail	M.B., Ch.B.	Grenoside	3537	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
†R. N. Farrer	M.R.C.S., L.R.C.P.	Clayton West	6927	4298
F. L. Whincup	M.B., Ch.B.	Cawthorne	8778	4815
<i>No. 15.—Upper Agbrigg Area.</i>				
†J. A. Stephens	M.R.C.S., L.R.C.P.	Kirkburton	6987	8424
†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	6858	7910
R. N. Kirk	M.B., Ch.B.	Slaithwaite	5439	9252
S. Hall	M.B., Ch.B., B.A.O.	Golcar	2456	15824
G. R. Aspinwall	M.R.C.S., L.R.C.P.	Marsden	8633	5407
S. Prior	M.B., C.M.	Kirkheaton	1674	2603
††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 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-Deane	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.)
<b>Area No. 1.—Ewecross.</b>			
W. Roberts	Bowland Rural	73833	3771
J. Peters	Mitton and Bashall Eaves	9565	1359
G. Kayley	Garsdale	11068	410
W. Batt	Dent and Sedburgh	41606	3159
W. Slinger	Bentham	69611	6457
C. Parker	Settle and Long Preston	92396	7910
<b>Area No. 2.—Staincliffe.</b>			
G. J. Harker	Grassington	27355	2555
S. H. Day	Kettlewell	83147	690
G. D. Hunt	Gargrave	17757	1819
J. E. Atack	Addingham	20785	2761
D. Slater	Kildwick	20379	12096
Do.	Skipton	19112	14765
Do.	Barnoldswick	20726	19035
<b>Area No. 3.—Claro.</b>			
T. C. Crawhall	Great Ouseburn	45969	14796
J. Clark	Knaresborough	18838	9655
Mrs. M. E. Bowes	Harrogate	22410	45856
G. E. Wilkinson	Pateley Bridge	75071	6534
F. S. Metcalfe	Ripon	61602	13654
<b>Area No. 4.—Barkston Ash.</b>			
W. Bortoft	Tadcaster	44911	11585
W. Wormald	Aberford	27482	22664
S. C. Mellor	Wetherby	64638	16776
R. A. Wilkinson	Bishopthorpe	6411	3515
<b>Area No. 5.—Skrack.</b>			
G. C. Clarke	Guisley	10126	26122
H. Wood	Horsforth	5758	18221
	Ilkley	48757	34704
<b>Area No. 6.—Worth Valley.</b>			
J. A. Sharp	Keighley	15472	49024
Miss A. Hartley	Bingley	12773	24054
W. H. Ogden	Haworth	8560	7788
L. M. Greenwood	Wilsden	2638	3000
<b>Area No. 7.—East Morley.</b>			
C. W. Calverley	Farsley	2927	10586
H. Darnborough	Drighlington	1135	4115
L. M. Greenwood	Denholme	2536	2547
A. Hotchin	Pudsey	2399	15340
L. Clough	Shipley	2182	30670
F. Higginson	Hunsworth	1381	1318
<b>Area No. 8.—Calder.</b>			
J. H. Hindle	Todmorden	40355	36693
F. Madders	Brighouse	12544	40815
A. Sutcliffe	Sowerby	26079	44681
<b>Area No. 9.—Spen Valley.</b>			
W. H. Holt	Batley	6485	47249
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
<b>Area No. 10.—Lower Agbrigg.</b>			
W. Town	Horbury and Normanton	41345	92088
<b>Area No. 11.—Osgodcross.</b>			
Mrs. L. I. Dodsworth	Hemsworth East	34750	31329
I. Scott	Hemsworth West		30231
W. Town	Pontefract	64103	97690
<b>Area No. 12.—Goole and Selby.</b>			
H. S. Miller	Goole	38043	23368
W. B. Weaver	Selby	38256	16175
<b>Area No. 13.—Don Valley.</b>			
F. Grisedale	Bolton-on-Dearne	21587	28722
Do.	Mexborough	7906	35635
A. J. Thorsby	Tickhill	42973	39396
J. Thurgood	Adwick-le-Street	26176	46478
H. E. Newton	Thorne	38419	32383
<b>Area No. 14.—Staincross.</b>			
E. Hammerton	Darton and Darfield	21572	70489
W. Taylor	Worsborough	7250	17039
B. J. B. Marsden	Stocksbridge	38238	19141
F. Bailey	Wortley	8082	2729
H. Dowson	Ecclesfield	7037	10018
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 ... ..	59752	80825
A. Smith ... ..	Saddleworth ... ..	16930	12484
Miss J. Lees ... ..	Springhead ... ..	1555	4740
<i>Area No. 16.—Rother Valley.</i>			
F. S. Butcher ... ..	Rotherham Rural ... ..	8880	14280
W. J. Blyth ... ..	Rawmarsh ... ..	2602	18939
G. C. Hearn ... ..	Maltby ... ..	20579	32269
T. H. Harrison ... ..	Wath-on-Deane ... ..	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 sick beds.	Number of Nursing Staff.
Settle	Settle 15	B. S. Hyslop	M.B., CH.B.	60	4
Skipton	Skipton 264	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. Thomas	B.M., B.CH.	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	H. V. Horsfall	M.B., CH.B.	78	7
		T. L. Walker	M.B., CH.B.		
Keighley	Keighley 2869	Consultants—part time, called by M.O. as required:— H. C. Ling W. H. G. M. Ling	M.R.C.S., L.R.C.P. F.R.C.S., L.R.C.P.	241	43*
Clayton, Bradford	Queensbury 2120	J. B. Stewart	L.R.C.P., L.R.C.S.	310	35*
Todmorden	Todmorden 120	H. Thorp	M.B., CH.B., D.P.H.	79	8*
		J. J. O'Reilly (whole-time resident)	M.B., F.R.C.S., D.P.H.		
Batley	Dewsbury 665	R. Herley (Ophthalmic Surgeon)	L.R.C.P., L.R.C.S.	424	73*
		J. B. Lyle (Visiting Physician)	M.D., CH.B., B.A.O.		
Wakefield	Wakefield 2837	D. H. Russell (Visiting Surgeon)	M.D., F.R.C.S.	168	38
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.D., 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	A. Anderson	M.B., C.M., D.P.H.	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.



## PART I.

## GENERAL PUBLIC HEALTH.

## Summary of Vital Statistics—1936.

AREA of Administrative County ...	1,625,058 acres before 1st April, 1936.
" " " " " "	1,618,399 acres from 1st April, 1936.

ESTIMATED RESIDENT POPULATION (Mid-Year 1936) ...	1,525,410
(Adjusted for changes in boundary which took place on 1st April, 1936.)	

ENUMERATED POPULATION at 1931 Census ...	1,530,405
--	-----------

POPULATION at 1931 Census ...	1,523,298
(Adjusted for the changes in boundary which took place on 1st April, 1936).	

SANITARY DISTRICTS, 147, namely:—11 Boroughs.

(See Table IV folded in at page 18). 108 Urban Districts (107 from 1st April, 1936).

28 Rural Districts.

**Note.**—Alterations in boundary. The above statistics relate to the year 1936. They are not adjusted for the changes in boundary which took place on the 1st April 1937 as a result of the County of York, West Riding Review Order, 1937. Particulars as to the changes are set out on page 14.

The Vital Statistics for the Administrative County for the decennia 1915-24 and 1925-34, and for the years 1935 and 1936 are summarised below:—

	Averages for 10 years:—			
	1915-24	1925-34	1935	1936
<b>Birth Rate</b>	21.1	17.1	15.0	15.1
(Per 1,000 estimated population.)				
<b>Death Rates:—</b>				
(All per 1,000 estimated population.)				
All Causes ...	13.7	12.1	11.9	12.3
Smallpox ...	0.00	0.00	Nil.	Nil.
Enteric Fever ...	0.04	0.02	0.00	0.00
Scarlet Fever ...	0.03	0.03	0.03	0.02
Diphtheria ...	0.11	0.08	0.14	0.10
Measles ...	0.25	0.10	0.02	0.05
Whooping Cough ...	0.15	0.09	0.04	0.06
Zymotic Diseases (seven principal) ...	0.86	0.41	0.28	0.29
Phthisis ...	0.81	0.58	0.48	0.44
(Tuberculosis of Respiratory System.)				
Other Forms of Tuberculosis ...	0.34	0.19	0.10	0.12
Respiratory Diseases ...	2.50	1.66	1.13	1.25
Cancer ...	1.11	1.33	1.48	1.51
Heart Disease ...	1.49	2.16	2.87	3.19
<b>Infantile Mortality</b> ...	95	72	58	63
(i.e., Number of deaths under one year per 1,000 live births.)				
<b>Diarrhœa</b> ...	12.24	5.96	3.42	4.00
(Deaths in infants under 2 years of age per 1,000 live births.)				
<b>Maternal Mortality:—</b>				
(Deaths of mothers in childbirth per 1,000 live births.)				
Puerperal Sepsis ...	1.54	2.07	1.86	1.70
Other Causes ...	3.18	3.42	2.69	2.65
Total ...	4.72	5.49	4.55	4.35

### Area and Population.

On the 1st April, 1936, certain changes in boundaries came into operation as the result of the Doncaster, Rotherham and Wakefield Extension Order, 1936. The statistics of area and population relating thereto are shown below.

		Area Acres	Population 1931 Census.
AREAS TRANSFERRED TO DONCASTER COUNTY BOROUGH.			
Bentley-with-Arksey U.D. (part)	...	172	7
Doncaster R.D. (part), <i>vis.</i> :—			
Parts of the Parishes of:—			
	Acres.	Population 1931 Census.	
Armthorpe	117	—	
Barnby Dun-with-			
Kirk Sandall	729	163	
Cantley	1,271	1,012	
Loversall	496	189	
Warmsworth	185	21	
	<u>2,798</u>	<u>1,385</u>	
		2,798	1,385
Total Area and Population transferred	...	<u>2,970</u>	<u>1,392</u>
AREAS TRANSFERRED TO ROTHERHAM COUNTY BOROUGH.			
Greasbrough U.D. (part)	...	1,415	3,057
Rawmarsh U.D. (part)	...	75	24
Rotherham R.D. (part), <i>vis.</i> :—			
Parts of the Parishes of:—			
	Acres.	Population 1931 Census.	
Brinsworth	360	618	
Dalton	560	179	
Wentworth	99	357	
Whiston	917	1,301	
	<u>1,936</u>	<u>2,455</u>	
		1,936	2,455
		3,426	5,536
Area transferred from Rotherham County Borough to Rotherham R.D. (Wentworth P.)	...	66	4
Nett Total Area and Population Transferred	...	<u>3,360</u>	<u>5,532</u>
AREA TRANSFERRED TO WAKEFIELD COUNTY BOROUGH.			
Stanley U.D. (part)	...	329	183
AREAS TRANSFERRED TO ROTHERHAM R.D.			
Greasbrough U.D. (part)	...	673	144
Rawmarsh U.D. (part)	...	198	7
Rotherham County Borough (part)	...	66	4
Total Area and Population Transferred	...	<u>937</u>	<u>155</u>
AREA TRANSFERRED TO RAWMARSH U.D.			
Greasbrough U.D. (part)	...	325	398
The result of these changes is summarised below:—			

Area affected by change.	Area, Acres.		Population, 1931 Census.	
	Before change	After change	Before change	After change
Bentley-with-Arksey U.D.	5,128	4,956	16,458	16,451
Greasbrough U.D.	2,413	U.D. abolished	3,599	U.D. abolished
Rawmarsh U.D.	2,550	2,602	18,572	18,939
Stanley U.D.	4,263	3,934	14,565	14,382
Doncaster R.D.	77,865	75,067	49,047	47,662
Rotherham R.D.	29,614	28,615	38,734	36,434
West Riding Administrative County:—				
Urban Districts	366,218	363,356	1,090,432	1,087,010
Rural Districts	1,258,840	1,255,043	439,973	436,288
Total	1,625,058	1,618,399	1,530,405	1,523,298
Doncaster C.B.	4,831	7,801	63,316	64,708
Rotherham C.B.	5,895	9,255	69,691	75,223
Wakefield C.B.	4,970	5,299	59,122	59,305



By the changes the Administrative County Area was decreased by 6,659 acres and population as at the 1931 census of 7,107.

In addition to the above, certain changes in boundary were brought about by the County of York, West Riding Review Order, 1937, and came into operation on the 1st April, 1937. By these changes the acreage of the Administrative County was altered and is now (June 1937) as shown below. It should be mentioned that the figures are provisional and subject to amendment:—

	Acres.
Urban Districts and Non-County Boroughs	376,782
Rural Districts	1,236,742
Administrative County	1,613,524

### Births.

During the year 1936, 22,995 births were registered as belonging to the West Riding Administrative County Area, yielding a birth rate of 15.1 per 1,000 of the estimated population. Of this number, 11,759 were males and 11,236 females. The birth rate for the aggregate urban districts of the County was 14.6 per 1,000 and for the rural districts 16.2 per 1,000. The live birth rate for England and Wales for the year 1936 was 14.8 per 1,000 of the estimated population. The County birth rate for the year 1935 was 15.0 per 1,000; for 1934, 15.2; and for 1933, 15.0. The average for the 5 years 1931-35 was 15.5 and for the 5 years 1926-30, 17.7.

Still births recorded during the year in the County Area numbered 1,071, and 980 illegitimate births were registered.

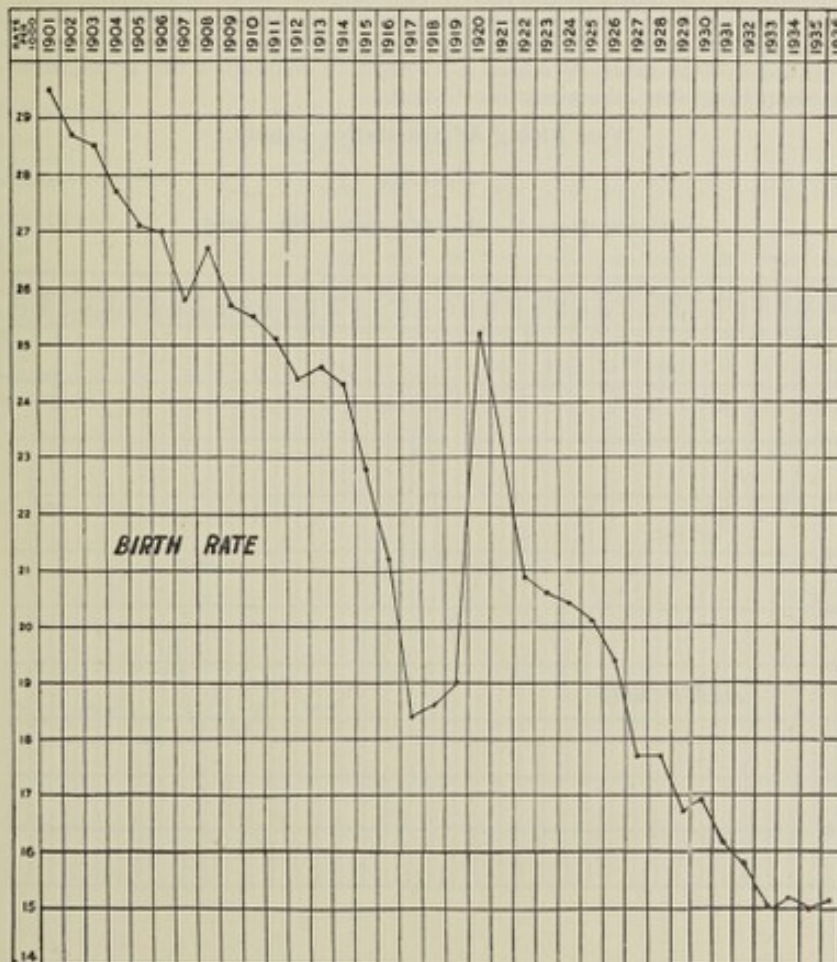
The districts having the highest birth rates during 1936 were the following:—Birkenshaw, 19.3; Conisbrough, 23.1; Cudworth, 20.9; Dodworth, 21.1; Hemsworth, 20.0; Knottingley, 21.2; Maltby, 23.2; Royston, 18.7; Thurnscoe, 20.1; Whitwood, 18.7; Worsborough, 22.4; Hemsworth R., 20.1; Rotherham R., 18.5; Thorne R., 20.0.

The districts recording the lowest birth rates were:—Barnoldswick, 10.2; Burley-in-Wharfedale, 10.7; Calverley, 8.9; Earby, 9.9; Hebden Bridge, 9.6; Linthwaite, 10.7; Marsden, 10.4; Mytholmroyd, 10.0; New Mill, 10.3; Skelmanthorpe, 10.0; Slaithwaite, 10.8; Thurstonland and Farnley Tyas, 9.7; Todmorden B., 10.0; Bowland R., 10.4.

The lists given above have been extracted from Table IV on page 19, which gives the principal vital statistics for each sanitary district in the County, and the figures quoted are the crude birth rates.

### West Riding Administrative County.

#### Birth Rate for the 36 years 1901—1936.





## Deaths.

The nett deaths registered for the Administrative County during 1936 numbered 18,843 (males 9,666, females 9,177), corresponding to a rate of 12.3 per 1,000 of the estimated mid-year population for the year 1936, compared with 11.9 for 1935 and 11.7 for 1934. The death rate for the total urban districts of the County was 12.9 per 1,000, and that for the rural districts 11.0 per 1,000. The death rate for England and Wales for the year 1936 was 12.1 per 1,000, and 11.7 for the previous year.

The mortality returns have been analysed in detail, and comparisons made with previous years in a number of tables in this report, and the number of deaths and death rates are given in Tables IV and V on pages 19 and 20.

The following districts had the highest crude (uncorrected) death rates during the year 1936:—Elland, 16.6; Golcar, 16.4; Haworth, 17.2; Honley, 17.8; Meltham, 17.3; Mytholmroyd, 18.4; Oakworth, 17.8; Queensbury, 18.2; Skelmanthorpe, 18.8; Soyland, 17.5; Thurstonland and Farnley Tyas, 19.9; Todmorden R., 16.0.

The districts with the highest adjusted death rates (i.e., corrected for age and sex constitution of the population) were, Barnoldswick, 16.0; Birstall, 16.4; Castleford, 17.2; Cudworth, 16.9; Darfield, 16.2; Elland, 16.4; Golcar, 17.1; Honley, 18.1; Meltham, 16.4; Mytholmroyd 16.2; Oakworth, 17.5; Queensbury, 17.3; Skelmanthorpe, 21.4; Springhead, 16.0.

The districts with the lowest crude rates were, Adwick-le-Street, 9.3; Altofts, 10.4; Bentley-with-Arksey, 10.3; Hemsworth, 10.1; Maltby, 7.0; Methley, 9.8; Mexborough, 9.0; Normanton, 10.3; Otley, 10.0; Rothwell, 10.2; Royston, 9.2; Stanley, 10.1; Thurnscoe, 9.9; Worsborough, 10.3; Barnsley R., 8.8; Doncaster R., 8.7; Hemsworth R., 9.7; Hunslet R., 8.9; Kiveton Park R., 9.8; Selby R., 10.1; Thorne R., 8.8.

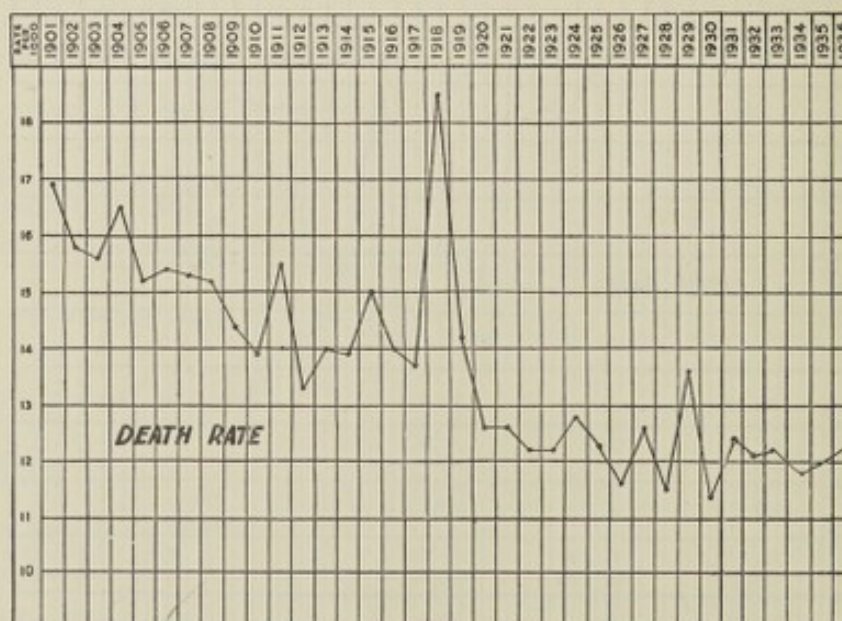
Those with the lowest adjusted rates were, Maltby, 10.4; Mexborough, 10.7; Otley, 10.1; Rawdon, 10.9; Rothwell, 10.9; Silsden, 10.8; Thurstonland and Farnley Tyas, 7.7; Barnsley R., 10.1; Great Ouseburn R., 10.8; Hunslet R., 10.6; Knaresborough R., 10.9; Sedburgh R., 10.0; Selby R., 8.8; Wharfedale R., 9.6.

During 1936, 4,757 deaths were allocated by the County Health Department under the Registrar General's scheme of quarterly distribution to the district of usual residence.

The adjusted death-rate is, broadly speaking, the crude death-rate adjusted for the age and sex constitution of the population. 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. Column 10 of Table IV folded in at page 19 contains a list of adjusted death-rates for the areas comprising the Administrative County.

### West Riding Administrative County.

Death Rate for the 36 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 1936.

TABLE I.

CAUSES OF DEATH	AGE AT DEATH											Total (net deaths)
	Under 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	2	1	—	—	—	—	4
2. Measles	20	21	29	8	1	—	—	—	—	1	—	80
3. Scarlet fever	—	4	12	17	3	—	1	—	—	—	—	37
4. Whooping Cough	44	23	16	1	—	—	—	—	—	—	—	84
5. Diphtheria	2	7	50	83	3	1	—	2	2	—	—	150
6. Influenza	11	5	2	6	8	16	12	34	54	59	28	235
7. Encephalitis Lethargica	—	—	2	1	—	7	4	3	4	2	—	23
8. Cerebro-spinal fever	4	—	4	6	5	—	—	2	1	—	—	22
9. Poliomyelitis	—	—	—	2	3	—	—	—	—	—	—	5
10. Polio-encephalitis	—	—	2	1	1	—	—	—	—	—	—	4
11. Tuberculosis of respiratory system	5	3	4	10	142	131	96	132	111	30	5	669
12. Other Tuberculous diseases	16	18	21	29	42	18	17	9	7	6	2	185
13. Syphilis	7	—	—	—	2	2	4	4	5	3	1	28
14. General paralysis of the insane, tabes dorsalis	—	—	—	—	1	—	5	18	10	7	2	43
15. Cancer, malignant disease	1	1	4	4	6	46	113	356	635	778	359	2303
16. Diabetes	—	—	—	4	6	9	12	21	89	127	41	309
17. Cerebral hæmorrhage, etc.	—	—	—	—	3	7	22	81	244	473	417	1247
18. Heart disease	—	—	2	34	46	81	134	395	953	1591	1643	4879
19. Aneurysm	—	—	—	1	2	—	5	12	8	9	1	38
20. Other circulatory diseases	—	1	1	1	—	1	8	32	145	387	461	1037
21. Bronchitis	67	11	3	9	6	6	15	39	93	181	272	702
22. Pneumonia (all forms)	254	83	53	24	37	50	63	120	156	135	96	1071
23. Other respiratory diseases	5	1	5	2	6	11	13	16	31	26	25	141
24. Peptic ulcer	—	—	—	—	2	11	24	45	48	26	6	162
25. Diarrhoea, etc.	83	9	9	—	5	6	3	4	9	13	13	154
26. Appendicitis	—	—	3	10	17	10	11	13	13	6	1	84
27. Cirrhosis of liver	—	—	—	1	—	1	2	2	20	13	5	44
28. Other diseases of liver, etc.	—	—	1	—	1	4	7	18	39	40	32	142
29. Other digestive diseases	26	4	11	10	19	20	26	42	46	67	48	319
30. Acute and chronic nephritis	2	2	1	14	27	28	34	75	166	201	105	655
31. Puerperal Sepsis	—	—	—	—	6	20	13	—	—	—	—	39
32. Other puerperal causes	—	—	—	—	9	26	26	—	—	—	—	61
33. Congenital debility, premature birth, malformations, etc.	768	4	2	3	2	1	1	2	1	—	—	784
34. Senility	—	—	—	—	—	—	—	—	8	83	485	576
35. Suicide	—	—	—	—	8	15	34	32	54	24	9	176
36. Other violence	21	17	33	49	105	96	83	90	93	101	98	786
37. Other defined diseases	116	20	30	60	87	80	130	185	301	336	202	1547
38. Causes ill defined or unknown	—	—	—	—	—	1	2	4	5	5	1	18
ALL CAUSES	1452	234	300	390	612	707	921	1788	3351	4730	4358	18843

AGE AND SEX DISTRIBUTION OF THE NET DEATHS												
URBAN DISTRICTS:—												
Males	579	91	103	148	237	252	328	711	1424	1814	1365	7052
Females	411	65	106	137	195	250	326	616	1154	1756	1815	6831
Persons	990	156	209	285	432	502	654	1327	2578	3570	3180	13883
RURAL DISTRICTS:—												
Males	273	50	48	56	98	99	132	238	437	620	563	2614
Females	189	28	43	49	82	106	135	223	336	540	615	2346
Persons	462	78	91	105	180	205	267	461	773	1160	1178	4960
WEST RIDING ADMINISTRATIVE COUNTY:—												
Males	852	141	151	204	335	351	460	949	1861	2434	1928	9666
Females	600	93	149	186	277	356	461	839	1490	2296	2430	9177
Persons	1452	234	300	390	612	707	921	1788	3351	4730	4358	18843



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 1936, 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.	1931-35.	1936.
	Total.	Average per year.			
Diseases of Heart and Circulatory System ...	25,368	5,074	5,954	274	316
Cancer, Malignant Disease ...	10,937	2,187	2,303	118	122
Bronchitis, Pneumonia, and other Diseases of Respiratory System not including Tuberculosis	10,158	2,032	1,914	110	102
Cerebral Hæmorrhage, etc. ....	5,796	1,159	1,247	63	66
Violent Deaths :—	4,429	886	962	48	51
<i>Suicide</i> ...	941	188	176	10	9
<i>Other Violence</i> ...	3,488	698	786	38	43
Diseases of Digestive System ...	4,795	959	905	52	48
Tuberculosis (All Forms) :—	4,911	983	854	53	45
<i>Respiratory Tuberculosis</i> ...	3,838	768	669	41	35
<i>Other Tuberculous Diseases</i> ...	1,073	215	185	12	10
Congenital Debility ...	4,188	838	784	45	42
Acute and Chronic Nephritis ...	3,477	695	655	38	35
Diabetes ...	1,435	287	309	15	16
Influenza ...	2,452	490	235	26	17
Diphtheria ...	862	172	150	9	8
Measles ...	571	114	80	6	4
Whooping Cough ...	432	86	84	5	4
Scarlet Fever ...	192	38	37	2	2
Other Defined Diseases ...	12,506	2,501	2,352	135	125
Causes ill defined or unknown ...	85	17	18	1	1
TOTALS ...	92,594	18,518	18,843	1,000	1,000

### Urban and Rural Statistics for 1936.

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*	Phthi-sis Death rate	Other Tub. Dis-eases Death rate	Respira-tory Diseases Death rate†	Cancer	Heart and Circul-atory Diseases		Puerperal Sepsis	Other Causes	
(1) Urban Districts in the West Riding ...	14.6	12.9	0.29	0.45	0.12	1.26	1.64	4.15	63	1.52	2.56	3.50
(2) Rural Districts in the West Riding ...	16.2	11.0	0.30	0.41	0.12	1.25	1.19	3.29	63	1.83	2.49	5.08
(3) WEST RIDING ADMINISTRATIVE COUNTY	15.1	12.3	0.29	0.44	0.12	1.25	1.51	3.90	63	1.62	2.54	4.00
(4) England & Wales ...	14.8	12.1	§	0.58	0.11	§	1.63	§	59	1.34	2.31	5.9

\* 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.

Table IV.  
Births, Deaths, Annual Rates, etc., 1936.

[illegible]











TABLE VI.

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

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

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Birth Rate ... ..	17.7	17.7	16.7	16.9	16.1	15.8	15.0	15.2	15.0	15.1
Death-rate ... ..	12.6	11.5	13.6	11.4	12.4	12.1	12.2	11.7	11.9	12.3
Infant Mortality* ...	79	62	89	65	74	70	70	58	58	63
Zymotic Death-rate ...	0.51	0.28	0.54	0.33	0.38	0.39	0.30	0.41	0.28	0.29
Death-rates from:—										
Small-pox ... ..	0.01	0.01	0.00	0.00	Nil	Nil	Nil	Nil	Nil	Nil
Scarlet Fever ... ..	0.02	0.02	0.05	0.03	0.02	0.01	0.02	0.05	0.03	0.02
Diphtheria ... ..	0.04	0.06	0.08	0.09	0.10	0.08	0.08	0.17	0.14	0.10
Enteric Fever ... ..	0.02	0.02	0.02	0.02	0.01	0.02	0.01	0.00	0.00	0.00
Measles ... ..	0.21	0.05	0.10	0.06	0.11	0.10	0.03	0.11	0.02	0.05
Whooping Cough ...	0.11	0.04	0.18	0.05	0.05	0.09	0.07	0.03	0.04	0.06
Diarrhoea, &c.† ...	5.63	5.53	6.96	4.59	5.10	6.00	6.07	3.21	3.42	4.00
Respiratory Diseases	2.12	1.46	2.22	1.35	1.64	1.33	1.36	1.16	1.13	1.25
Phthisis‡ ... ..	0.65	0.61	0.66	0.57	0.57	0.52	0.49	0.44	0.48	0.44
Other Tuberculous Diseases ... ..	0.21	0.22	0.21	0.20	0.16	0.17	0.14	0.12	0.10	0.12

\* 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 1916 to 1935.

The following table gives the average rates for quinquennial periods (compared with the rates for 1936) 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 1936 for comparison	Quinquennial Periods				Year 1936 for comparison	Quinquennial Periods				Year 1936 for comparison
	1916-20	1921-25	1926-30	1931-35		1916-20	1921-25	1926-30	1931-35		1916-20	1921-25	1926-30	1931-35	
Birth Rate ... ..	19.6	20.2	16.7	14.7	14.6	23.1	23.5	20.3	17.3	16.2	20.5	21.0	17.7	15.5	15.1
• Infant Mortality ...	100	86	74	65	63	96	82	74	67	63	99	85	74	66	63
Death Rates:—															
All Causes ... ..	14.8	12.7	12.5	12.6	12.9	13.9	11.7	11.2	10.8	11.0	14.6	12.4	12.1	12.1	12.3
Zymotic Diseases ...	0.93	0.58	0.40	0.34	0.29	1.00	0.59	0.50	0.39	0.30	0.95	0.58	0.42	0.35	0.29
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	0.02	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.02	0.02
Diphtheria ... ..	0.15	0.06	0.06	0.12	0.11	0.13	0.05	0.07	0.10	0.06	0.14	0.06	0.06	0.11	0.10
Enteric Fever ... ..	0.04	0.03	0.02	0.01	0.00	0.05	0.02	0.02	0.01	0.01	0.04	0.03	0.02	0.01	0.00
Measles ... ..	0.32	0.12	0.08	0.07	0.05	0.30	0.11	0.12	0.08	0.06	0.32	0.11	0.09	0.07	0.05
Whooping Cough...†	0.15	0.13	0.10	0.05	0.05	0.15	0.16	0.13	0.07	0.06	0.15	0.14	0.11	0.06	0.06
Respiratory Diseases ...	2.75	2.26	1.83	1.36	1.26	2.51	2.00	1.68	1.23	1.25	2.69	2.19	1.79	1.32	1.25
Respiratory Tuberculosis ...	0.92	0.74	0.65	0.52	0.45	0.76	0.61	0.54	0.45	0.41	0.88	0.71	0.62	0.50	0.44
Other Tuberculous Diseases ...	0.39	0.28	0.21	0.14	0.12	0.32	0.26	0.21	0.15	0.12	0.37	0.28	0.21	0.14	0.12
Cancer ... ..	1.14	1.20	1.34	1.52	1.64	0.95	1.08	1.13	1.19	1.19	1.09	1.17	1.28	1.42	1.51
Heart Disease ... ..	1.48	1.59	2.06	2.81	3.41	1.27	1.37	1.68	2.13	2.67	1.43	1.53	1.96	2.61	3.19
† Diarrhoea (Deaths in children under 2 years of age) ...	11.67	10.23	5.94	4.26	3.50	14.04	9.29	6.31	5.84	5.08	12.36	9.96	6.06	4.77	4.00
† Maternal Mortality—															
Puerperal Sepsis ...	1.56	1.56	2.14	2.15	1.59	1.58	1.74	1.78	2.06	1.92	1.57	1.61	2.02	2.12	1.70
Other Causes ... ..	3.26	3.16	3.70	3.76	2.67	3.06	2.75	2.59	2.69	2.61	3.20	3.04	3.35	3.41	2.65
Total ... ..	4.82	4.72	5.84	5.91	4.26	4.64	4.49	4.37	4.75	4.53	4.77	4.65	5.37	5.53	4.35

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

† Deaths per 1,000 live births.

### Mortality from Cancer.

The table below gives the number of deaths and death rates from cancer in the years 1926 to 1936:—

TABLE VIII.

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			
1926	1,453	467	1,920	1.27	1.13	1.24	1.36	106	117
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
Average for 5 years 1926-30	1,482	481	1,963	1.34	1.13	1.28	1.41	106	117
1931	1,538	496	2,034	1.40	1.12	1.32	1.48	107	121
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
Average for 5 years 1931-35	1,654	533	2,187	1.52	1.19	1.42	1.53	118	128
1936	1,767	536	2,303	1.64	1.19	1.51	1.63	122	*

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

TABLE IX.

### CANCER.

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

AGES.	URBAN DISTRICTS.				RURAL DISTRICTS.				ADMINISTRATIVE COUNTY.			
	1911-20	1921-30	1931-35	1936	1911-20	1921-30	1931-35	1936	1911-20	1921-30	1931-35	1936
MALES.												
Under 15 years ...	2	2	3	2	2	4	2	7	2	3	3	4
15 and under 25 years ...	4	5	4	3	4	3	4	2	4	4	4	3
25 and under 45 years ...	27	24	26	29	22	22	20	22	26	23	24	27
45 and under 65 years ...	256	267	285	311	206	230	231	196	244	258	270	278
65 and upwards ...	832	931	1,205	1,373	712	891	1,059	1,235	798	920	1,164	1,333
All ages. ...	95	115	143	163	80	100	110	117	91	110	133	149
FEMALES.												
Under 15 years ...	2	2	2	3	2	2	3	—	2	2	2	2
15 and under 25 years ...	3	4	3	1	2	5	3	3	3	5	3	2
25 and under 45 years ...	40	45	46	39	34	43	43	41	39	44	45	40
45 and under 65 years ...	326	305	308	300	294	286	274	277	319	301	300	294
65 and upwards ...	862	901	1,050	1,117	716	867	1,048	857	826	893	1,050	1,053
All ages. ...	117	138	160	165	98	122	131	122	112	134	152	153



### Mortality from Heart Disease.

The table below gives the number of deaths and death rates from diseases of the heart in the years 1926 to 1936:—

TABLE X.

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			
1926	1,877	563	2,440	1.64	1.37	1.57	1.65	135	142
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
Average for 5 years 1926-30	2,283	714	2,996	2.06	1.68	1.96	2.03	161	168
1931	2,841	876	3,717	2.59	1.97	2.41	2.54	195	206
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
Average for 5 years 1931-35	3,063	956	4,018	2.81	2.13	2.61	2.66	217	221
1936	3,678	1,201	4,879	3.41	2.67	3.19	*	259	*

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

TABLE XI.

### 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, and 1936.

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

## Infant Mortality.

It will be seen from the statistics set out in the table below that the infant mortality rates for the West Riding Administrative County and England and Wales were higher in 1936 than in 1935, but the rate for the Administrative County shows the greater increase. Almost half of this increase is due to the heavier mortality of infants from pneumonia, the rate per thousand births being 2.50 greater in 1936 than in 1935. Measles and whooping cough, to which ailments pneumonia is frequently a sequela, had an increased mortality rate of 1.01, and diarrhoea one of 0.79 per thousand live births. Most of the chief causes of death show an increased infant mortality in 1936 over 1935, but the increases are so small as not to require special mention. Table XV on page 26 gives the infantile death rate from the various causes during the past twenty-five years.

The infant mortality rate for the Administrative County has for many years shown a downward trend, as will be seen from the graph on page 26, in fact the decline has been steeper than that which has taken place in the country as a whole. In the years 1934 and 1935 the rate was 58, a decrease of 12 on that of 70 for the two previous years, and the maintenance of the rate at this much lower level, reached so abruptly, was in some degree improbable in the years immediately following.

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
1901-1910	40,449	5,443	135	128
1911-1920	34,326	3,735	109	100
1921-1930	29,491	2,352	80	72
	Actual numbers	Actual numbers	Yearly rate	Yearly rate
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

Below is given a comparative table showing for the Administrative County, the mortality rate, per thousand live births, of infants at different periods of life. It will be seen from this table that the decline in the infant mortality rate has been chiefly in the later months of infancy, that is among infants over four weeks of age.

TABLE XIII.

### West Riding Administrative County: Infant Mortality at different periods of life.

Year.	Deaths per 1,000 live births at the following ages:—								
	Under 1 day	1-7 days	1-4 weeks	Under 4 weeks	4 weeks to 3 months	3-6 months	6-9 months	9-12 months	Total under 1 year
1926	10	12	12	34	12	10	9	8	73
1927	10	13	12	35	12	10	11	11	79
1928	10	12	10	32	10	7	7	6	62
1929	11	14	13	38	14	13	12	12	89
1930	12	14	11	37	9	7	6	6	65
1931	12	14	11	37	11	10	9	7	74
1932	10	14	11	35	12	9	7	7	70
1933	12	13	10	35	11	10	8	6	70
1934	11	15	9	35	7	6	5	5	58
1935	12	14	8	34	8	7	5	4	58

Approximately 52 per cent. of the deaths of infants under one year of age are due to congenital debility, malformation and premature birth, the majority of such deaths occurring in the first four weeks of life. An examination of Table XV on page 26 will show that the infant mortality rate in the Administrative County from these causes has remained between 31 and 36 per thousand live births since 1920, whilst from most other causes there is a marked decline.



The problem of the reduction of the number of infant deaths from congenital debility, malformation and premature birth affects the whole country and not the Administrative County alone, for, in the five years 1931-35, 516 of every thousand infant deaths in the Administrative County were due to these causes, and 524 in England and Wales.

An attempt has been made to ascertain the influence in the Administrative County of overcrowding on the infant mortality rate, and the figures in the table below have been arrived at by grouping the districts in the Administrative County according to the percentage of overcrowded dwellings in each district as given in the Report on the Overcrowding Survey in England and Wales which was published in August, 1936.

TABLE XIV.

Percentage of Overcrowded Dwellings.	Total Live Births, 5 years 1931-35.	Total Infant Deaths, 5 years 1931-35.	Average Infant Mortality Rate for the 5 years 1931-35.
Districts with:—			
Under 1 per cent. ... ..	7,226	398	55
1 and under 3 per cent. ... ..	52,399	3,444	66
3 per cent. and over ... ..	52,117	3,446	66

It will be seen that, when taken as a whole, those districts in the Administrative County where the number of overcrowded dwellings is under one per cent. of the total number of dwellings therein, the average infantile mortality rate for the five years 1931-35 is 55, compared with 66 for districts with over that percentage of overcrowded dwellings. The figure of 55 for these districts with under one per cent. of overcrowded dwellings may be to some extent fortuitous owing to the comparative smallness of the figures involved, for there were only fourteen such districts, in which 7,226 births occurred in the five years 1931-35, and which contained 28,039 dwellings at the time of the overcrowding survey, whilst the corresponding figures for the whole of the Administrative County were 111,742 births and 360,000 dwellings. Apart from the aforementioned consideration, the low rate of infant mortality in these districts cannot be attributed entirely to the comparative absence of overcrowding, nor to the density of population (persons per acre), for an examination shows that this is as high as 6.1 in one of the districts and as low as 0.1 in another. Moreover, the districts are not of one class, but include those of the industrial, residential and agricultural types containing populations of varied economic status.

Though there can be little doubt that the presence of overcrowding in a district must have some adverse influence on infant life, particularly by increasing the effect of other unfavourable factors, it is probable that it has not in itself a predominating influence on the rate of infant mortality. Indeed in the districts with the highest average infant mortality rates for the five years 1931-35 the percentage of overcrowded dwellings as shown by the Overcrowding Survey was 3.16, compared with 2.77 in the districts with the lowest rates, a difference of only 0.39.

It should be added that the districts with the highest rates contained a total of 42,900 dwellings and those with the lowest rates 37,864, thus the overcrowding percentages are based on figures which do not diverge sufficiently to cause an unequal comparison.

A list of the districts with the highest and lowest average infantile mortality rates for the five years 1931-35 is given below:—

DISTRICTS WITH AN AVERAGE INFANTILE MORTALITY RATE FOR THE FIVE YEARS 1931-35 OF 80 OR OVER.

*Boroughs and Urban Districts.*

Birkenshaw ... ..	83	Midgley ... ..	83
Conisbrough ... ..	87	New Mill ... ..	83
Dodworth ... ..	83	Shelley ... ..	80
Farsley ... ..	90	South Crosland ... ..	83
Garforth ... ..	87	Stainland ... ..	82
Gildersome ... ..	83	Thurlstone ... ..	105
Horbury ... ..	95	Thurnscoe ... ..	100
Keighley B. ... ..	80	Whitwood ... ..	85
Maltby ... ..	90	Yeadon ... ..	85

*Rural Districts.*

Thorne ... ..	90
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DISTRICTS WITH AN AVERAGE INFANTILE MORTALITY RATE FOR THE FIVE YEARS 1931-35 OF 45 OR UNDER.

*Boroughs and Urban Districts.*

Elland ... ..	44	Marsden ... ..	41
Emley ... ..	31	Meltham ... ..	34
Flockton ... ..	11	Mytholmroyd ... ..	33
Hebden Bridge ... ..	30	Oxenhope ... ..	33
Hipperholme ... ..	45	Penistone ... ..	37
Honley ... ..	40	Ripon City ... ..	45
Horsforth ... ..	44	Rishworth ... ..	22
Hoylandswaine ... ..	19	Saddleworth ... ..	45
Knarborough ... ..	34	Soyland ... ..	19
Lepton ... ..	44	Thurstonsland ... ..	31



## Rural Districts.

Bishopthorpe	32	Seiby	35
Knaresborough	39	Settle	41
Penistone	44	Wetherby	39

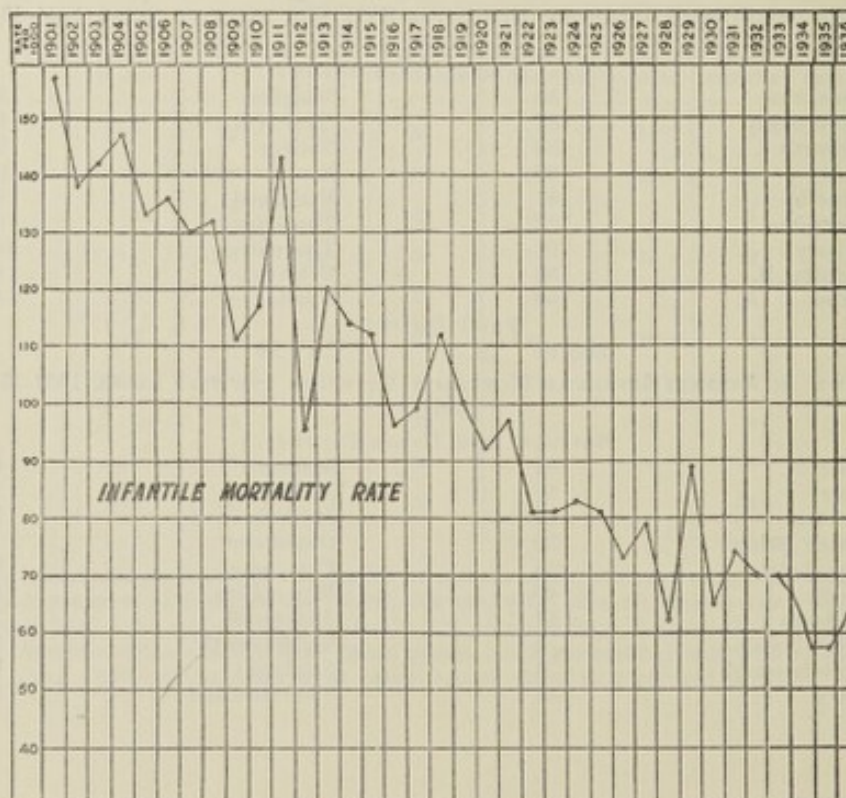
Where the name of a district is in italics it indicates that less than 250 births have occurred therein in the five years 1931-35 and therefore even one infant death has a considerable effect on the infant mortality rate, and in these cases the rates shown should not be taken as strictly comparable with those of other districts with a larger number of births.

TABLE XV.

## West Riding Administrative County.

## Causes of Infant Mortality in the years 1912-36

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	2.90	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	65.13
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









## EPIDEMIOLOGY.

Statistics as to incidence of the seven principal zymotic diseases are given below. The combined death-rate from these diseases was 0.29 per 1,000 of the estimated population, compared with 0.28 for the previous year, and the average rate of 0.41 for the ten years 1925-34.

The deaths from measles numbered 80 in 1936 compared with 37 in 1935, and from whooping cough 84 against 54. The deaths from diphtheria, however, were 150 in 1936, a decrease of 59 on the figure for 1935. 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 1927 to 1936, and the table on page 21 headed "Average Birth and Death Rates from 1916 to 1935" gives similar information for the quinquennial periods comprised in those years.

TABLE XVII.

Zymotic Disease.	No. of Cases 1936.	No. of Deaths 1936.	Ratio of Deaths.	
			(a) per 1,000 persons attacked.	(b) per 1,000 persons living.
(1) Smallpox	—	—	—	—
(2) Scarlet Fever	4,978	37	7.43	0.02
(3) Diphtheria	2,261	150	66.34	0.10
(4) Enteric Fever	54	4	74.07	0.00
(5) Measles	*	80	?	0.05
(6) Whooping Cough	*	84	?	0.06
(7) Diarrhoea, etc., under two years	*	92	?	0.06
Total of principal Zymotic Diseases	?	447	?	0.29

\* 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.

The following table gives the number of cases of infectious disease notified, and the rate per thousand population, in the Administrative County during the six years 1931-36.

The number of cases notified in 1936 in each Sanitary District of the Administrative County will be found in Table XVI folded in at this page and paragraphs with regard to the incidence of the principal infectious diseases will be found on this and the following pages.

TABLE XVIII.

Diseases.	Number of Cases Notified.							Cases Notified per 1,000 population.							England and Wales
	1931	1932	1933	1934	1935	Average for 5 yrs. 1931-35	1936	1931	1932	1933	1934	1935	Average for 5 yrs. 1931-35	1936	
Small-pox	146	—	3	1	—	30	—	0.09	—	0.00	0.00	—	0.02	—	0.00
Scarlet Fever	2952	3261	6218	6645	6108	5037	4978	1.91	2.12	4.05	4.33	3.98	3.28	3.26	2.53
Diphtheria	1537	1590	1652	3062	3175	2203	2261	1.00	1.04	1.08	2.00	2.07	1.43	1.48	1.39
Enteric Fever	95	200	58	36	50	88	54	0.06	0.13	0.04	0.02	0.03	0.06	0.04	0.06
Puerperal Fever	91	89	60	63	77	76	69	*3.65	*3.66	*2.60	*2.69	*3.34	*3.20	*3.00	†
Puerperal Pyrexia	151	134	149	172	186	158	182	*6.06	*5.51	*6.45	*7.35	*8.02	*6.67	*7.91	†
Cerebro-Spinal Fever	608	345	175	70	39	247	41	0.39	0.22	0.11	0.05	0.03	0.16	0.03	†
Acute Poliomyelitis	12	8	37	14	18	18	17	0.01	0.01	0.02	0.01	0.01	0.01	0.01	†
Acute Polio-Encephalitis	3	2	1	—	3	2	1	0.00	0.00	0.00	—	0.00	0.00	0.00	†
Encephalitis Lethargica	13	19	9	13	6	12	15	0.01	0.01	0.01	0.01	0.00	0.01	0.01	†
Ophthalmia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Neonatorum	121	101	87	105	100	103	112	*4.86	*4.15	*3.77	*4.49	*4.33	*4.33	*4.87	†
Erysipelas	680	572	670	808	662	678	631	0.44	0.37	0.44	0.53	0.43	0.44	0.41	0.40
Respiratory	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis	1796	1411	1431	1225	1133	1399	1088	1.17	0.92	0.93	0.80	0.74	0.91	0.71	†
Other Forms of Tuberculosis	765	630	548	559	528	606	510	0.50	0.41	0.36	0.36	0.34	0.39	0.33	†

\* Cases notified per 1,000 Registered Live Births.

† Figures not available at time of going to press.

### SMALL-POX.

No case of small-pox was notified in the Administrative County during the year 1936. In a few cases small-pox was suspected, but after consultation it was decided that the eruptions were due to chicken-pox.

The Medical Officer of Health for Oldham County Borough informed the County Medical Officer that cases of small-pox had occurred in his district, but although Oldham is adjacent to the County Area no case occurred in the neighbouring Urban Districts of Springhead and Saddleworth.

### SCARLET FEVER.

The epidemic prevalence of scarlet fever was slightly less than in the preceding years 1933, 1934 and 1935, during each of which years over 6,000 cases were notified in the Administrative County; during 1936, 4,978 cases of this disease were notified.



The districts in which the greatest number of notifications were received are shown in the following table:—

Maltby Urban ...	202
Rotherham Rural ...	202
Hemsworth Rural ...	187
Rothwell Urban ...	181
Doncaster Rural ...	178
Tadcaster Rural ...	160
Batley Borough ...	144

The figures given below for the last seven years illustrate the periodic prevalence of scarlet fever:—

Year.	1930	1931	1932	1933	1934	1935	1936
No. of cases	5,726	2,952	3,261	6,218	6,645	6,108	4,978

In December, 1936, an outbreak of scarlet fever due to the infection of a milk supply occurred in the Doncaster Rural District. Thirty cases were notified in this district and a very much larger number in the Doncaster County Borough where most of the infected milk was retailed. It is thought that the milk was contaminated by the hands of a milker who had been giving attention to a discharge from the ear of one of his children and this discharge was proved by bacteriological examination to contain organisms capable of causing scarlet fever.

The milk supply from the affected farm was temporarily stopped, but subsequently allowed to be retailed after pasteurisation. This measure proved effective as the number of notifications of scarlet fever dropped immediately.

#### DIPHTHERIA.

2,261 cases of diphtheria were notified in the Administrative County during the year 1936 as compared with 3,175 in the preceding year.

The districts with the highest number of cases were:—

	No. of cases notified.
Hemsworth Rural ...	120
Goole Borough ...	104
Shipley Urban ...	104
Keighley Borough ...	100
Doncaster Rural ...	92
Bingley Urban ...	75
Tadcaster Rural ...	73
Pudsey Borough ...	62
Wath-upon-Deane Urban ...	61
Rawmarsh Urban ...	54
Swinton Urban ...	54

#### Immunisation.

As diphtheria is spread by means of "spray infection" measures for its control have been difficult to find. The discovery of a method for protecting children against this disease should commend itself to all parents, for it is among young children that most cases of diphtheria occur.

It has been generally recognised that immunisation gives protection against infection and in immunisation there is a simple weapon to withstand the attack of a strong enemy. The practice of immunisation has been continued during the year, clinics being held in nearly all sanitary districts in the Administrative County Area.

Facilities for immunisation were again offered under the County scheme to the public free of cost in any of the following ways:—

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

In spite of the continuation of these facilities the number of children immunised during the year 1936 has dropped materially from the previous year.

The figures for the last five years are as follows:—

Year	1932	1933	1934	1935	1936
No. of children immunised or undergoing treatment	2,232	4,063	16,524	54,435	14,218

The number of children immunised by private practitioners under the County scheme during the year 1936 was 2,717. This year was the first full year of operation of the scheme as extended and during the last eight months of the year 1935, 1,274 children were immunised by private practitioners.

The increased use of this part of the County Council scheme is gratifying, for it brings us a step nearer to the desired aim of protecting all children as they approach the age of one year.

The portable cinema projector purchased early in the year was used for the display of films on the value of immunisation at lectures in child welfare centres and schools, and to parents' associations. These film displays and lectures were given in the City of Ripon and Borough of Goole (twice) and in the Urban Districts of Ardsley East and West, Holmfirth, Featherstone, Otley, and Rawmarsh, and in the Rural Districts of Keighley and Thorne.

#### Diphtheria Carriers.

The difficulty in dealing with carriers is well-known, for even after prolonged isolation the germ of diphtheria may still be recovered from the discharges of the nose or throat.

During the year 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. As a few patients only have been treated, it is too early to state any conclusions as to the value of this method of treatment.

### ENTERIC FEVER.

There were 54 cases of typhoid or paratyphoid fever notified during 1936 as compared with 50 in the year 1935, and 36 in the year 1934.

The districts affected were as follows:—

#### BOROUGH AND URBAN DISTRICTS.

	Cases notified.
Bolton-upon-Deane ... ..	2
Goole ... ..	1
Harrogate ... ..	3
Hemsworth ... ..	1
Keighley ... ..	1
Kirkburton ... ..	1
Knottingley ... ..	1
Midgley ... ..	1
Normanton ... ..	1
Oakworth ... ..	1
Pontefract ... ..	4
Rawmarsh ... ..	1
Ripon ... ..	1
Rothwell ... ..	1
Royston ... ..	1
Shipley ... ..	1
Skipton ... ..	1
Soyland ... ..	1
Swinton ... ..	1
Wombwell ... ..	1

#### RURAL DISTRICTS.

Bishopthorpe ... ..	2
Goole ... ..	1
Halifax ... ..	1
Hemsworth ... ..	1
Pontefract ... ..	20
Wakefield ... ..	1
Wetherby ... ..	1
Wortley ... ..	1

It will be noted from the above that the cases were spread over a number of districts, but attention is drawn to the figures for Pontefract Borough and the Pontefract Rural District where 22 cases were notified in connection with an outbreak of enteric fever in one area of the Pontefract Rural District, three of the cases being diagnosed in the Pontefract General Infirmary. The first notification of enteric fever was received by the Medical Officer of Health for the Pontefract Rural District on 17th April, and by the 20th April nine patients, all from one village, were in hospital. Close co-operation was maintained between the medical practitioners, the local medical officer of health, the sanitary inspector and officers of the County Health Department and as a result of intensive investigation the mode of infection was found to be associated with the milk supplied by a farm where three cases of the disease occurred and which was situated in the Rural District.

The milk supply from the farm was stopped from 23rd April to 10th May by the Medical Officer of Health and recommenced after tests had shown that the remaining workers at the farm were healthy and not carriers of infection.

The total number of persons removed to the Pontefract Isolation Hospital was 29, but with regard to seven the diagnosis of enteric fever was not confirmed. There were two deaths; the remaining 20 cases made a good recovery, including a woman who was delivered of a premature child during her convalescence.

### ACUTE POLIOMYELITIS AND ACUTE POLIO-ENCEPHALITIS.

#### (INFANTILE PARALYSIS.)

During the year 1936, 17 cases of acute poliomyelitis and 1 case of acute polio-encephalitis were notified.

The cases occurred sporadically, only four districts, Wombwell Urban, Pontefract Rural, Rotherham Rural, and Skipton Rural reporting more than one case.



### DYSENTERY.

The number of notifications of this disease during the year 1936 was 63, of which 47 occurred in one district (Settle Rural).

The infection was found to be due to *B. Dysenteriae* (Sonne), but the source was not established. The course of the disease was short, with mild symptoms and no complications.

### FOOD POISONING.

During the year individual cases of suspected food poisoning were reported in the Urban Districts of Ardsley East and West, Holmfirth, Horbury and Penistone, and the Borough of Ossett. Despite detailed enquiries the sources of infection were not established but no further cases were reported.

### ISOLATION HOSPITALS.

The following table gives particulars of the removal to hospital of cases of Smallpox, Scarlet Fever, Diphtheria and Enteric Fever during 1936. Columns 25 to 28 of Table XVI folded in at page 28 show the removals for each district:—

TABLE XIX.

	Total cases notified.	Cases removed to Hospital.	
		Number.	Percentage.
Smallpox ... ..	—	—	—
Scarlet Fever ... ..	4,978	4,446	89.3
Diphtheria ... ..	2,261	2,167	95.8
Enteric Fever ... ..	54	47	87.0
Total for 1936 ... ..	7,293	6,660	91.3

### Treatment of Venereal Diseases.

TABLE XX.

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.	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.
Keighley Victoria Hospital	Wednesday, 10 a.m. to 12 noon.	Wednesday, 10 a.m. to 12 noon.
General Infirmary at Leeds	Tuesday, 6 to 8 p.m. Monday to Friday inclusive, 10 a.m. to 12 noon and 2 to 7 p.m. Saturday, 10 a.m. to 12 noon.	Tuesday, 6 to 8 p.m. Monday, 1-30 to 3 p.m. Thursday, 5-30 to 7 p.m.
Oldham Royal Infirmary	Tuesday, 7-30 p.m. Wednesday, 7-30 p.m.	Monday, 7-30 p.m.
Rotherham T.B. Dispensary, 12 Frederick Street	Tuesday, 11-30 a.m. to 12-30 p.m. and 6 to 8 p.m. Wednesday, 6 to 8 p.m.	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.
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.	Thursday, 10 a.m. to 1 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, 4 to 6 p.m. Friday, 3 to 5 p.m.
York County Hospital	Monday, 3 to 4 p.m. Thursday, 6 to 7 p.m. Friday, 7-30 to 8-30 p.m.	Wednesday, 3 to 4 p.m. Friday, 7 to 7-30 p.m.

Table showing the Venereal Diseases Treatment Centres and number of attendances, etc., during 1936, of West Riding patients:—

TABLE XXI.

Centre	No. of new patients				No. of In-patient days	No. of Out-patient attendances
	Syphilis	Soft Chancre	Gonorrhoea	Non-Venereal		
Barnsley Clinic, Queen's Road	16	—	41	31	—	6,235
Bradford St. Luke's Hospital	16	—	43	58	69	3,141
Burnley Victoria Hospital ...	2	—	1	1	—	36
Dewsbury Infirmary ...	16	—	42	31	—	3,385
Doncaster Royal Infirmary ...	67	—	99	49	194	9,176
Goole, Bartholomew Hospital	1	1	6	15	—	382
Halifax Royal Infirmary ...	27	—	30	103	76	2,661
Huddersfield V.D. Centre ...	12	2	89	55	92	6,517
Keighley Victoria Hospital ...	30	—	45	13	—	3,526
Leeds General Infirmary ...	118	—	113	129	187	12,012
Oldham Royal Infirmary ...	2	—	6	2	—	194
Rotherham T.B. Dispensary, 12, Frederick Street ...	18	—	31	35	70	3,478
Sheffield Jessop Hospital ...	5	—	9	19	278	712
Sheffield Royal Hospital ...	6	—	9	6	43	413
Sheffield Royal Infirmary ...	11	—	13	11	11	1,044
Wakefield Clayton Hospital ...	88	—	92	42	34	8,367
York County Hospital ...	1	—	10	4	—	925
	436	3	679	604	1,054	62,204

TABLE XXII.

Table giving an analysis of the combined returns of treatment centres for the year 1936, compared with previous years:—

Year.	New Patients.	No. of In-patient days.	Out-patient attendances.
1931	1,490	3,460	54,922
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

There has been an increase in the number of attendances at the out-patients' department of the treatment centres. This is partly due to the larger number of new patients suffering from syphilis, and partly to the fact that patients are realising more and more the importance of persisting with the treatment.

A wide field is open to preventive medicine in the detection of latent syphilis in cases of pregnancy, because if the prospective mother receives adequate treatment during her period of pregnancy the child may escape infection.

If the incidence of syphilis is to be reduced, a larger number of cases must apply for treatment during the early stage of the disease.

The best method of controlling venereal diseases and protecting the public from infection is the provision of means for treatment without any stigma attaching thereto. The essence of the problem is how to get a willing patient at the earliest time to the clinic where skilled advice and adequate treatment are to be had.

Good work has been done by educative propaganda measures with the object of encouraging each individual to avoid any risk of contracting venereal disease, to seek prompt treatment in case of infection, and to continue treatment until cured.

The usual programme consisting of a month's intensive campaign divided into two weeks in the Spring and two weeks in the Autumn was again arranged.

The itinerary comprised visits to Stainforth, Thorne, Moorends, Hatfield, Swallownest, Thurocroft, Tankersley, Oughtibridge, Ecclesfield, Dalton, Knolbeck, Farsley, Pudsey, Calverley, Shipley, Baildon, Tadcaster, Allerton Bywater, Gildersome and Scholes, and 6,500 was the estimated total attendances.

General practitioners who are approved in accordance with the requirements of the Ministry of Health to receive arsenobenzene compounds now numbers 94, an increase on last year of 7. The number of doses supplied during the year was 948.

The number of patients receiving treatment in the Hope Hospital, Leeds, was 14, the total number of in-patient days being 1,001, and the number of doses of arsenobenzene compounds given in treatment was 8.



## Public Health Legislation, etc., during 1936.

Below is a list of Orders, Circulars and Memoranda which have been issued, and Acts passed in 1936, in connection with public health matters.

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

#### GENERAL.

Circular No. 1512 and Memo. 191. Med.	Precautions against Anaesthetic Explosions in Operating Theatres. To County Councils and County Borough Councils. December 31, 1935.
Circular No. 1520	Certification of Blindness. Standard Illumination of Test Types. To County and County Borough Councils, Common Council of the City of London, and Voluntary Associations for the Blind. January 21, 1936.
Memo.	Nutritive Value of Milk. Memo. dated March, 1936, by the Advisory Committee on Nutrition of the Ministry of Health and Department of Health for Scotland.
Regulations Do.	Dangerous Drugs (Amendment) Regulations, dated May 1, 1936. Dangerous Drugs. The Raw Opium (Amendment) Regulations, dated May 1, 1936.
Order No. 17	Dangerous Drugs (Hospital Exemption) Order, dated May 26, 1936.
—	Milk Acts, 1934 and 1936. Arrangements for increasing the Demand for Milk within the Area of the Milk Marketing Board for England and Wales by Publicity and Propaganda. March 30, 1936. <i>Board of Agriculture and Fisheries.</i>
—	Milk. Revised Arrangements under the Milk Acts, 1934 and 1936, for Increasing the Demand for Milk within the Area of the Milk Marketing Board by the Supply of Milk in Schools at Reduced Rates. August 19, 1936. <i>Board of Agriculture and Fisheries.</i>
Circular No. 1533, Order No. 356 and Memo. 197/Foods. Circular No. 1580 and Memo. 139/Foods. Circulars Nos. 1534 and 1566.	Milk (Special Designations) Order, 1936. To County Councils and Sanitary Authorities, April 24, 1936. Graded Milk, Bacteriological Tests for, November 5, 1936.
Cmd. 5238 Report	Public Health (Imported Food) Regulations, 1925, and Public Health (Imported Food) Amendment Regulations, 1933. To Port Sanitary Authorities and certain Sanitary Authorities, April 24 and August 28, 1936. Public Health Bill. Explanatory Memorandum by the Minister of Health. Water Resources and Supplies. Report from the Joint Parliamentary Committee, together with the Proceedings of the Committee, the Minutes of Evidence and an Appendix.
Circular No. 1563 and Memo. 199. Med. Order No. 1025.	Therapeutic Substances Act, 1925. Sterilized Surgical Catgut. To County Councils and County Borough Councils, August 28, 1936. Hospitals. Voluntary Hospitals (Paying Patients) Rules, dated September 15, 1936.

#### HOUSING AND TOWN PLANNING.

Circular No. 1539	Housing Act, 1935. To Housing Authorities, May 7, 1936.
Circular No. 1560 and Order No. 665	The Housing Act, 1935 (Operation of Overcrowding Provisions) Order, dated June 26, 1936.
Order No. 739	The Housing Acts (Forms of Orders and Notices) Regulations, dated July 23, 1936.
Report	Housing Act, 1935. Report on the Overcrowding Survey, 1936.
Order No. 765	The Housing Acts (Overcrowding and Miscellaneous Forms) Regulations, dated July 25, 1936.
Order No. 838	Abatement of Overcrowding. The Housing Act, 1935 (Operation of Overcrowding Provisions) Order, dated August 21, 1936.
Order No. 1017	Abatement of Overcrowding. The Housing Act, 1935 (Operation of Overcrowding Provisions) Order (No. 3), dated September 25, 1936.
Circular No. 1583	Housing (Rural Workers) Acts (1926 and 1931). To Clerks to Authorities, November 28, 1936. ( <i>Forwarding report mentioned in next paragraph of this list.</i> )
Report	Central Housing Advisory Committee. Rural Housing. Rural Housing Sub-Committee Report, dated July 22, 1936.
—	Housing 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.
—	Housing, House Production, Slum Clearance, etc. Position at September 30, 1936.

#### PHARMACY AND POISONS.

Order No. 1238	The Poisons List Confirmation Order, dated December 21, 1935.
Do. 1239	The Poisons Rules, dated December 21, 1935.
Do. 1240	The Poisons (Approved Institutions) Order, dated December 21, 1935.
Rules	Poisons (Colouring) Rules, dated April 24, 1936.
Do.	Poisons (Amendment) Rules, dated April 24, 1936.
Order No. 142	The Poisons (Appeals to Quarter Sessions) Rules, dated April 3, 1936.

Memo.	Pharmacy and Poisons Act, 1933. Memorandum (Poisons No. 1, Shopkeepers) on the Provisions affecting Shops other than Chemists' Shops, April, 1936.
Do.	Pharmacy and Poisons Act, 1933. Memorandum (Poisons No. 2, Wholesalers) on the Provisions affecting Manufacturers, Wholesalers, etc. September, 1936.
Do.	Pharmacy and Poisons Act, 1933. Memorandum (Poisons No. 3, Practitioners and Hospitals) on the Provisions affecting Medical, Dental and Veterinary Practitioners, Hospitals, Dispensaries and similar Institutions. September, 1936.
Do.	Pharmacy and Poisons Act, 1933. Memorandum (Poisons No. 4, Agriculture and Horticulture) affecting the purchase of Poisons for use in Agriculture and Horticulture. September, 1936.

(The above-mentioned Rules relating to Poisons have been made by the Secretary of State and the memoranda issued by the Home Office.)

#### MATERNITY AND CHILD WELFARE.

Circular L.G.A. 49.	Local Government Act, 1929. Scheme for securing payment to Voluntary Associations. To County Councils. April, 1936.
Circular No. 1569	(Incorporating Memo. 200/M.C.W.) Midwives Act, 1936. (Provisions of, etc.). To Local Supervising Authorities under the Midwives Acts, September 18, 1936.
Circular No. 1574	Nursing Homes Registration Act, 1927. To Clerks of Councils or Town Clerks, September 30, 1936.
Circular No. 1582 and Order No. 1112	The Medical Practitioners (Fees) Regulations, dated October 26, 1936. Fees of Medical Practitioners called in by Midwives. To Local Supervising Authorities under the Midwives Acts, November 2, 1936.

#### II.—ACTS OF PARLIAMENT.

Public Health Act, 1936.  
 Voluntary Hospitals (Paying Patients) Act, 1936.  
 Housing Act, 1936.  
 Midwives Act, 1936.

### HOUSING AND GENERAL SANITARY MATTERS.

A. BROOK, Chief County Sanitary Inspector.

#### Housing.

##### Provision of New Houses.

The following statement shows the provision of new houses in the Administrative County during 1936:—

	Houses provided by Local Authorities.	Houses provided by† Private enterprise.
In Municipal Boroughs ...	450	1,273*
In Urban Districts ...	1,519	4,107
In Rural Districts ...	674	2,215
	2,643	7,595
	10,238	

† Numbers relate to houses completed during the year ended 30th September, 1936.

\* 10 with State Assistance.

TABLE XXIII.

##### Houses Erected during the five years, 1931—1935 inclusive.

	1931	1932	1933	1934	1935
By Local Authorities and Private Enterprise under assisted schemes.	1,851	2,968	2,016	1,183	1,324
Unassisted. (Years ended 30th September)	2,725	3,297	5,049	8,024	9,175
TOTALS ...	4,576	6,265	7,065	9,207	10,499

Despite the continued erection of dwellings by local authorities and private enterprise, the result of the Overcrowding Survey of England and Wales, 1936, indicates that a shortage of houses still exists in various parts of the country.

The particulars set out in the tabular statements which follow are extracted from the "Report on the Overcrowding Survey in England and Wales, 1936." It will be observed from the statement marked (1) that in the West Riding Administrative County the percentage of overcrowded dwellings to total dwellings inspected is 3.6, compared with 2.9 for England and Wales, the West Riding figure being only exceeded by:—Northumberland 11.1; Durham 10.4; Salop 5.1; Stafford 5.0 and Cumberland 3.8.

Statement (2) shows the six urban districts in the administrative area most seriously affected by overcrowding, together with the six districts least affected, whilst statement (3) gives similar information in respect of rural districts in the Riding.



TABLE XXIV.  
Extracts from "Report on The Overcrowding Survey in England and Wales, 1936."  
DWELLINGS INSPECTED.

(1)	All dwellings.				Dwellings owned by Housing Authorities.			
	Total.	Over-crowded.	Percentage over-crowded.	No. of families housed at minimum standard.	Total.	Over-crowded.	Percentage over-crowded.	No. of families housed at minimum standard.
England and Wales	4,908,953	143,677	2.9	119,261	477,053	20,626	4.3	15,186
England (excluding Monmouthshire)	4,486,346	126,971	2.8	106,475	450,169	19,548	4.3	14,243
<b>Administrative Counties.</b>								
Bedford	62,220	786	1.3	1,283	5,223	179	3.4	277
Berks.	41,945	711	1.7	703	4,364	139	3.2	92
Buckingham	63,735	976	1.5	720	6,856	205	3.0	139
Cambridge	29,482	385	1.3	357	4,050	50	1.2	49
Chester	144,164	3,187	2.2	2,627	12,720	440	3.5	306
Cornwall	63,356	1,051	1.7	889	3,130	101	3.2	49
Cumberland	41,236	1,571	3.8	1,122	3,371	84	2.5	73
Derby	139,996	4,019	2.9	2,674	11,216	554	4.9	304
Devon	83,533	1,232	1.5	1,265	6,437	216	3.4	109
Dorset	51,181	744	1.5	646	3,620	151	4.2	63
Durham	197,454	20,591	10.4	13,940	28,445	1,864	6.5	1,552
Isle of Ely	15,186	332	2.2	282	1,771	47	2.7	26
Essex	314,129	5,088	1.6	6,343	45,292	1,911	4.2	2,153
Gloucester	68,282	1,605	2.4	1,588	5,561	221	4.0	140
Hereford	21,429	603	2.8	447	1,332	78	5.9	27
Hertford	84,584	1,217	1.4	1,367	13,614	388	2.8	331
Huntingdon	13,028	236	1.8	163	1,740	17	1.0	11
Kent	280,441	3,576	1.3	3,294	21,658	898	4.1	594
Lancaster	457,144	12,961	2.8	12,491	39,396	1,318	3.3	1,051
Leicester	58,492	1,110	1.9	786	5,456	239	4.4	139
Lincoln (Parts of Holland)	20,913	527	2.5	360	2,117	55	2.6	43
Lincoln (Kesteven)	25,114	540	2.2	441	1,802	94	5.2	44
Lincoln (Lindsey)	63,865	1,131	1.8	946	2,829	85	3.0	53
Middlesex	357,072	7,815	2.2	8,283	31,812	1,548	4.9	1,040
Norfolk	65,015	1,559	2.4	1,098	5,779	235	4.0	169
Northampton	50,505	932	1.8	755	4,898	162	3.3	97
Northumberland	91,259	10,174	11.1	7,651	11,113	853	7.7	656
Nottingham	100,090	2,096	2.1	1,409	9,506	369	3.9	159
Oxford	29,933	573	1.9	463	2,881	78	2.7	45
Peterborough	12,839	162	1.2	82	1,176	42	3.6	13
Rutland	3,614	81	2.2	52	254	12	4.7	5
Salop	45,330	2,333	5.1	1,232	4,435	281	6.3	134
Somerset	80,301	1,302	1.6	1,164	10,099	370	3.7	209
Southampton	93,047	1,462	1.6	1,617	7,743	264	3.4	191
Stafford	161,510	8,109	5.0	4,274	25,173	2,188	8.7	1,024
Suffolk East	47,368	832	1.8	606	2,519	64	2.5	36
Suffolk West	23,789	606	2.5	439	1,815	81	4.5	51
Surrey	187,364	2,301	1.2	3,140	23,878	756	3.2	973
Sussex East	51,686	667	1.3	712	3,668	104	2.8	100
Sussex West	44,046	461	1.0	467	3,718	121	3.3	84
Warwick	77,039	1,795	2.3	1,155	6,353	320	5.0	155
Westmorland	9,398	205	2.2	315	1,112	24	2.2	22
Wight, Isle of	16,771	112	0.7	111	709	26	3.7	23
Wilts.	67,422	1,073	1.6	1,079	5,308	179	3.4	133
Worcester	75,192	2,331	3.1	1,608	9,944	436	4.4	233
Yorks.—East Riding	29,649	727	2.5	578	1,957	132	6.7	60
Yorks.—North Riding	64,803	2,221	3.4	1,660	4,614	172	3.7	98
Yorks.—West Riding	360,395	12,863	3.6	11,731	37,645	1,397	3.7	998

## DWELLINGS INSPECTED.

(2)	All dwellings.				Dwellings owned by Housing Authorities.			
	Total.	Over-crowded.	Percentage over-crowded.	No. of families housed at minimum standard.	Total.	Over-crowded.	Percentage over-crowded.	No. of families housed at minimum standard.
<b>W. R. Admin. County</b>								
<b>Six Urban Districts most seriously affected.</b>								
Hackmondwike	2,718	397	14.6	173	153	8	5.3	4
Birkenshaw	757	106	14.0	51	28	2	7.1	—
Whitley Upper	193	23	11.9	14	—	—	—	—
Spenborough	8,120	768	9.5	541	520	12	2.3	11
Southwram	723	64	8.9	66	—	—	—	—
Ossett M.B.	4,257	367	8.6	227	231	1	0.4	—
<b>Six Urban Districts least seriously affected.</b>								
Barnoldswick	3,335	3	0.1	23	10	—	—	—
Earby	1,214	4	0.3	6	16	—	—	2
Rawdon	1,224	6	0.5	27	85	3	3.5	1
Bolton-upon-Dearne	3,121	19	0.6	15	972	7	0.7	7
Ilkley	1,546	11	0.7	3	210	2	1.0	1
Todmorden M.B.	6,740	56	0.8	82	156	2	1.3	5

(3)	All dwellings.				Dwellings owned by Housing Authorities.			
	Total.	Over-crowded.	Percentage over-crowded.	No. of families housed at minimum standard.	Total.	Over-crowded.	Percentage over-crowded.	No. of families housed at minimum standard.
<b>W. R. Admin. County</b>								
<b>Six Rural Districts most seriously affected.</b>								
Wakefield ... ..	4,572	368	8.0	235	558	53	9.5	29
Penistone ... ..	1,159	77	6.6	59	—	—	—	—
Halifax ... ..	1,672	92	5.5	106	5	—	—	—
Hunslet ... ..	1,010	40	4.0	42	182	1	0.5	1
Barnsley ... ..	1,129	44	3.9	46	56	8	14.3	3
Tadcaster ... ..	6,928	272	3.9	147	946	33	3.5	14
<b>Six Rural Districts least seriously affected.</b>								
Wharfedale ... ..	2,038	13	0.6	15	60	1	1.7	—
Great Ouseburn ... ..	3,377	22	0.7	14	287	3	1.0	1
Knaresborough ... ..	2,009	16	0.8	22	47	1	2.1	—
Keighley ... ..	2,679	26	1.0	33	53	1	1.9	1
Skipton ... ..	4,052	40	1.0	64	166	3	1.8	6
Kiveton Park ... ..	3,944	56	1.4	48	656	17	2.6	9

TABLE XXV.

## Housing Statistics.

Summary of housing work, showing action taken by local authorities in the Administrative County during 1936.

## 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) ... ..	29,419	6,695	36,114
(b) Number of inspections made for the purpose ... ..	59,079	16,564	75,643
(2) (a) Number of dwelling-houses (included under sub-head (1) above), which were inspected and recorded under the Housing Consolidated Regulations ... ..	12,424	6,161	18,585
(b) Number of inspections made for the purpose ... ..	23,382	12,776	36,158
(3) Number of dwelling-houses needing further action ... ..	15,235	3,101	18,336
(a) Number considered to be in a state so dangerous or injurious to health as to be unfit for human habitation ... ..	4,343	1,358	5,701
(b) Number (excluding those in sub-head (3) (a) above) found not to be in all respects reasonably fit for human habitation ... ..	10,892	1,743	12,635

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 ... ..	10,371	1,150	11,521
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## 3.—ACTION UNDER STATUTORY POWERS DURING THE YEAR.

## A. Proceedings under Sections 17, 18, 23, Housing Act, 1930.

(1) No. of dwelling-houses in respect of which notices were served requiring repairs ... ..	1,187	614	1,801
(2) No. of dwelling-houses which were rendered fit after service of formal notices ... ..	880	300	1,180
(a) By owners ... ..	866	299	1,165
(b) By Local Authority in default of owners ... ..	14	1	15

## B. Proceedings under Public Health Acts:—

(1) No. of dwelling-houses in respect of which notices were served requiring defects to be remedied ... ..	2,829	549	3,378
(2) No. of dwelling-houses in which defects were remedied after service of formal notices ... ..	2,083	465	2,548
(a) By owners ... ..	1,859	437	2,296
(b) By Local Authority in default of owners ... ..	224	28	252

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

(1) No. of representations, etc., made in respect of dwelling-houses unfit for habitation ... ..	1,339	853	2,192
(2) No. of dwelling-houses in respect of which Demolition Orders were made ... ..	646	420	1,066
(3) No. of dwelling-houses demolished in pursuance of Demolition Orders ... ..	326	200	526
(4) No. of dwelling-houses in respect of which undertakings were accepted from owners—Section 19 (2) ... ..	480	221	701
(a) To render houses fit for human habitation ... ..	341	158	499
(b) As to usage other than for human habitation ... ..	139	63	202

## D. Proceedings under Section 20 of the Housing Act, 1930, or Section 84, Housing Act, 1935:—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ... ..	125	13	138
(2) Number of separate tenements or underground rooms closed in pursuance of Closing Orders ... ..	98	5	103
(3) Number of separate tenements or underground rooms, the Closing Orders in respect of which were determined, the tenement or room having been rendered fit ... ..	—	8	8

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



## Slum Clearance.

The tabular statement which follows shows the action taken during 1936.

TABLE XXVI.  
HOUSING ACT, 1930.

	Municipal Boroughs	Urban Districts	Rural Districts	Total
<u>Clearance Orders submitted.</u>				
No. of Orders ... ..	51	173	68	292
No. of houses to be demolished ... ..	466	1,355	332	2,153
No. of persons to be displaced from above houses ... ..	1,442	4,612	984	7,038
<u>† Clearance Orders confirmed wholly, or in part.</u>				
No. of Orders ... ..	49	129	49	227
No. of houses to be demolished ... ..	474	938	255	1,667
No. of persons to be displaced from above houses ... ..	1,468	3,301	815	5,584
<u>* Houses approved for re-housing persons dis- placed</u> ... ..	482	1,286	332	2,100

† Includes orders submitted 1935, but not confirmed until 1936.

\* Includes houses for re-housing persons displaced as the result of demolition under Section 19; separate figures of houses approved to re-house persons displaced as a result of demolitions in clearance areas are not available.

## Work of the County Inspectorial Staff.

During the year under review the County Sanitary Inspectors were engaged as under:—

## CLEARANCE AREAS.

- (1) Inspections made and evidence given at Ministry of Health inquiries at:—  
Darton U., Hebden Bridge U., Marsden U., Mytholmroyd U.

- (2) Attendances at Ministry of Health inquiries at:—  
*Urban Areas.*—Ardsley E. and W., Baildon (3), Bingley, Conisbrough (2), Dodworth, Knottingley, Pontefract M.B., Pudsey M.B., Saddleworth (2), Selby, Sowerby, Stanley, Swinton, Worsborough.

*Rural Areas.*—Doncaster (2), Goole, Pateley Bridge, Selby, Tadcaster, Thorne.

*Housing Surveys* were carried out at:—Kirkburton U.D., Ripon City, Doncaster R.D. (Braithwell), Ripon R.D. (North Stainley-w-Sleningford) and (Skelton).

Re-surveys to ascertain progress were made at:—Barnsley R.D. (Stainborough), Penistone R.D. (Thurgoland), Ripon R.D. (Bishop Monkton) and (Markington-w-Wallerthwaite).

*Inspections* relative to housing conditions were made at:—

*Urban Districts.*

Dodworth.	Doncaster (Conisbrough Parks).
Earby.	Kiveton Park (Dinnington).
Elland.	Pateley Bridge (Lofthouse).
Featherstone.	Pontefract (Beal).
Golcar.	Sedbergh.
Guisley.	Selby (West Haddlesey).
Knottingley.	Wortley (Tankersley).
Rothwell.	
Sowerby.	

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

From the time the above Acts came into operation to December 31st, 1936, 76 applications for assistance have been received.

In 48 cases, covering 115 houses, the applications received favourable consideration, and at the end of the year 75 houses had been re-conditioned at a cost to the County Council of £6,875 9s. 6d. Of this amount, half is repayable to the County Council as loan charges under Section 4(2) of the Act of 1936. In the remaining 40 houses the necessary works of reconstruction are being proceeded with.

Twenty-three applications regarding 79 houses were refused, and 5 applications concerning 7 houses were withdrawn.

Periodical inspections of houses re-conditioned under the above Acts are made by the County Sanitary Inspectors to ascertain that the following conditions under which grants are made are being complied with, *viz.*,

1. The dwelling for a period of twenty years from the date on which it first becomes fit for occupation after the completion of the works shall not be occupied except by a person whether as owner or tenant whose income is in the opinion of the County Council, such that he would not ordinarily pay a rent in excess of that paid by agricultural workers in the district, or by an agricultural worker or employee of substantially the same economic condition employed by the person who is rated in respect of the dwelling.

2. The rent payable by the occupier in respect of the dwelling during such period shall not exceed the amount of the normal agricultural rent, increased by a sum equal to four per cent. (three per cent. prior to January 1st, 1935) of the amount by which the estimated cost of the works in respect of which assistance has been given exceeds the amount of the assistance given by way of grant, and no fine, premium, or other like sum shall be taken in addition to the rent.

### Smoke Abatement.

This important branch of work has been somewhat neglected again during 1936, owing to the amount of time it has been found necessary to devote to other duties, particularly slum clearance and housing generally, and the Milk (Special Designations) Orders.

The objective of the Department in connection with smoke abatement is to secure that at least once per year, each sanitary district in the administrative county is visited by one of the County Sanitary Inspectors to make inquiry as to what action is being taken and together with the local Sanitary Inspector, take a series of observations of chimneys in the area. Unfortunately this still appears unattainable.

If as much attention was paid to the question of smoke abatement by sanitary authorities and other bodies, as is given to the supervision of the food supply, great improvement in the atmosphere in large towns and their vicinity would result. Most of the personnel connected with public health work know how severely cases relating to contaminated or adulterated foods are now looked upon by magistrates generally, but one cannot say as much in regard to prosecutions undertaken to prevent the emission of black smoke into the atmosphere. It does not appear to be realised that if the atmosphere is polluted, the polluting material will to some extent find its way into the human body, and may cause, or tend to cause, respiratory trouble, or otherwise affect the health of persons breathing such polluted air.

The actual smoke observations taken by the County Sanitary Inspectors during 1936 were very few in number, and particulars thereof are set out in the tabular statement which follows. In cases where black smoke is emitted in excess of the permissible amount, premises of delinquents are visited, attention is directed to the offence, and any advice or assistance possible is afforded in an endeavour to reduce the emission of black smoke. The result of these observations is always communicated to the Local Authorities concerned.

TABLE XXVII.

#### Smoke observations taken by the County Inspectors during the year 1936.

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.	
3	Yes	3	Minutes. 8-0	Minutes 4-5	Minutes. 6-5	Nil	Nil	Minutes 6-5
1	Yes	1	24-5	24-5	24-5	Nil	Nil	24-5
6	No	4	15-0	6-5	10-1	Nil	2	6-8
6	Yes	3	21-5	19-5	20-3	Nil	3	10-2



## County Public Library.

In the year 1936, 644 books were disinfected or otherwise dealt with, which had been issued from the County Public Library and had come into contact with infectious disease.

## Drainage, Sewerage and Sewage Disposal.

These matters still continue to receive attention at the hands of the various Sanitary Authorities in the West Riding. In districts regarded as well sewered, the development of new estates for building purposes has necessitated the extension of existing, or provision of new lines of sewers. In other areas owing to building development or conversion of closets to the water-carriage system, sewage works have shown a tendency to become overloaded, and needed extension. In some districts the financial aid which can be afforded under the Local Government Act, 1929, has brought into the bounds of practicability the provision of sewers for areas which would not have otherwise received serious consideration owing to the excessive burden which would have been placed on the local ratepayers.

Below is given a list of districts in regard to which the County Council have agreed during the year to contribute towards the cost of sewage schemes.

TABLE XXVIII.  
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.
Great Ouseburn Rural ... ..	Upper and Nether Poppleton ... ..	£14,768	£192 do.
Tadcaster Rural ... ..	Sherburn-in-Elmet ... ..	£6,275	£183 do.
Tadcaster Rural ... ..	Appleton Roebuck ... ..	£2,450	£67 10 0 do.

The department was represented at Ministry of Health inquiries into applications for sanction to borrow money for schemes in regard to sewerage and sewage disposal as under:—

### URBAN DISTRICTS.

Shipley.

### RURAL DISTRICTS.

Bowland (Grindleton), Pontefract (Brotherton and Ferry Fryston), Sedbergh (Sedbergh), Skipton (Bradleys), Tadcaster (Sherburn-in-Elmet), Wharfedale (Arthington and Bramhope).

Investigations or enquiries were also made by officers of the Department as to matters affecting drainage, sewerage or sewage disposal in the following districts:—

### URBAN.

Denby and Cumberworth, Thurstonland and Farnley Tyas.

### RURAL.

Bishopthorpe (Copmanthorpe), Doncaster, (Barnbrough, Sprotborough), Todmorden (Wadsworth).

## Water Supplies.

Praiseworthy activity has continued on the part of many Sanitary Authorities in regard to water supplies during 1936, and even in the case of the small and sparsely populated areas, it is becoming more and more recognised that to "economise" in the rates at the expense of a satisfactory water supply is a false economy.

During the year further advantage was taken of the facilities offered by the Government under the Rural Water Supplies Act, 1934.

Under this Act, the Government provided £1,000,000 to assist in the provision or improvement of water supplies in rural areas in England and Wales. Certain conditions laid down by the Minister of Health had to be observed by applicants, one being that unless exceptional circumstances existed, grants would only be made from the above fund when the County Council and the Rural District Council concerned contributed their fair share of the cost.

To the end of the year under review grants have been made by the County Council in connection with water schemes, as shown in the following statement:—

## TABLE XXIX.

## RURAL WATER SUPPLIES ACT, 1934.

## LOCAL GOVERNMENT ACT, 1929—SECTION 57.

## SCHEDULE OF GRANTS IN AID OF SCHEMES FOR THE PROVISION OF WATER SUPPLIES.

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 ... ..	Wintersett	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		
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	250
Do. ... ..	Burton Salmon, Hillam and Monk Fryston	5,000	125
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



Local inquiries held by the Ministry of Health into applications for sanction to borrow money for works in connection with water supplies were attended by officers of the Department as under:—

URBAN DISTRICTS.  
Denby-and-Cumberworth.

RURAL DISTRICTS.  
Great Ouseburn—Whixley.  
Skipton—Hartlington.  
Wetherby—Kearby-with-Netherby,  
Eastern Areas.

Enquiries or inspections with regard to water supplies were made by the County Sanitary Inspectors in the following areas:—

URBAN DISTRICTS.  
Emley.  
Gildersome.  
Mexborough.  
Mytholmroyd.  
Otley.  
Saddleworth.  
Thurstonland and Farnley Tyas.

RURAL DISTRICTS.  
Barnsley—Woolley.  
Bishopthorpe—Acaster Malbis, Askham  
Richard, Dringhouses.  
Bowland—Tosside.  
Doncaster—Sprotborough, Warmsworth.  
Great Ouseburn—Roecliffe, Whixley.  
Hemsworth—Walden Stubbs.  
Kiveton Park.—All Parishes.  
Pontefract—Burton Salmon, Hillam,  
Monk Fryston, Whitley,  
Womersley.  
Ripon—Laverton.  
Settle—Giggleswick.  
Skipton—Glusburn, Hartlington.  
Tadcaster—Appleton Roebuck, Bolton  
Percy, Colton.  
Todmorden—Wadsworth.  
Wetherby—Wighill.

### Collection and Disposal of Refuse.

Year by year Sanitary Authorities throughout the West Riding are faced with the task of collecting and disposing of an ever increasing amount of refuse, and with this increasing amount of refuse there is also a demand in many cases for more frequent collection. The task of the Authorities in this connection could be rendered much easier if householders would play their part, as the amount of refuse requiring to be dealt with would be materially reduced, if paper, vegetable refuse, etc., was, wherever possible, burned in the domestic grate. Incidentally, this would result in a considerable saving of money to the ratepayers.

The Sanitary Authorities in the West Riding generally, give attention to the question of securing proper means of storage for refuse, and its prompt and efficient removal. In the urban areas, scavenging is almost entirely undertaken by local authorities, some carrying out the work by direct labour, others employing contractors. In the rural areas, public scavenging is being more extensively adopted.

During the year 1936, on only one occasion was it necessary for an officer of this Department to carry out personal investigation in regard to scavenging.

With regard to refuse disposal, conditions in some areas are not so satisfactory as they might be. There are still far too many tips, where refuse is just tipped and left, or may be "raked over" occasionally. As stated in a previous report these "uncontrolled" tips are to say the least, unsightly, insanitary and dangerous, they encourage rat infestation, are frequented by the "tatter" who searches them for jars, bottles, rags, bits of metal or any other saleable article. It is considered that local authorities and others concerned in the disposal of refuse should not sanction the indiscriminate uncontrolled tipping of refuse.

Investigations by officers of this Department into methods of refuse disposal were made in 4 urban and 3 rural districts during the year.

### Sanitary Accommodation.

The tabular statement below gives the percentage of closets on the water carriage and conservancy systems respectively in the urban and rural districts comprising the Administrative County for each of the five years 1932 to 1936 inclusive.

TABLE XXX.

	Urban Areas.					Rural Areas				
	1932	1933	1934	1935	1936	1932	1933	1934	1935	1936
Water-Carriage System	88.93	89.87	90.29	90.98	92.59	64.54	65.65	68.24	68.34	71.91
Conservancy System ...	11.07	10.13	9.71	9.02	7.41	35.46	34.35	31.76	31.66	28.09



As one anticipates, the water carriage system continues to increase, although its progress is perhaps not so rapid as one would like. This can be ascribed to the fact that in the great majority of districts where closets on the conservancy system exist to any extent, there is absence of either adequate sewerage arrangements or water supplies, or both. Without these facilities, replacement of privies or pail closets by closets on the water-carriage system cannot take place. Unfortunately there still remain in one or two areas where sewers and water supplies are available, some closets of the tub or pail type. Under such conditions, this type of convenience should be regarded by any sanitary authority in whose area it exists, as a blot upon its public health administration, and something to be removed at the earliest opportunity.

The number of privies, etc., replaced by water closets during 1936 was 2,556, and in addition, 1,376 water closets were provided for existing properties. The number of water closets provided in connection with newly erected properties during 1936 totalled 9,531.

In connection with closet accommodation generally, the time has arrived when every house should possess its own separate closet accommodation; the joint use of a closet by two houses is not desirable from many points of view. This provision is generally insisted upon in connection with newly erected houses, but it should also apply in regard to old property. It is good to be able to record that in some sanitary districts in the Riding the local authorities endorse this view, and require every house to have a separate closet. Another point with regard to closet accommodation for old property, which is considered undesirable, is the grouping of sanitary conveniences in blocks, placed in fairly public situations, such as the centre of a large common yard or at the end of a long block of property, sometimes at an unreasonable distance from the houses they are designed to serve. In any scheme dealing with closet accommodation, every endeavour should be made to secure that in addition to each house having a separate convenience, the convenience should be placed in such a position as will secure reasonable privacy and facilitate access thereto by the occupants of the house.

During the year 1936, officers of the Department made inspections in matters affecting sanitary accommodation in two urban and three rural areas.

## Milk Supplies.

### MILK (SPECIAL DESIGNATIONS) ORDER, 1923 AND 1936.

The Milk (Special Designations) Order, 1936, which revoked the Orders of 1923 and 1934 came into operation on June 1st. The new Order prescribes the following designations for milk, *viz.*:

**"Tuberculin Tested."** The conditions for this grade are substantially the same as those which were required for the Grade "A" (Tuberculin Tested) milk. Such milk comes from cows which have passed a veterinary examination and a tuberculin test, and it may be bottled on the farm or elsewhere.

Until the 31st December, 1936, the milk if raw had to be so produced that a sample taken at any time before delivery to the consumer should not contain more than 200,000 bacteria per millilitre. After that date the milk when tested in accordance with the prescribed method must not decolourize methylene blue within  $4\frac{1}{2}$  hours if the sample is taken at any time from the 1st May, to the 31 October, or within  $5\frac{1}{2}$  hours if the sample is taken at any time from the 1st November to the 30th April. At all dates it must contain no coliform bacillus in 1/100th millilitre. If pasteurised it must be described as "Tuberculin Tested Milk (Pasteurised)" and must not contain more than 30,000 bacteria per millilitre. If it is bottled on the farm the word "(Certified)" may be added to its description.

**"Accredited."** The conditions for this grade are similar to those prescribed in the Order of 1923 for Grade A Milk. It is raw milk from cows which have passed a veterinary examination; it may be bottled on the farm or elsewhere. It must satisfy the same bacteriological tests as are prescribed for raw Tuberculin Tested milk.

**"Pasteurised."** This designation is applicable both where "Accredited" milk and where ungraded milk is pasteurised in accordance with the requirements of the Order. The conditions are substantially the same as in the Order 1923, except that further conditions are imposed with regard to thermometers and temperature records.

The designations "Certified," "Grade 'A' (Tuberculin Tested)" and "Grade A" set up under the Order of 1923 are abolished.

Article 4 of the Order provides that outside London licences (other than supplementary licences) authorising the use of the special designations "Tuberculin Tested" and "Accredited" by producers shall be granted by County and County Borough Councils, and all other licences under this Order by the Councils of County Boroughs, Boroughs, Urban Districts and Rural Districts, so that from June 1st, 1936, the County Council became an authority for the issue of licences authorising the use of the special designation "Tuberculin Tested."

**Closing and Labelling of Bottles.** Some little alteration is also made by the Order in the requirements as to the closing of bottles and the labelling of "Tuberculin Tested" and "Accredited" milk.



**"Tuberculin Tested" Milk.** On January 1st 1937, the number of persons licensed in the West Riding Administrative Area was 53, and of these 34 had held licences prior to June 1st, 1936, issued by the Ministry of Health.

In the Milk (Special Designations) Order, 1936, there is a clause in the third schedule dealing with additions to a tuberculin tested herd which requires that where an animal, other than one coming from an attested herd or a herd in respect of which a licence authorising the use of the special designation "Tuberculin Tested" is in operation, is added, it shall be segregated from the rest of the herd for a period of two months from the date of its addition.

The major portion of the "Tuberculin Tested" herds in the Riding are not self contained, and in these cases, where licences have been newly issued by the County Council, it has been required that suitable arrangements for segregation of new additions to the "Tuberculin Tested" herd should be provided, but in the cases where a licence has been issued by the Ministry of Health prior to June last, such provision for segregation did not always exist, and in these cases steps are being taken in conjunction with the County Veterinary Officer to secure such suitable provision.

Samples of milk from "Certified," "Grade 'A' T.T.," and "Tuberculin Tested" producers were examined as under during 1936.

1. *Samples of milk collected and examined on behalf of the Ministry of Health:—*

CERTIFIED.	Satisfactory	...	...	276
	Unsatisfactory	...	...	21
	Total	...	...	297
GRADE A. T.T.	Satisfactory	...	...	37
	Unsatisfactory	...	...	8
	Total	...	...	45

2. *Samples of milk collected by the County Staff:—*

CERTIFIED. GRADE A. T.T. or TUBERCULIN TESTED.	Satisfactory	...	...	18
	Unsatisfactory	...	...	2
	Total	...	...	20

**"Accredited Milk."** The spate of applications for "Accredited" licences due to the introduction of the Milk Marketing Board's "Accredited Producers' Scheme" continued during 1936, and to a large degree the time of the County Sanitary Inspectors has had to be given over to this work. From January 1st to December 31st, 1936, the total of new applications received was 245, which brought the applications since the beginning of 1935 up to a total of 696.

The scheme operating in the administrative county in connection with these applications was set out in some detail in the Annual Report for 1935, and has worked smoothly and efficiently during the year. The criticism of the policy of the County Council regarding the standard set up for buildings, equipment, methods, to which reference was made in the report for last year, has been of a mild type generally, though the feeling still persists among milk producers in the West Riding that they are suffering by reason of the action of neighbouring authorities who have granted licences to producers on the basis of a low standard as regards premises and equipment generally.

During the year an arrangement was entered into between the County Public Health Department and the County Veterinary Department which should have the effect of reducing the number of visits to licensed premises by officers of the County Council and District Councils to the essential minimum.

Some modification in procedure in this matter became necessary in 1935 when the County Veterinary Officers were made responsible for the veterinary inspection of Grade "A" herds, and more recently when they were required to undertake periodic inspections of Accredited and Tuberculin Tested herds.

The modifications introduced have secured even greater co-operation between the two departments.

As has been the practice hitherto the application for a licence under the Milk (Special Designations) Order, 1936 is forwarded to the County Public Health Department when the initial inspection of premises and equipment and preparation of reports on any constructional alterations are carried out by the County Sanitary Inspectors working in conjunction with the various local Sanitary Inspectors. This procedure continues under the new arrangements, but after the licence has been issued, the County Veterinary Officers undertake the supervision of premises, paying attention to general cleanliness, methods of production, etc., these inspections taking place at the same time that the premises are visited for the quarterly clinical examinations of cattle. The County Veterinary Officer brings to the notice of the County Medical Officer any structural alterations that he considers require attention or any other insanitary matters connected with premises or methods of production which may affect adversely the quality of the milk. In addition, sampling of milk once the licence has been obtained is now undertaken by the County Veterinary Department.



Upon receiving a report from the County Veterinary Officer that unsatisfactory conditions have been discovered at premises where special designated milk is produced, a special visit is paid by the County Sanitary Inspector either alone or in company with the local Sanitary Inspector, and a licensee is asked to put right any such unsatisfactory conditions as may exist. This transfer of the duty of periodic inspection to the County Veterinary staff after the licence has been issued following upon the initial inspection and preparation of the report and specifications by the County Sanitary Inspectors, has permitted the latter to direct their attention more assiduously to duties of a more important character. So far the scheme appears to be working well.

On January 1st, 1937 there were in the West Riding Administrative Area 397 producers of "Accredited" milk, of whom 91 also held licences for bottling such milk. The number is still small as compared with the numbers in some nearby counties, but the situation is better appreciated by a consideration of the cow population. These 397 licensees among them own approximately 11,116 cows, and when it is stated that the estimated cow population of the Riding is about 106,000 on 8,830 registered milk producing farms it will be seen that whilst the percentage of "Accredited" producers is only 4.5 of the total milk farms, the cow population of these "Accredited" milk producers equals 10.5 per cent. of the total cow population.

As intimated in the Annual Report for 1935, in certain cases "Accredited" licences were issued to applicants on receipt of undertakings from them to the effect that certain structural alterations to premises which could not well be carried out during the winter months would be effected during the summer. Quite a number of producers took advantage of this concession, and in all cases but one the undertakings were duly carried out. In the excepted case the licence holder unfortunately died before the work, which was in hand, was completed.

#### Bacteriological Examination of Grade "A" and "Accredited" Milks.

Year.	Samples collected by County Staff.	Up to standard.	Below standard
1936	1,224	1,088 or 88.8%	136 or 11.1%

During the year it was found necessary to call certain licensees before the appropriate Committee in consequence of contravention of the Order and/or samples of milk being found unsatisfactory on bacteriological examination, and in two instances licences were revoked. Later the licence of one offender was renewed.

#### SUPPLY OF MILK TO SCHOOL CHILDREN.

The supply of milk to school children is in bottles each containing one third of a pint. During the year 1936 the number of bottles of milk supplied to elementary and secondary schools has fallen to a slight degree as will be observed from the statement set out below which gives comparative figures for 1935 and 1936:—

	1935	1936
Total bottles supplied	23,152,999	22,596,766
Average No. of bottles per day	105,241	103,793

During the year 1936, the total number of bottles of pasteurised milk supplied was 15,151,840, and of raw milk, 7,444,926. It will be noted from the above figures that the pasteurised milk supplied amounts to practically two-thirds of the whole.

The number of contractors supplying the milk numbered 111, of whom 20 supplied "pasteurised" and 91 raw milk.

Where possible, an endeavour has been made to eliminate overlapping, i.e., two distributors of the milk travelling over the same route.

Before any contract to supply milk to schools is approved, an inspection of the premises of the milk producer is made by one of the County Sanitary Inspectors, and subsequently during the term of the contract further inspections are carried out and enquiry is made into the methods of production and handling of the milk. It is regretted that once again during 1936, owing to pressure of other work the County Sanitary Inspectors have not been able to make these re-visits as frequently as is necessary; this is demonstrated by the increased number of samples which have been reported upon adversely after bacteriological examination.

Particulars of these examinations are set out below:—

TABLE XXXI.  
Samples of School Milk Examined.

Class of Milk.	Satisfactory.	Unsatisfactory.	Total
Pasteurised ... ..	84	24	108
Raw ... ..	185	83	268
Totals ...	269	107	376







### Arrangements for Health and Comfort of Shop Workers.

The Shops Act, 1934, requires every part of a shop in which persons are employed in the business of the shop to be suitably and sufficiently ventilated and maintained at a reasonable temperature and to have satisfactory means for securing such conditions; suitable and sufficient sanitary conveniences must also be provided and maintained for the use of employees.

The duty of enforcement rests with the Local Sanitary Authorities. The Shops Inspectors of the County Council are, however, required by the Act to take note of any contravention, and if necessary report upon it to the Sanitary Authority for the district in which the shop is situate.

The Chief Shops Inspector for the County Council, Mr. A. Ross, has supplied the following information as to the action taken by his Department during the year under review:—

Reports in respect of shops where a reasonable temperature was not being maintained, or where the sanitary conveniences were not considered suitable and sufficient have been received as follows:—

Reasonable temperature not maintained ... ..	129 shops.
Sanitary conveniences not considered suitable and sufficient ...	201 shops.

In each case the attention of the Sanitary Authority for the district was drawn to the unsatisfactory conditions.

There has been no report of a shop where suitable and sufficient ventilation was not being maintained.

### Burning Colliery Spoil Banks.

In February, 1931, the Housing Sub-Committee of the West Riding Public Health and Housing Committee requested me to submit a report on burning colliery tips throughout the West Riding Administrative Area. This report was submitted in the following June and it showed that 45 colliery tips were on fire in 1931, 24 sanitary districts being affected. The measures taken by the colliery companies concerned to mitigate any nuisance were varied and not always successful.

These burning tips were kept under observation, but further detailed investigation was not contemplated until the end of 1934, when a request was received from Sir George Newman, then Chief Medical Officer, Ministry of Health, for information as to the number of spoil banks on fire, their effect on health and what measures were being taken to prevent or extinguish them.

Dr. Wood Wilson, Assistant County Medical Officer, undertook the work of investigation. His inquiry was prolonged owing to the nature of the information required and to the necessity for a personal visit to the majority of the collieries in the County. His report, which was presented to the Housing Sub-Committee on the 7th December, 1936, is set out in the following pages.

#### Introduction.

As a result of a questionnaire sent to medical officers of health of local authorities in the West Riding Administrative County, it was found that out of a total of 153 colliery spoil banks reported as existing in 1931, 45 were on fire.

This present investigation was started in February, 1935, at the instigation of the Ministry of Health who required information on several points, for example, whether the number of burning tips was increasing; whether any measures were employed to prevent or extinguish fires, and the extent of the nuisance caused to persons living in the vicinity.

Owing to the nature of the information required it was decided that an inspection should be made of the 45 tips reported as being on fire in 1931, but after a few visits it was realised that the investigation would not be complete without an extension of the inspections to those other districts where spoil banks existed.

It also became apparent very soon during the investigation that the question of burning colliery spoil banks was a complex one, being bound up with legal enactments, colliery practices as regards tipping, and the health of persons resident near burning tips. Unfortunately, information on the last point, which was the main reason for investigation by a Public Health Department, was the most difficult to obtain.

It is proposed to discuss the results of the investigation under the three headings given above.

#### Law Relating to Colliery Tips.

One of the definitions of a nuisance given in the Public Health Act, 1875, is that of Section 91(4)—“Any accumulation or deposit which is a nuisance or injurious to health.”

From this it would appear that if injury to health could be proved as a result of a burning colliery tip, action could be taken against the owners. The first proviso under this section, however, exempts from any penalty the owner of a business which necessitates the accumulation of deposit if the best available means have been taken for preventing injury to the public health.

The Public Health Act, 1936, which comes into force on the 1st October, 1937, re-enacts similar provisions in Sections 92(1) (c) and 94(4).

In June 1936, the Minister of Health, replying to a question in the House of Commons, stated that “any action designed to make obligatory on all local authorities concerned the duty of removing the menace to health of burning pit heaps would be outside the scope of a consolidation Bill.”



That further power is desired in some quarters is shown by the terms of a Bill, Public Health (Coal Mines Refuse) Bill, which was introduced in February, 1936, and ordered to be printed. The purpose of this Bill is to "deem a deposit of refuse from a coal mine which is liable to spontaneous combustion a deposit within the meaning of Section 91(4) of the Public Health Act, 1875 and to preclude the first proviso of that section from applying."

It will now be seen why the question of burning colliery tips is so complex, for to secure abatement of any injury to health as the law now stands, it is essential to prove that the best available means of preventing such injury have not been taken.

It is fortunate, however, that colliery companies have not generally taken advantage of the strict legal requirements; as a rule they have been helpful when approached informally to abate a nuisance to surrounding householders.

Several companies were approached by local authorities while this investigation was proceeding and all took steps to keep down or extinguish the fire.

#### Colliery Practices as regards Tipping.

In the course of this investigation, 134 collieries were visited and the varied practices as regards tipping seen. By far the most frequent method of tipping the refuse was by wagons and tubs, either alone or in combination with an apparatus called a "skip," an erection of girders which enabled the refuse to be discharged at a selected point on the tip.

The following table shows the frequency of the different methods in use; the collieries are divided into those with burning spoil banks and those without:—

Method of Tipping.	Frequency.	
	Collieries with no tips on fire.	Collieries with burning tips.
Wagons and/or Tubs ... ..	33	50
Aerial Ropeway ... ..	2	17
Separate tips for different material ... ..	1	3
Underground packing ... ..	1	0
Not ascertainable owing to pit being dismantled ... ..	27	8
Total ...	64	78*

\* One colliery had five tips on fire and four had two tips on fire.

#### Prevention of firing of Colliery Spoil Banks.

Advantage was taken in many cases during the investigation to inquire of colliery officials what their views were regarding the means of preventing tip fires. The question in that way, was perhaps rather unfair, for many colliery managers undoubtedly have ideas for the prevention of fires which would be impracticable for many reasons, for example, lack of space or economy, in their own colliery. It is to be noted, however, that information was generally freely given, many having a very keen interest in this subject, which seems to be controversial. That unanimity is not yet in sight may be seen from the following classification of replies:—

#### VIEWS OF COLLIERY OFFICIALS AS TO BEST MEANS OF PREVENTING COLLIERY TIPS FROM FIRING.

Restrict height of tip ... ..	8
Alternate tipping sites ... ..	10
Tip washery dirt and pit dirt together ... ..	8
Tip washery dirt and pit dirt separately ... ..	3
Allow "pickers" (to remove combustible material)... ..	2
Prohibit "pickers" (to prevent stirring up of tip) ... ..	1
Underground packing ... ..	1
	—
	33
	—

The only method which approached general acceptance was tipping in shallow layers, alternate tipping sites being a modification of this principle, but in very many cases this was considered impracticable owing to cost both of land and labour.

It was found that very few collieries had a definite plan which they were carrying out with a view to prevention of fires.

Among the plans in actual use were the following:—

1. Refuse tipped in shallow layers radiating from a central tip so that a part could be isolated in the event of fire.
2. Tipping to depth of less than 20 feet; allow to cool; return after more than two years and tip another 20 feet.
3. Packing the refuse underground.
4. Tipping in shallow layers over a large area, binding with wet washery dirt and pressing in with weight of locomotive. Turf has already been laid over one portion.

In none of the above instances was fire observed.



The annual report for 1935 on Alkali, etc., Works (by Chief Inspectors of the Ministry of Health), contains a reference to burning colliery spoil banks and suggests for prevention of fires:— separate tipping of washery dirt; tipping in layers of less than 20 feet, or with intervening layers of inert material; prohibiting of "picking" for coal on the surface.

It does not seem to be unanimous that washery dirt should be tipped separately for in spite of its coal content it may materially assist in preventing firing of a tip owing to forming a firm "bind" which prevents the entrance of air.

It is possible that further investigation would show that washery slurry, even with a coal content which makes it of use for raising steam, would be of value in preventing spontaneous combustion.

#### Extinction of Burning Colliery Spoil Banks.

It was found during the investigation that 78 spoil banks were on fire and in the majority of cases where the fires were extensive and near to houses, the colliery companies had tried some measures to extinguish them.

The Alkali, etc., Works Report, mentioned above, has outlined methods which have been successfully employed; the summary given below shows to what extent the different methods have been used in the West Riding:—

Method.	Frequency tried.	Results.		
		Successful.	Some effect.	Failure.
Flooding externally with water ... ..	10	1	5	4
Flooding internally by percolation ... ..	—	—	—	—
Blanketing with inert materials:—				
(a) Sand ... ..	7	—	4	3
(b) Fine dust ... ..	3	—	3	—
(c) Clay Grout ... ..	2	1	—	1
(d) Slack wash ... ..	1	—	1	—
(e) Soil ... ..	1	—	1	—
(f) Alum shale ... ..	1	—	—	1
Isolation of burning portion ... ..	3	—	3	—
Totals ... ..	28	2	17	9

It may be thought that as there were 78 tips on fire in the County Area, action was being taken by colliery companies only in a small proportion of cases. This reproach is however more apparent than real for in many cases the fires were inconsiderable, amounting only to quiet smouldering, while in others houses are so far distant that no complaints were received. It was to be noted in this connection that in only one instance was information received that a colliery company had refused to take measures for the alleviation of nuisance from a burning tip when requested by the Urban District Council concerned.

As regards the methods used it will be seen from the preceding table that in only two cases was success claimed; these are described in more detail below:—

**G. Colliery.** First inspected in June, 1935, owing to many complaints of nuisance. Small water pipe in position unable to cope with fire. Colliery company approached again, laid out a network of pipes for the supply of water and by August, 1935, considerable improvement had been made. At an inspection in September, 1936, no trace of fire was evident.

**U. Colliery.** This colliery company for many years has been trying to extinguish the fire owing to a housing estate being erected in the vicinity. Covering with sand was tried, then lime was pumped in, and then a mixture of clay and water was pumped into the bank, six or more feet down with the object of forming an impervious layer and so "blanketing" the fire. It was recognised that cracking would take place owing to heat but plans were made to go over the ground again in order to keep the layer intact.

The method achieved considerable success at first but at a subsequent inspection (February 1936) fire had again broken out in one corner. Reasons advanced for this were:—(1) strike at the colliery which made it difficult to maintain men for the clay grouting process, (2) tipping had to be resumed on the old bank as the new tip was not in readiness.

A later inspection (June 1936) showed that the fire was not yet completely under control.

The contrast between these two methods outlined above is interesting for in theory the "blanketing" method was more likely to be successful. Water, unless in large quantities (the tide twice a day was the estimate of one colliery manager) is generally more harmful than helpful, as it allows the entry of air.

Where large quantities of water are available it does seem practicable to obtain some effect on the fire, at least relieving the worst features.

Clay grout applied on the surface of another burning tip was a failure as it soon cracked and was not renewed.



### Health of Persons Resident near Burning Tips.

This part of the investigation proved very difficult and it was soon realised that only general ideas could be formed. The views of the Medical Officers of Health to the different local authorities concerned could be summed up in the words:—"Burning colliery tips are unpleasant as they spoil the amenity of a district for residence but injury to health is no greater than in any industrial area."

That there is a greater risk in industrial areas than in rural areas is shown by figures for the County Area. In 1935, the death rate in the Urban Districts was 12·5 per 1,000 as against 10·3 for the Rural Districts, and 11·7 for England and Wales. Comparison of the respiratory diseases death rate is also interesting and the following table gives the death rates for the five years 1931 to 1935 for England and Wales, the Urban Districts of the West Riding and for the County Boroughs of Oldham, St. Helens and Dewsbury.

1931-1935.

	Average death rates per thousand estimated population from:—	
	All Causes.	*Respiratory Diseases.
England and Wales ... ..	12·03	1·35
W.R. Urban Districts ... ..	12·58	1·36
Oldham C.B. ... ..	14·50	1·88
St. Helens C.B. ... ..	12·13	1·97
Dewsbury C.B. ... ..	14·18	1·88

\* Pneumonia, bronchitis, etc. Does not include deaths from tuberculosis of the respiratory system.

It can be seen from the above table that the death rate from all causes and respiratory death rate for the West Riding Urban Districts compares very favourably with that of industrial towns.

The table following gives the death rates for 1935 for England and Wales, and for mining and textile districts in the West Riding Administrative County.

	Deaths in the year 1935 per thousand estimated population from:					
	All Causes.			Respiratory Diseases.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
England and Wales ... ..	12·49	11·06	11·75	1·36	0·98	1·16
W.R. Mining Districts ... ..	10·71	9·87	10·31	1·36	1·07	1·22
W.R. Textile Districts ... ..	14·50	13·01	13·70	1·35	0·92	1·12

The above figures show a lower death rate in mining districts as compared with textile districts and a higher respiratory death rate. The differences are not significant as the higher death rate in the textile districts can be attributed to the fact that the population thereof contains a larger proportion of older people than does that of the mining districts.

An attempt was made during the investigation to obtain information from householders in the vicinity on how the burning spoil banks affected them, particularly as regards health. To call at every house in some cases would have been impracticable and so a random selection was made in order to obtain an insight into the effects produced in a particular district. In this connection it was noted that employees at a colliery were generally very loyal to the Company so that few complaints were received from them; this attitude to a certain extent made enquiry into effects on health less reliable.

Of the 78 colliery tips on fire in the County, 39 were the subject of complaint from householders. These 39 tips were all on fire to some extent, some much more than others. In all cases smoke and fumes were evident, dust was rarely in great quantity and the presence of flames was varied.

The complaints received from the districts in the immediate vicinity of these tips are classified as follows:—

(NOTE.—The numbers refer to the number of localities at which the complaint was made and not the number of individuals making the complaint.)

Subject of complaint.	Frequency, (i.e., No. of localities).
<i>Personal.</i>	
Sore throat ... ..	6
Cough ... ..	5
Headache ... ..	2
Boils ... ..	1
Smell ... ..	4
Compelled to keep windows closed ... ..	4
<i>Household.</i>	
Tarnishing of metals ... ..	23
Smuts ... ..	4
<i>Vegetation</i> ... ..	22

It will be seen from the preceding table that complaints of injury to health were in the minority, also the evidence that fumes were to blame was not altogether reliable.

Climatic conditions of course, affected the severity of the complaints, rain often being the cause of more fumes and lighting up of the burning heap, while the direction of the wind could banish completely any cause for complaint.

The presence of offensive fumes causing bedroom windows to be closed at night is a factor which requires consideration as a possible source of injury to health, due to lack of sufficient ventilation.

It is to be noted that dust blown from the tips was seldom a cause for complaint, the chief complaint of the housewife being the blackening of silver and brass work. The tarnishing of household metal work was indeed a very marked feature of most districts.

Injury to the crops of adjacent farms was evident and appeared to be admitted by the colliery companies in many cases, as compensation was paid to the farmers. In some cases the colliery companies owned the farm land adjacent, letting it to tenants at low rentals. In one case, found during the investigation, the colliery company were defending an action for damage to crops and were confident of succeeding. The result of the action is unfortunately, not known.

The number of houses within a short distance of the burning tips was estimated where complaints were received of nuisance. In 16 instances there were no houses within 400 yards of the tip, in the remaining 23 cases houses were distributed in the vicinity as follows:—

	No. of Collieries.				Total No. of Houses (approx.).
Within a radius of 100 yards	...	8	...	...	129
Between 100 to 200 yards	...	11	...	...	228
Between 200 to 400 yards	...	20	...	...	1,286

As regards the range of effects of the fumes it is to be noted that in the 16 cases where the nearest houses were more than 400 yards from the burning spoil bank, the complaints of harmful effects to health were rare, the most usual complaint being of damage to vegetation.

While in many ways it might be thought that injury to health is established by the complaints of residents, the scarcity of definite evidence is obvious. In the first place, there are the views of local Medical Officers of Health who consider that in general, health in the vicinity of a burning spoil bank does not suffer to any great extent and in the second place, evidence of householders cannot be considered unanimous. Even in the course of a by no means exhaustive enquiry among residents many would be heard to state that they had never had a day's illness.

One local authority with a housing estate in close proximity to a burning bank arranged for the air to be sampled, but again the findings were against definite injury to health.

The report by Richardson and Jaffe, Analytical Chemists, was as follows:—

"(1) Air sampled on tip where smoke and flames were issuing.

Carbon monoxide	...	...	40 parts per million.
Sulphuretted hydrogen	...	200	" "
Sulphur dioxide	...	600	" "

"(2) Air sampled 50 yards from smoke.

Total sulphur compounds	...	20 parts per million.
Carbon monoxide	...	None.

"(3) Air sampled at houses just outside colliery.

Carbon monoxide	...	None.
Sulphur compounds	...	None.

"In our opinion the air from the burning tip is not detrimental to health. The sulphur dioxide "is not so great as is given off by mill chimneys, whilst the carbon monoxide does not equal the "amount due to motor car exhaust.

"The various fumes given off are not sufficiently serious to be deleterious to the men actually "engaged in extinguishing the burning material.

"By the time the fumes have blown outside the grounds they are so diluted as to be negligible."



**Summary of Findings.**

1. There were 78 burning colliery spoil banks in the West Riding Administrative Area.
2. The number on fire had increased from 45 in 1931 to 78 in 1936.
3. Measures were being taken by a few colliery companies to prevent fire.
4. Measures were being taken by most colliery companies to extinguish the fire if complaints were received of nuisance.
5. The nature of the complaints by persons living in the vicinity was mostly of damage to household fittings and vegetation.
6. Although the health-giving advantages of a pure atmosphere cannot be questioned, nevertheless it has been found impossible to adduce conclusive evidence of injury to health from the fumes given off by a burning tip.
7. Owing to the variety of opinions held by colliery officials on the subject of burning spoil banks it is suggested that a method or methods should be agreed upon by experts as most likely
  - (a) to prevent firing of a colliery tip, and
  - (b) to extinguish a burning colliery tip.

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

TABLE XXXII.

**Quarterly Report of Samples taken during 1936.**

District.	Sampling Officer.	Samples taken during 1936.				
		First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total.
Harrogate	W. B. Greenwood	97	95	69	101	362
Mexborough	R. Hutchison	75	92	68	103	338
Mirfield	E. Ward	117	128	133	137	515
Pontefract	H. F. Wilkinson	80	105	78	66	329
Rothwell	T. A. Bramley	99	103	83	87	372
Shipley	W. Bates	90	86	96	101	373
Skipton	T. S. Roberts	85	90	87	89	351
Sowerby	E. Bell (J. W. Bramley)	113	96	65	98	372
Wombwell	A. Nobbs	85	75	58	93	311
Total samples taken by Sampling Officers ...		841	870	737	875	3,323
Local Authorities ...		158	178	198	349	883
Total Samples ...		999	1,048	935	1,224	4,206

The above total includes 62 "appeal to cow" samples (*i.e.*, samples direct from the farm at the time of milking), which frequently entail early morning visits. Of the 62 samples, 47 were obtained by our Sampling Officers and 15 by Local Authorities.

Excluding the "cow" samples, 2,289 samples of milk were collected by our officers, and 852 by local Sanitary Inspectors, making a total of 3,141, and of this total 198 or 6·0 per cent. were adulterated.

TABLE XXXIII.

**Record of Samples for Five Years, 1927-1931 and for Five Years, 1932-1936.**

Year.	Total samples submitted by		Total examined.	Total adulterated.	Percentage adulterated.
	County Council.	Local Authorities.			
1927	2989	803	3792	172	4·5
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
Average for 5 years, 1927-31	3025	749	3794	192	5·0
1932	3308	858	4166	232	5·5
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
Average for 5 years, 1932-36	3323	868	4191	222	5·2

It will be noted that in 1936, 180 (or 4·3%) samples were adulterated, and these consisted of 144 of milk and 36 other, namely:—Beer 1; Bismuthated Magnesia Tablets 1; Brown-it 1; Butter 2; Candied Peel 1; Citric Acid 1; Cream 3; Elderberry Wine 1; Glycerine 1; Grape Fruit Crush 1; Lime Water 1; Maclean's Stomach Powder 1; Malted Milk 1; Malted Oatmeal 1; Potted Meat 8; Sausage 6; Sweets 1; Tartaric Acid 1; Tea 1; and Tinned Dairy Cream 2.

The extent of the adulteration necessitated proceedings in regard to 11 samples of milk and 2 of sausage. As regards the other unsatisfactory samples, in most instances cautions were issued.

TABLE XXXIV.

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

Year.	Genuine.	Adulterated.	Total	Percentage Adulterated.
1932	2175	151	2326	6·9
1933	2089	154	2243	6·8
1934	2141	138	2279	6·0
1935	2180	131	2311	5·6
1936	2145	144	2289	6·3

SPECIAL MILK SAMPLING. Sampling Officers made surprise visits in 41 districts and obtained 113 samples of milk from Sunday morning supplies, and four samples were reported against by the County Analyst.

One sample was seriously adulterated and a prosecution ensued; the other three samples were deficient in fat and cautions were issued.

#### 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:—

Barnoldswick ... .. 48	Hebden Bridge ... .. 4	Todmorden ... .. 17
Batley ... .. 103	Hemsworth ... .. 22	Wath-upon-Deane ... .. 4
Bentley ... .. 39	Hoyland Nether ... .. 12	Whitwood ... .. 10
Birstal ... .. 24	Ilkley ... .. 16	Hemsworth R. ... .. 9
Brighouse ... .. 30	Maltby ... .. 14	Kiveton Park R. ... .. 27
Castleford ... .. 29	Mexborough ... .. 27	Knaresborough R. ... .. 17
Cudworth ... .. 10	Normanton ... .. 10	Ripon R. ... .. 1
Elland ... .. 48	Ossett ... .. 5	Wortley R. ... .. 1
Garforth ... .. 3	Pudsey ... .. 20	
Goole ... .. 51	Rothwell ... .. 44	867
Harrogate ... .. 175	Royston ... .. 12	
Haworth ... .. 15	Stanley ... .. 20	

### The Pharmacy and Poisons Act, 1933.

In 1926 a Departmental Committee was appointed to consider the desirability or necessity for the amendment of the Poisons and Pharmacy Acts and following on the recommendations of that Committee The Pharmacy and Poisons Act, 1933 was passed, which made a considerable revision in the law relating to the sale, supply, storage and transport of poisonous substances. A standing advisory committee, The Poisons Board, has been established by the Act. The duties of the Board are to advise or make recommendations to the Secretary of State as to what substances shall be treated as poisons for the purposes of the Act and with regard to the rules relating to poisons which the Secretary of State is empowered to make. The Board has prepared a list of poisons which is divided into two parts and has been confirmed by the Home Office. So far as retail sales are concerned, it may be said that in Part I are included those poisons which may only be sold from chemists' shops, and in Part II those which may also be sold under certain conditions by other retail shopkeepers.

Broadly speaking, Part II of the list contains those poisons which are in common use for purposes other than the treatment of human ailments. The following are some of the substances which are poisons, or are preparations which contain poisons, included in that Part:—Solutions of ammonia, salts of lemon, caustic soda and potash, lysol and other carbolic disinfectants, nicotine and its salts, and various salts of arsenic and mercury.

Persons, other than registered chemists or pharmacists, desiring to sell by retail substances, or preparations containing substances, included in Part II of the Poisons List, must make application to and obtain the approval of the County Council. The County Council is required by the Act to keep a list of such retail sellers, and they may refuse to enter therein or they may remove therefrom the name of any person for any sufficient reason relating either to him personally or his premises. The person affected has the right of appeal to Quarter Sessions.



A considerable number of applications for entry on the list has been received by the County Council, and 1,557 inspections were made in 1936 in connection therewith. To secure compliance with the complicated provisions of the Act and rules made thereunder, it is necessary to make inspections in connection with retail sellers whose names are on the County Council's list. Such sellers numbered 1,551 at the end of 1936.

## PUBLIC VACCINATION.

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

TABLE XXXV.

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.
1931	23,652	6,630 (28.03%)	82	14,443 (61.1%)	2,497
1932	22,848	6,243 (27.3%)	75	14,159 (61.95%)	2,371
1933	21,622	5,283 (24.44%)	53	14,051 (65.24%)	2,135
1934	21,690	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

There are 158 Public Vaccinators under contract to perform vaccinations and re-vaccinations in the 170 vaccination districts, and at the 15 County Institutions.

There are also 62 Vaccination Officers, 16 of whom are paid by salary and 46 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.

The tables set out below indicate the work done under the Vaccination Acts in the Administrative County Area during the year ended 30th September, 1936.

TABLE XXXVI.

	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 ... ..	3,936	238	4,174	107
Performed by Medical Officers of County Institutions ...	14	10	24	1
	3,950	248	4,198	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 XXXVII.

VACCINATIONS PERFORMED IN COUNTY INSTITUTIONS, YEAR ENDED 30TH SEPTEMBER, 1936.

Name of County Institution.	Name of Medical Officer.	Primary Vaccinations			Re-vaccinations.
		Under 1 year.	1 year and upwards.	Totals.	
Grenoside ... ..	A. Anderson ... ..	—	—	—	—
Hemsworth ... ..	T. C. A. Sweetnam ... ..	1	—	1	—
Keighley ... ..	T. L. Walker ... ..	—	—	—	—
Knaresborough ... ..	C. H. Steinbach ... ..	3	3	6	1
Otley ... ..	W. H. Galloway ... ..	—	—	—	—
Penistone ... ..	A. A. Masser ... ..	—	—	—	—
Pontefract ... ..	G. Burnett ... ..	2	—	2	—
Settle ... ..	B. S. Hyslop ... ..	—	1	1	—
Skipton ... ..	W. H. Robinson ... ..	—	—	—	—
Tadcaster ... ..	J. P. Scatchard ... ..	—	—	—	—
Todmorden ... ..	H. Thorp ... ..	—	4	4	—
Wetherby ... ..	E. R. Hargreaves ... ..	—	1	1	—
Goole ... ..	J. Crawford ... ..	4	1	5	—
Ripon ... ..	R. Thomas ... ..	—	—	—	—
Selby ... ..	O. L. Scarborough ... ..	4	—	4	—
		14	10	24	1

TABLE XXXVIII.

## Vaccination of Children whose Births were registered from 1st January to 31st December, 1935, inclusive.

Name of Vaccination Officer	Vaccination District	Number of Births returned in the "Birth List Sheets" as registered from 1st January to 31st December 1935	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 1936	Number of Statutory Declarations of Conscientious Objection actually received by the dates of birth of the children to which they relate, during the Calendar Year, 1936.	Number of Children vaccinated after declaration of Conscientious Objection had been made.	Total number of Certificates of Successful Vaccination for year 1936 sent to other Vaccination Officers.	
			Column I	Column II	Column IV	Column V	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						
		Successfully Vaccinated	Inappreciable of Vaccination	Had Smallpox	Number in respect of whom Statutory Declarations of Conscientious Objection have been received	Died Unvaccinated									
W. Roberts	Bowland Rural	41	16	—	—	22	—	—	2	—	12	21	—	—	2
J. Peters	Do.	12	1	—	—	5	—	—	—	5	—	—	—	—	—
G. Kayley	Garsdale (Sedbergh)	8	2	—	—	5	1	—	—	—	1	3	—	—	—
W. Batty	Sedbergh	42	22	—	—	18	—	—	—	2	14	24	—	—	—
W. Slinger	Bentham (Settle)	79	19	—	—	50	3	2	—	1	32	56	—	—	5
C. Parker	Settle and Long Preston	103	39	2	—	58	2	—	1	1	58	43	—	—	4
G. J. Harker	Grassington (Skipton)	14	2	—	—	11	—	—	1	—	8	10	—	—	—
S. H. Day	Kettlewell (Skipton)	5	3	—	—	2	—	—	—	—	3	—	—	—	—
G. D. Hunt	Gargrave (Skipton)	19	13	—	—	6	—	—	—	—	9	7	—	—	—
D. Slater	Barnoldswick, etc. (Skipton)	467	20	1	—	355	24	5	8	6	39	324	—	—	1
T. C. Crawhall	Gr. Ouseburn	373	239	1	—	238	33	—	44	4	240	231	2	9	—
J. Clark	Knaresborough	145	64	—	—	72	3	—	1	3	70	56	—	—	11
Mrs. M. E. Bowes	Harrogate	599	203	1	—	287	24	21	6	18	217	341	—	—	13
G. E. Wilkinson	Pateley Bridge	77	31	—	—	36	4	—	—	6	34	29	—	—	1
F. S. Metcalfe	Ripon	194	83	2	—	91	10	—	—	—	69	83	1	—	—
W. Borth	Tadcaster	137	101	—	—	25	4	1	2	4	133	33	—	—	22
W. Wormald	Aberford	246	83	—	—	131	7	3	5	1	16	84	141	—	14
S. C. Mellor	Wetherby	160	86	—	—	61	3	6	1	3	108	52	—	—	17
R. A. Wilkinson	Bishopthorpe	29	9	—	—	16	—	—	—	3	18	11	—	—	6
G. C. Clarke	Horforth	324	118	5	—	166	4	—	20	3	60	149	—	—	—
H. Wood	Ilkley and Otley	306	97	1	—	148	6	2	6	23	140	149	—	—	9
G. C. Clarke	Yeadon	225	23	1	—	169	14	—	4	10	33	181	—	—	8
J. A. Sharp	Keighley	702	12	—	—	643	35	1	7	4	23	399	—	—	—
Miss A. Hartley	Bingley	176	12	—	—	147	13	2	1	—	30	125	—	—	7
W. H. Ogden	Haworth	57	1	—	—	53	3	—	—	—	6	69	—	—	—
L. M. Greenwood	Wilden	44	—	—	—	41	—	—	—	—	3	—	34	—	—
C. W. Calverley	Farsley	88	36	1	—	43	6	—	2	—	53	46	—	—	11
H. Darnbrough	Drighlington	132	7	—	—	59	3	—	—	5	—	37	—	—	—
A. Hotchin	Pudsey	122	46	1	—	81	3	1	—	—	48	63	—	—	10
L. Clough	Shipley	530	51	1	—	411	22	12	4	17	38	445	—	—	5
F. Higginson	Cleckheaton	148	14	1	—	122	8	—	1	2	11	135	—	—	—
F. Madders	Sowerby	403	58	—	—	318	13	—	2	1	62	304	—	—	8
A. Sutcliffe	do.	291	31	—	—	249	7	—	—	—	4	260	—	—	27
J. H. Hindle	Todmorden	282	35	—	—	232	14	—	—	1	34	252	—	—	—
W. H. Holt	Busby and Gomersal	624	63	—	—	455	38	5	—	8	55	463	—	—	1
Miss G. Wormald	Gildersome	45	3	—	—	41	1	—	—	—	11	22	—	—	4
H. Jackson	Liversedge	323	57	—	—	237	6	—	5	—	56	233	—	—	2
E. R. Brearley	Mirfield	140	31	1	—	101	2	5	—	—	32	96	—	—	—
Miss E. W. Haigh	Morley	301	44	—	—	232	14	6	3	—	45	236	—	—	—
J. T. Smith	Ossett	196	18	—	—	145	6	—	—	27	16	131	—	—	2
W. Town	Horbury and Normanton, etc.	1194	284	—	—	799	43	4	8	22	34	329	824	—	42
Mrs. L. I. Dodsworth	Hensworth East	640	201	—	—	401	23	7	3	5	—	189	424	1	7
I. Scott	Do. West	584	270	—	—	264	20	15	—	16	—	245	269	—	10
W. Town	Pontefract	1751	455	—	—	1127	74	16	10	43	26	444	1151	—	16
H. S. Miller	Goole	478	87	—	—	345	24	2	4	16	—	91	361	1	—
W. B. Weaver	Selby	255	104	—	—	136	12	1	—	2	—	95	140	—	—
F. Griesdale	Bolton-upon-Deane	1346	278	3	—	925	67	4	30	11	28	279	919	—	20
A. J. Thorsby	Bawtry and Tickhill	570	228	—	—	246	21	—	5	70	—	216	389	—	27
J. Thurgood	Adwick-le-Street	712	117	1	—	423	20	1	3	29	99	152	422	—	17
H. E. Newton	Thorne	634	126	—	—	414	28	8	—	22	36	87	786	—	13
E. Hammerton	Darfield and Darton	1150	263	1	—	781	58	8	—	8	31	268	882	—	21
W. Taylor	Worborough	337	96	—	—	228	9	—	2	2	—	92	229	—	6
B. J. B. Marsden	Stockbridge	193	49	—	—	132	10	—	1	1	—	58	146	—	—
F. Bailey	Wortley	187	73	—	—	100	7	2	—	3	2	53	30	—	1
H. Dowson	Ecclesfield	200	32	—	—	136	12	5	—	15	—	39	142	—	5
H. Redfearn	Penistone	614	131	—	—	438	28	11	—	6	—	125	406	—	3
E. Firth	Colne and Holme Valley	92	10	—	—	71	5	2	—	—	8	32	—	—	3
A. Smith	Saddleworth	43	5	—	—	36	2	—	—	—	4	—	8	—	—
Miss J. Lees	Springhead	284	86	1	—	178	15	—	2	—	2	66	166	—	—
F. S. Butcher	Rotherham Rural	296	28	1	—	232	10	6	2	1	16	41	236	—	1
W. J. Blyth	Rawmarsh	608	132	2	—	420	20	2	—	6	16	90	405	—	5
G. C. Hearn	Malby	470	38	—	—	347	29	—	8	45	26	283	—	—	—
T. H. Harrison	Wath-upon-Deane	230	29	—	—	188	5	—	—	1	—	158	—	1	—
C. F. Airey	Anston	—	—	—	—	—	—	—	—	—	—	—	—	—	6
		21220	4936	28	—	13992	908	159	205	421	571	5023	13795	6	444





TABLE XXXIX.

VACCINATIONS PERFORMED IN VACCINATION DISTRICTS, YEAR ENDED 30TH SEPTEMBER, 1936.

Name of Vaccination District.	Public Vaccinator.	Primary Vaccinations.			Re-vaccinations.
		Under 1 year.	1 year and upwards.	Totals.	
<b>Area No. 1.—Ewecross.</b>					
Sedbergh	T. W. Rothwell	9	—	9	6
Dent	C. A. Allan	3	—	3	—
Slaidburn	J. T. Bleasdel	10	—	10	—
Gisburn	J. T. Bleasdel	—	—	—	—
Mitton	T. G. S. Harkness	1	—	1	—
Long Preston	H. M. Clegg	6	—	6	1
Austwick	T. Lovett	2	—	2	—
Arncliffe	G. D. G. Cameron	5	—	5	—
Bentham	T. L. Dowell	4	4	8	—
Malham	H. Wales	7	—	7	—
Ingleton	G. J. Marks	12	12	24	—
Settle	B. S. Hyslop	26	1	27	1
<b>Area No. 2.—Staincliffe.</b>					
Skipton	N. A. Macleod	23	2	25	2
Addingham	W. L. Crabtree	4	3	7	—
Barnoldswick	J. Pickard	3	—	3	4
Cowling	C. Clyne	6	1	7	—
Gargrave	H. Wales	10	—	10	—
Grassington	G. D. G. Cameron	9	—	9	—
Silsden	M. Purcell	3	—	3	—
Earby	A. McKay Niven	4	—	4	—
<b>Area No. 3.—Claro.</b>					
Green Hammerton	R. C. Davison	24	2	26	—
Boroughbridge	F. P. Rust	23	—	23	4
Acomb	J. S. Dudgeon	7	3	10	1
Great Ouseburn	J. M. Benson	15	—	15	—
Sharow	S. Hey	1	—	1	—
Ripon	P. A. Steven	29	2	31	1
Kirkby Malzeard	R. G. M. Harvey	12	—	12	—
Knaresborough	D. F. Dobson	35	1	36	2
Harrogate (part)	S. Foskett	69	7	76	1
do. (Starbeck)	S. C. Wilkinson	11	1	12	1
Ripley	S. Foskett	10	—	10	—
Bishopside	C. A. Flintoff	16	1	17	—
Birstwith	E. G. Campbell	11	1	12	—
<b>Area No. 4.—Barkston Ash.</b>					
Bishopthorpe	T. H. Barton	11	—	11	—
Sherburn	Wm. Murphy	40	—	40	2
Kippax	C. C. Hargreaves	7	—	7	—
Aberford	C. H. Sykes	61	3	64	—
Tadcaster	J. P. Scatchard	41	1	42	1
Boston Spa	R. W. Lee	44	4	48	3
Harewood, Sicklinghall	H. B. Cook	11	4	15	—
Thorner	O. D. Beetham	18	1	19	—
Wetherby	J. A. Hargreaves	25	2	27	1
<b>Area No. 5.—Skray.</b>					
Baildon	E. G. Firth	4	1	5	—
Ilkley	T. B. Hearder	10	5	15	4
Yeadon	A. J. I. Muschamp	7	1	8	1
Horsforth	D. W. E. Burridge	12	1	13	—
Otley	W. H. Galloway	52	3	55	1
<b>Area No. 6.—Worth Valley.</b>					
Keighley	F. Villy	4	—	4	1
Bingley (part)	W. A. Lochhead	11	—	11	1
Cullingworth	W. A. Lochhead	—	—	—	—
Haworth	J. E. Baird	1	1	2	1
Steeeton	C. Clyne	1	1	2	—
Wilsden	T. M. S. Findlater	—	—	—	—
<b>Area No. 7.—East Morley.</b>					
Hunsworth	J. A. Hope	—	—	—	—
Drighlington	H. D. Merrington	13	—	13	—
Calverley	N. A. A. Hughes	5	1	6	—
Farsley	T. H. Elmer	15	2	17	—
Shipley	O. D. Ballinger	18	—	18	—
Denholme	A. H. Stewart	—	1	1	—
Pudsey	E. T. Hyland	49	2	51	—
<b>Area No. 8.—Calder.</b>					
Sowerby Bridge	V. C. Meyer	17	2	19	1
Elland	A. G. Gamble	10	1	11	1
Stainland	N. C. Beaumont	7	2	9	—
Brighouse	C. M. Stallard	27	3	30	—
Shelf	J. J. Murphy	2	—	2	—
Queensbury	G. C. Sharp	8	—	8	—
Midgley	C. S. Ogilvy	6	2	8	—
Barkisland	A. J. W. Stephen	15	1	16	1
Todmorden	H. Thorp	3	3	6	—
Hebden Bridge	F. J. Dowdall	14	1	15	2
Mytholmroyd	S. T. Henderson	7	—	7	—



TABLE XXXIX.—(Continued.)

Name of Vaccination District.	Public Vaccinator.	Primary Vaccinations.			Re-vaccinations.
		Under 1 year.	1 year and upwards	Totals.	
Area No. 9.—Spen Valley.					
Liversedge	R. M. Beatty	31	—	31	—
Birstal	A. Dick	4	4	8	3
Gildersome	H. D. Merrington	—	—	—	—
Batley	H. Keighley	30	1	31	—
Heckmondwike	W. A. Mair	16	1	17	—
Mirfield	J. E. H. West	30	—	30	—
Morley	W. S. Sykes	30	1	31	4
Birkenshaw	E. M. Whitehead	12	1	13	—
Ossett	W. L. R. Wood	26	2	28	3
Cleckheaton	A. L. Mitchell	5	—	5	—
Area No. 10.—Lower Agbrigg.					
Horbury	J. N. U. Russell	24	5	29	2
Normanton	N. S. Twist	64	1	65	2
Crigglestone	K. S. MacDonald-Smith	27	2	29	—
Walton	D. Downie	4	2	6	1
Stanley	J. D. Bottomley	58	1	59	1
Emley	C. H. Smith	10	—	10	—
Crofton	T. E. Lister	22	—	22	—
Ardley	T. Stephens	10	5	15	1
Rothwell	H. Stevenson	32	—	32	—
Oulton	C. H. Seville	11	3	14	—
Area No. 11.—Osgoldcross.					
Heck	F. G. Creaser	16	—	16	—
Knottingley	J. Kehelly	80	—	80	—
Pontefract	G. Burnett	60	5	65	3
Methley	E. W. L. White	22	1	23	—
Featherstone	Wm. Steven	55	4	59	—
Castleford	J. J. W. Campbell	84	—	84	—
Brotherton	B. H. Gillbanks	53	—	53	—
Kirkstall	J. Malloch	7	—	7	—
South Elmsall	E. J. H. Sullivan	155	6	161	3
Ryhill	S. Hodgkinson	66	1	67	—
Brierley	J. L. Elliott	70	1	71	—
Great Houghton	J. W. Whitworth	9	1	10	—
Hemsworth	T. C. A. Sweetnam	55	2	57	—
Kinsley	M. B. Taylor	57	—	57	—
Ackworth	W. L. Gardner	12	6	18	1
Area No. 12.—Goole and Selby.					
Drax	F. G. Creaser	11	—	11	—
Selby	O. L. Scarborough	63	3	66	3
Snaith	F. G. Creaser	28	4	32	—
Swinefleet	W. Eardley	9	—	9	—
Goole	A. M. Erskine	28	6	34	1
Eastoft	J. C. T. Crowden	—	—	—	—
Area No. 13.—Don Valley.					
Bolton-on-Dearne	J. K. T. Mills	38	—	38	1
Mexborough	J. J. Huey	27	—	27	1
Tickhill	A. C. Lindsay	21	—	21	1
Bentley-with-Arksey	B. Lyons	38	2	40	—
Conisbrough	W. J. Maclure	220	24	244	4
Askern	J. Malloch	56	3	59	1
Adwick-le-Street	D. Malloch	45	—	45	—
Thurnscoe	F. J. Boyle	49	3	52	—
Brodsworth	J. Wylie	6	—	6	—
Armthorpe	H. F. Renton	55	—	55	—
Bawtry	W. F. Ward	37	—	37	—
Hatfield	C. D. Walker	32	1	33	—
Thorne	J. M. Taylor	43	5	48	1
Stainforth	R. M. L. Anderson	27	—	27	—
Area No. 14.—Staincross.					
Hoyland	H. R. L. Allott	31	—	31	4
Worsborough	H. A. L. Banham	55	1	56	—
Cudworth	J. L. Elliott	77	3	80	2
Darfield	J. W. Whitworth	14	—	14	—
Dodworth	J. Leishman	17	—	17	2
Darton	R. Millar	37	2	39	—
Wombwell	J. C. Pickup	34	—	34	—
Hoyland	P. Lewis	31	1	32	—
Royston	H. B. Pare	42	1	43	—
Bradfield	J. A. R. Thompson	13	—	13	—
Stannington	N. MacPhail	10	—	10	—
Loxley	T. A. H. Smith	1	—	1	—
Chapelton	H. Sands	31	—	31	—
Grenoside	J. Smail	30	—	30	—
Stocksbridge	A. E. Goldie	23	—	23	1
Tankersley	P. Lewis	—	—	—	—
Wortley	T. H. Easton	11	1	12	—
Silkstone	F. L. Whincup	7	4	11	—
Clayton West	R. N. Farrer	3	—	3	2
Thurgoland	T. H. Easton	—	—	—	—
Penistone	A. A. Masser	25	3	28	—

TABLE XXXIX.—(Continued.)

District Name of Vaccination	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 ... ..	19	1	20	—
Skelmanthorpe ... ..	D. Bell ... ..	5	1	6	2
Shepley ... ..	M. M. Dey ... ..	8	—	8	—
Holmfirth ... ..	W. D. Galloway ... ..	12	—	12	—
Scholes ... ..	E. Trotter ... ..	13	1	14	—
Honley ... ..	W. H. Smailes ... ..	10	1	11	—
Meltham ... ..	P. MacGirr ... ..	10	—	10	—
Slaithwaite ... ..	R. N. Kirk ... ..	6	4	10	—
Golcar ... ..	S. Hall ... ..	21	—	21	—
Marsden ... ..	G. R. Aspinwall ... ..	14	1	15	—
Kirkheaton ... ..	S. Prior ... ..	6	—	6	—
Springhead ... ..	J. G. Oliver ... ..	9	1	10	—
Saddleworth ... ..	J. Loftus ... ..	6	—	6	2
<i>Area No. 16—Rother Valley</i>					
Brinsworth ... ..	R. G. Selby ... ..	32	1	33	—
Thurcroft ... ..	G. S. L. Kemp ... ..	41	4	45	—
Wentworth ... ..	H. M. Mills ... ..	3	—	3	1
Wath-on-Dearne ... ..	T. Crowley ... ..	2	1	3	—
Rawmarsh ... ..	D. P. K. Jockel ... ..	26	2	28	1
Maltby ... ..	W. L. Dibb ... ..	32	1	33	1
Swinton ... ..	C. J. H. Aitken ... ..	10	—	10	2
Thrybergh ... ..	G. H. Sedgwick ... ..	51	—	51	2
Harthill, Anston ... ..	J. N. Clark ... ..	42	6	48	3
		3,936	238	4,174	107

## PUBLIC ASSISTANCE MEDICAL SERVICES.

A list of District Medical Officers will be found on pages 8—10 of this Report. It will be noted that 6 assistant district medical officers have been appointed in the Osgoldcross, Don and Rother Valley districts. To meet the needs of the people, additional surgeries have been provided by certain district medical officers at convenient centres.

The following tabular statement gives a summary of the number of services rendered during the year. The total number of visits made by the district medical officers, 145,412, shows an increase of 12,330 over last year, when the corresponding figure was 133,084. The increased number of visits is recorded chiefly in the Lower Agbrigg, Osgoldcross and Don Valley areas.

TABLE XL.  
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	23,066	11	865	314	1,179
2. Staincliffe ... ..	150,261	53,721	8	3,742	1,341	5,083
3. Claro ... ..	213,890	90,495	13	2,578	1,475	4,053
4. Barkston Ash ... ..	143,442	54,540	9	3,145	1,190	4,335
5. Skyrack ... ..	64,641	79,047	5	1,118	827	1,945
6. Worth Valley ... ..	39,443	83,876	6	1,828	1,612	3,440
7. East Morley ... ..	12,560	64,576	8	970	652	1,622
8. Calder ... ..	78,978	122,189	14	2,662	2,002	4,664
9. Spen Valley ... ..	22,177	134,845	10	3,293	2,755	6,048
10. Lower Agbrigg ... ..	41,345	92,383	14	10,318	5,840	16,158
11. Osgoldcross ... ..	88,853	159,220	16	15,606	14,658	30,264
12. Goole and Selby ... ..	76,299	45,043	4	1,982	747	2,729
13. Don Valley ... ..	137,061	182,614	20	14,155	17,532	31,687
14. Staincross ... ..	117,088	143,244	19	6,769	6,050	12,819
15. Upper Agbrigg ... ..	78,237	98,049	16	1,020	838	2,758
16. Rother Valley ... ..	61,143	112,622	13	7,438	9,190	16,628
Totals ...	1,622,497	1,539,530	186	78,389	67,023	145,412

## GENERAL HOSPITALS AND PUBLIC ASSISTANCE INSTITUTIONS

In my Annual Report for the year 1935 (page 50) I drew attention to the impending appropriation under the Public Health Committee of the sick wards at the Batley and Wakefield Public Assistance Institutions. During 1936 the respective Committees of the County Council gave further consideration to this proposal and appropriation was finally decided upon by the County Council at its meeting in January, 1937.

The Public Assistance Committee decided that the sick wards attached to the remaining institutions (apart from those proposed to be closed) will be required for future use in the care of the aged and infirm, able-bodied, etc. This decision placed the Public Health Committee in a position to initiate negotiations with representatives of voluntary hospitals serving the Administrative County. The Yorkshire and Sheffield Regional Committees of the British Hospitals



Association represent very largely the voluntary hospitals serving the Administrative County. These bodies appointed medical and lay representatives to meet representatives of the County Council as required by the Act of 1929, and the first of these statutory consultations took place in January, 1937.

At this Conference a free and friendly interchange of views was made and it was pointed out by the Chairman of the County Committee that the policy of the County Council in the matter of provision of general hospital accommodation was one of co-operation and not competition with the voluntary hospitals. As the result of this preliminary meeting it was decided that the first step in developing a joint programme would be for the voluntary hospital authorities to indicate as far as was in their power so to do, the extent to which additional accommodation was required by voluntary hospitals, the amount of such accommodation which would be likely to be supplied from voluntary funds, workmen's compensation contributory schemes, endowments, etc., and the balance to be met by the County Council. At the time of writing active steps are being taken to secure the foregoing information and it is hoped to hold further consultations at an early date.

**VISITS TO HOSPITALS.** Arising out of a tour of hospitals made by a special Sub-Committee of the County Council in England, Scotland, France, Germany, Denmark, and Sweden, a special report relating to hospital construction, equipment and administration, was prepared and published.

Certain important recommendations relating to future policy made by the special Sub-Committee and included in the special report are as follows:—

- (1) . . . . . the deputation made an attempt whenever possible to find out the method adopted by various authorities when ascertaining the number of hospital beds required for their respective areas, and it appeared from the replies received generally that requirements were based upon a more or less arbitrary standard of beds per thousand of population.
- (2) As regards the departments which should be included in any future County Hospitals the deputation was impressed by the fact that in the majority of the larger institutions, *e.g.*, those over 600 beds approximately, the practice appears to be to include not only general medical and general surgical beds, but Out-patients Departments and special departments, *e.g.*, Throat, Nose and Ear Department, Obstetrical and Gynaecological Department, X-Ray Department, Electro-therapeutic and Massage Department, Pathological, Bio-chemical, Bacteriological and Dietetic Sections, etc., all of which are essential to a modern hospital unit. The deputation therefore recommends that in the event of the County Council proceeding with the construction of a new hospital, as for example in South Yorkshire, where essential special departments are not provided in other hospitals within a convenient distance, such specialised departments to the hospital should be provided.
- (3) The deputation enquired into the optimum number of beds to form an efficient and economic unit of a hospital. Opinions on this matter differed but the more informed persons who were questioned suggested that 1,200 beds was the margin beyond which real efficiency and economy was likely to decline. They said however that much depended upon the character of the district to be served, and that in a wide sparsely populated area two units of 600 might be of greater advantage to the efficient treatment of patients on account of the reduced distance in travelling. They added that 1,200 beds should not be regarded as a confirmed figure, and that a greater or less number might not materially affect efficient administration depending upon the type of hospital constructed and the work undertaken.
- (4) In regard to co-ordination with County Boroughs and Voluntary Hospitals, the deputation was satisfied that wherever possible effective co-ordination with public or voluntary hospitals should be the policy of the County Council.
- (5) The deputation visited a number of hospital medical schools and was impressed with the value of the work undertaken. It considers that in the future there might be definite advantages in developing the medical school system in connection with selected County Hospitals, and whilst at this stage it is not proposed to make any recommendation to that effect, it is considered that the Universities of Leeds and Sheffield should be informed of such proposals as may ultimately be made for the provision of new County Hospitals, in order that at an appropriate time the question of development (with its accompanying financial obligations) may be discussed with them.
- (6) The deputation had the opportunity of comparing different types of hospitals. It saw large hospitals of one, two or three storeys on the pavilion system and others of the same number of beds approximately on the vertical system. It was much impressed by the greater convenience to patients and staff of the vertical system of construction, and it appeared likely that greater efficiency and economy would result from this type of building. Thus by adequate provision of lifts, patients can be moved rapidly from ward to appropriate departments or operating theatres, nurses can be drafted rapidly from one ward or department to another and laundry and food can be conveyed much more quickly in the vertical building than in the institution on the pavilion system.
- (7) There seems to be no consistency of opinion as to the most suitable location for hospital kitchens. In some hospitals, they are provided in the basement or sub-basement, whilst in others, they are provided on the top storey, the reason given for the latter arrangement being that noise and smell within the hospital wards is reduced, if not completely eliminated. The question therefore, as to the location of the kitchens in the new hospitals is one for careful consideration, according to the type of hospital planned.
- (8) Another feature of hospital planning with which the deputation was met on the Continent was the fact (in one hospital at least) that the ground floor is not used for the accommodation of patients, this floor being utilised as residential quarters for the staff, offices and reception rooms. It would seem that such a scheme is worthy of consideration.



(9) The deputation had the opportunity of inspecting the planning and equipment of operating theatres in most of the hospitals visited. It saw single theatres serving one or more wards, and batteries of theatres communicating with each other serving the greater part of the surgical departments of hospitals. It was very much impressed by the latter arrangement in the planning of operating theatres as it appeared that greater efficiency and economy resulted from a certain reduction in staff, centralisation of equipment and instruments and concentration of sterilising apparatus at one central point.

(10) The deputation was also very much impressed with the fact that in dealing with hospital planning and equipment, efficiency and comfort were everywhere put before the question of cost, and evidence was usually available of the expenditure which had been incurred in providing the most up-to-date apparatus and equipment, not only in the interest of patients actually receiving treatment, but with a view to providing facilities for research, and for the training of students."

**DIETARIES.** The Public Assistance Committee had under consideration during the year the question of re-modelling the dietaries in the County Public Assistance Institutions and making them uniform in accordance with modern views on nutrition. Difficulties arose because dietetic habits vary greatly in different parts of the Administrative Riding.

Up to the present, no action has been taken in this matter but it will be re-considered before the commencement of the next financial year.

**DECORATION SCHEMES FOR SICK WARDS.** Consideration has been given to the question of finding the most suitable colour scheme for institution premises from a psychological point of view. It must be realised of course that a colour which would be advantageous to the recovery of the patient and to the general brightness of wards might be expensive on the grounds that it requires more frequent renewal. This is a matter which is receiving further attention with a view to the preparation of a suitable colour scheme for general application.

**KEIGHLEY COUNTY HOSPITAL. RE-MODELLING OF MATERNITY UNIT.** As a result of re-modelling of the wards, and instructions given as to the admission of patients, the percentage occupation of beds at Keighley County Hospital has been reduced to a figure considered desirable by Medical Officers of the Ministry of Health.

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

TABLE XLI.

	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	739	387	623	377	816	862	134	59	160	170	93	59	97	120	208
Beds occupied 31. 12. 30.	407	189	436	256	648	702	82	22	138	155	23	8	45	51	171

TABLE XLII.

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

Type of Case.	Name of Institution.																			Total	
	Settle	Skipton	Knareborough	Ripon	Tadcaster	Wetherby	Otley	Keighley	Clayton	Todmorden	Staincliffe Batley	Wakefield	Pontefract	Hemsworth	Goole	Selby	Penistone	Grenoside	Deanhouse		
Sick (Acute and Chronic) ...	41	272	127	28	25	23	155	435	287	151	877	771	448	159	217	73	41	70	223	4420	
Infirm ...	8	91	170	40	33	22	93	118	259	78	169	203	281	42	69	63	63	27	22	1851	
Mental ...	55	4	7	3	13	—	—	137	60	15	84	33	33	7	12	6	1	30	40	540	
Maternity ...	2	2	9	5	3	—	4	272	41	2	120	32	14	4	4	39	—	2	—	555	
Other Cases ...	2	6	—	19	14	13	34	20	25	9	69	7	45	21	20	4	2	14	2	325	
Totals ...	108	374	313	92	88	58	286	982	672	255	1319	1046	821	233	322	185	107	143	287	7691	
Number of Deaths.																					
Sick (Acute and Chronic) ...	13	49	78	7	10	8	68	75	81	51	216	194	134	35	47	12	12	22	64	1176	
Infirm ...	2	4	4	8	—	—	—	35	37	—	31	56	—	10	12	8	7	5	10	229	
Mental ...	—	—	3	—	12	—	—	21	4	—	—	—	1	—	—	—	—	—	1	42	
Maternity ...	—	1	—	—	—	—	—	12	10	—	8	3	—	—	1	1	—	—	—	36	
Other Cases ...	1	—	—	—	—	—	3	1	1	2	4	1	7	2	3	1	1	1	—	28	
Totals ...	16	54	85	15	22	8	71	144	133	53	259	254	142	47	63	22	20	28	75	1511	



## PART II.

# THE WORK OF THE COUNTY BACTERIOLOGICAL LABORATORY.

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

### VISIT TO GERMAN LABORATORIES.

The following is a summary of a report by Dr. P. L. Sutherland, County Bacteriologist and Pathologist, on his visit to Germany in August, 1936. His object was to study the methods employed in Germany for the routine examination of specimens received in Public Health Laboratories and compare them with the methods employed in similar institutions in England:—

**DIPHTHERIA.** As in England a large proportion of the daily routine specimens is for the detection of the diphtheria bacillus. The Berlin method, however, renders the work much less laborious and much larger numbers can be examined with ease. All specimens are plated on Clauberg's medium. The plates are incubated overnight, and next day by naked eye examination alone a diagnosis can be made, almost at a glance. This eliminates the preparation and microscopic examination of films from each culture which is usual in England and is laborious and time consuming. Plating on special medium (McLeod's) has been practised in the County Laboratory but rather as a supplement and not as a substitute for the older method. It is claimed that with Clauberg's medium in very few cases is any further examination required and that in some of the Berlin laboratories 1,500-2,000 swabs have been dealt with in one day without unduly disorganising the other daily work.

Clauberg's medium has been prepared, and experiments made in the County Laboratory so far have shown that positive results can be obtained by its use when serum slopes are negative or only found positive by laborious search, and this is especially the case with swabs from convalescents. The introduction of this medium should prove of great value in time of epidemic when the large number of swabs received tends to interfere with the other work of the laboratory.

**VENEREAL DISEASES.** In both Berlin and Hamburg it is the usual practice to supplement the result of the Wassermann test by two or more flocculation tests. In Berlin the two tests in routine use are the Meinicke-Klärungsreaktion M.K.R. II, and the Ballungs test; in Hamburg, in addition, a form of Wassermann test is used in which the usual artificial antigen is replaced by an emulsion of spirochaetes (Pallida Reaction of Gaëtgens). A trial of these tests has shown that they are of great assistance not only in respect of treated cases but also for the diagnosis of congenital cases in which the Wassermann Reaction is often doubtful or negative.

**TYPHOID, PARATYPHOID AND DYSENTERY.** There is very little difference in the methods employed in Germany and England for the diagnosis of typhoid, paratyphoid and dysentery, except that a much greater variety of medium is used. In both Hamburg and Berlin the Sonne type of dysentery has recently tended to become more prevalent. This increasing prevalence has also been noticed in the West Riding and in other parts of England during the past few years. In Germany, as in England, outbreaks of Sonne dysentery tend to occur in the form of small household epidemics. In every outbreak examinations are made of all members of the affected household.

A large number of specimens of faeces is examined for the ova of parasitic worms and in a comparatively large number the ova of one or other of the common forms of worms is found. This type of examination is very seldom requested in the West Riding.

**MILK EXAMINATIONS.** These examinations are made exclusively in the Hygienic Institute in the Chief Public Health Office in Berlin. Both chemical and bacteriological examinations are made and the chemical and bacteriological laboratories are situate in adjoining rooms.

The standard for special milk (Vorzugsmilch) is as follows:—

Fat content	at least 3%
Bacterial content	... Not over 150,000 per c.c.
B. coli	... Not more than 30 per c.c.

The examination is made monthly. The animals are subjected to a monthly veterinary inspection and strict regulations are in force as to housing and feeding. All persons employed in the production of Vorzugsmilch are medically examined before commencing work and at yearly intervals afterwards.

**STAFF.** In Germany the occupation of technical laboratory assistant corresponds to that of laboratory assistant in England and has largely become a profession for women. These women are trained in special institutions, certified by the state, in such subjects as chemistry and physics, anatomy and physiology, biochemistry, bacteriology, serology and pathology, and an examination takes place at the end of the course. The state certificate is not granted, however, until the candidate has completed a six months course in laboratory work in a prescribed laboratory. Students are only admitted to these courses of training provided they have passed to the second highest class in a secondary school and have reached the age of 18½ years. The younger assistants are moved from one section of the laboratory to another as required, but the older and more experienced assistants are usually permanently in charge of a very limited section of the work in which they have become expert. The work of these assistants, of course, is supervised by a fully qualified medical bacteriologist.



The employment of women who have been specially trained is in striking contrast with conditions in England where the assistants are for the most part men. Usually, in England, a youth enters a laboratory on leaving school and his subsequent training depends on the scope of the work of the laboratory in which he is employed and the degree of his general education. Certificates in bacteriology, biochemistry and pathology are granted by a Joint Committee of the Laboratory Assistants' Association and the Pathological Society to candidates who have served 5 years in any bacteriological or pathological laboratory and have passed the prescribed examinations.

**MEDICO-LEGAL WORK.** The medico-legal work for the whole of greater Berlin is performed in the Medico-Legal Institute of the University, where the equipment is modern and comprehensive. The work comprises the performing of post-mortem examinations, identification of blood and other stains, blood group tests in paternity cases, estimation of alcohol content in blood in "drunk in charge" cases and chemical examinations such as blood for carbon monoxide.

Numerous post-mortem examinations are made each morning and in every case the organs are seen by the Chief Assistant and usually by the Director also. In cases where legal proceedings are pending the examination is made by two pathologists in the presence of a solicitor appointed for the purpose.

As blood group tests in paternity cases are a compulsory preliminary to legal proceedings, a large number are made weekly. Specimens of the blood of the persons concerned (*i.e.*, the mother, child and alleged father) are grouped and no case is allowed to go to Court unless the blood group of the child is shown to be consistent with that of the alleged father. By these tests the Courts in Germany have been relieved from hearing a considerable number of such cases.

Recent legislation in Germany has made submission to the test for alcohol in blood compulsory in all cases of alleged drunkenness in charge of a motor car. Arrangements are being made so that shortly these tests can be carried out in the County Laboratory if required by the West Riding Police.

The visit to Hamburg was brief—a week-end on the way to Berlin—but a visit was paid to the Institute of Hygiene in Juniusstrasse where it was possible to realise the enormous amount of work done; 332,000 specimens are examined yearly of which 183,000 are bacteriological. Most of the time was spent in the Westend Institute, Berlin, where 143,707 specimens for the diagnosis of infectious disease were examined in 1935.

The general impression gained from the visit is that in Germany a much greater number of examinations per head of population is made than in England and that more use is made of women laboratory assistants. With regard to equipment, the German laboratories showed no superiority with the exception of the Medico-Legal Institute at the Berlin University.

As a result of Dr. Sutherland's visit much valuable information was gained as to technical details, some of which, as will have been observed, have since been put into operation in the County Laboratory.

#### COUNTY BACTERIOLOGICAL LABORATORY.

The total number of specimens examined in the County Laboratory during the year 1936, was 58,349.

This number includes 6,012 specimens received from the County Boroughs of Barnsley, Dewsbury, Doncaster, Halifax, Middlesbrough and Wakefield, the Ministry of Health, and from the Dewsbury and Heckmondwike Joint Waterworks Board, and Barnsley Beckett Hospital.

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

TABLE XLIII.

Month	Serum Reaction for Enteric Fever.	Sputum for Tubercle Bacilli	Suspected Diphtheria	Venereal Disease	Miscel- laneous	Total
January ...	65	521	2,701	512	1,296	5,095
February ...	9	530	2,152	582	1,329	4,602
March ...	45	637	2,685	836	1,394	5,597
April ...	134	548	2,081	596	1,187	4,546
May ...	61	506	1,629	621	1,415	4,322
June ...	45	484	1,770	596	1,481	4,376
July ...	42	586	1,810	658	1,754	4,850
August ...	62	397	1,397	577	1,103	3,536
September ...	53	420	1,606	656	1,280	4,105
October ...	68	544	2,506	739	1,534	5,451
November ...	70	470	2,018	1,506	1,804	5,868
December ...	22	483	1,878	1,836	1,782	6,001
Total ...	676	6,216	24,383	9,715	17,359	58,349



The next table gives the figures for 1936 in comparison with those for the previous six years:—

TABLE XLIV.

Year.	Serum Reaction for Enteric Fever	Sputum for Tubercle Bacilli	Suspected Diphtheria	Venereal Disease	Miscel- laneous	Total
1930	1419	5722	13786	4028	5239	30194
1931	1080	5862	11323	3828	8319	30412
1932	1545	5983	14750	4132	11128	37538
1933	846	6423	15383	4532	10145	37329
1934	522	6399	25136	4964	11472	48493
1935	510	6,165	29494	6459	13341	55909
1936	676	6216	24383	9715	17359	58349

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

TABLE XLV.

Type of Specimen.	Positive	Negative	Total
<b>ENTERIC FEVER.</b>			
<i>Widal reaction (blood).</i>			
B. Typhosus ...	36	180	216
B. Paratyphosus A ...	—	216	216
B. Paratyphosus B ...	12	204	216
<i>Urines.</i>			
B. Typhosus ...	9	165	174
B. Paratyphosus A ...	—	174	174
B. Paratyphosus B ...	3	171	174
<i>Fæces.</i>			
B. Typhosus ...	20	192	212
B. Paratyphosus A ...	—	212	212
B. Paratyphosus B ...	11	201	212
UNDULANT FEVER.	3	25	28
FOOD POISONING ...	1	10	11
DYSENTERY ...	24	76	100
<b>HUMAN TUBERCULOSIS</b>			
<i>Sputa.</i>			
First examinations ...	1,183	4,076	5,259
Second examinations ...	8	623	631
Third examinations (inoculations and cultures) ...	12	314	326
<i>Urines</i>			
Urine (inoculated) ...	9	256	265
<b>BOVINE TUBERCULOSIS.</b>			
C.V.O. milks from single cows ...	52	932	984
C.V.O. group samples ...	19	407	426
Mixed milks from various sources ...	150	3,264	3,414
Milks from single cows received from County Boroughs ...	4	70	74
MILKS FOR BACTERIAL CONTENT.	—	—	3,370
WATERS FOR BACTERIOLOGICAL EXAMINATION	—	—	520
<b>DIPHTHERIA.</b>			
Swabs for diagnosis ...	1,029	3,777	4,806
Swabs from convalescents ...	2,366	14,162	16,528
Swabs from "contacts" ...	196	2,853	3,049
<b>VIRULENCE TESTS.</b>			
Cases for diagnosis ...	20	18	38
Convalescents ...	120	71	191
"Contacts" ...	28	45	73
CEREBRO-SPINAL FLUIDS AND SWABS	22	141	163
<b>ANTHRAX.</b>			
Human ...	4	10	14
Bovine ...	—	—	—
Wools ...	4	35	39
BIO-CHEMICAL EXAMINATIONS	—	—	805
ZONDEK ASCHHEIM TESTS.	17	24	41

TABLE XLV.—(Continued.)

Type of Specimen.	Positive	Negative	Total
RINGWORM ... ..	73	119	192
OPHTHALMIA NEONATORUM ... ..	4	12	16
CYTOLOGICAL SPECIMENS ... ..	—	—	392
HISTOLOGICAL SPECIMENS (CLINICAL) ... ..	—	—	118
VACCINES ... ..	—	—	31
POST-MORTEM EXAMINATIONS ... ..	—	—	99
MEDICO-LEGAL HISTOLOGY EXAMINATIONS ... ..	—	—	278
EXAMINATIONS FOR THE POLICE ... ..	—	—	37
VENEREAL DISEASE.			
Wassermann reaction ... ..	730	4,874	5,604
Meinicke Reaction M.K.R. II ... ..	212	697	909
Ballungs Reaction ... ..	265	644	909
Pallida Reaction ... ..	53	157	210
Mastic Reaction ... ..	13	20	33
Lange Gold Sol Test ... ..	3	58	61
Gonorrhœa Complement Fixation ... ..	229	794	1,023
Gonococci ... ..	274	712	986
Spirochaetes ... ..	—	—	—
SILICOSIS ... ..	—	—	15
OTHER SPECIMENS ... ..	—	—	3,597

## 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 L on page 66.

TABLE XLVI.

Authority	No. of Specimens	Cost to Authority
Barnsley C.B. ... ..	195	£ 94 s. 15 d.
Dewsbury C.B. ... ..	226	86 11 0
Doncaster C.B. ... ..	7	1 11 6
Halifax C.B. ... ..	10	2 12 6
Middlesbrough C.B. ... ..	1	0 10 0
Wakefield C.B. ... ..	1,942	313 18 0
Ministry of Health ... ..	65	14 12 6
Dewsbury and Heckmondwike		
Joint Waterworks Board ... ..	6	3 0 0
Barnsley Beckett Hospital ... ..	2	0 10 0
	2,454	518 0 6

## ENTERIC FEVER.

**Examination for Widal reaction.**—During the year, 648 specimens of blood were tested for the Widal reaction for the diagnosis of typhoid fever and paratyphoid fever. In each case the blood was tested against *B. typhosus*, *B. paratyphosus* A, and *B. paratyphosus* B. 36 specimens gave a positive agglutination with *B. typhosus*, and 12 with *B. paratyphosus* B.

It was mentioned in the last report that there had been an improvement in the quantity of blood sent to the laboratory for this test, due to the more general use by practitioners of the Behring venule. This improvement has been maintained during 1936.

It is still possible therefore, in the majority of cases, to make the test macroscopically in 4 dilutions which is more satisfactory than the microscopic method in one dilution. By the latter method it is often impossible to distinguish, owing to cross agglutination, between the typhoid and paratyphoid fevers.

**Examination for *B. typhosus* and *B. paratyphosus* A. and B.**—The number of specimens examined for organisms of the typhoid group was 1,158. These consisted chiefly of samples of urine and faeces from convalescent cases and from suspected "carriers." Of these, 20 specimens of faeces and 9 of urine were found to contain *B. typhosus*, and 11 of faeces and 3 of urines contained *B. paratyphosus* B.

## UNDULANT FEVER.

28 specimens of blood were examined for undulant fever and 3 specimens proved positive.



## DYSENTERY.

Ninety-eight specimens of faeces and two of blood were examined for *B. Dysenteriae* and 24 proved positive. Twenty-two specimens of faeces showed the presence of *B. Sonne* and two specimens of blood were examined for agglutination and gave a positive result with the Flexner bacillus in each case.

Thirteen of the Sonne cases were received in connection with an outbreak of dysentery at a large public school in Yorkshire, while four were from Wakefield City and one each from Stanley, Mirfield, Barnoldswick, Brighouse and Stainforth (Thorne).

The two Flexner cases were from Crosshills and Hebden Bridge respectively.

## FOOD POISONING.

Eleven specimens were received during the year for examination for food poisoning organisms. These comprised five specimens of faeces, three of urine, a pork-pie, an apple, and a mixture of stewed apples and strawberries and one specimen of faeces proved positive (*B. Aertrycke*). The positive case was an isolated one from Holmfirth.

## HUMAN TUBERCULOSIS.

**Sputum.**—The specimens examined microscopically for the tubercle bacillus numbered 5,259 and in 1,183 or 22.5 per cent. the bacillus was found.

631 specimens which had been previously examined twice microscopically with negative result were re-examined by the sedimentation method, and 8, or 1.2 per cent. were found to be positive.

326 specimens which had been previously examined three times microscopically and once by sedimentation with negative result, were again re-examined by the sedimentation method, by culture and biologically. Of these, 12 or 3.6 per cent. were found by one or other, but chiefly by the biological method (inoculation test), to be positive.

By the sedimentation and biological methods 2.0 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 898 specimens of urine which were received for examination for various reasons, 265 were examined for tubercle bacilli to exclude the presence of tuberculosis of the bladder or kidney. Of these, 9 were found to contain *B. tuberculosis*.

**Other specimens.**—The remaining 151 specimens of human origin examined for the tubercle bacillus were pus 45, pleural fluids 41, faeces 9, cerebro-spinal fluids 52, fluid from knee 1, fluid from neck 1, and stomach washings 2. In 6 specimens of pus, 2 of pleural fluid and 5 of cerebro-spinal fluid, tubercle bacilli were found.

## BOVINE TUBERCULOSIS.

**Milk.—Veterinary Samples.**—1,410 specimens (984 from individual cows and 426 group samples) were examined by the biological test. Of these, 52 from single cows or 5.3 per cent., and 19 group samples or 4.4 per cent. were found to contain the tubercle bacillus.

In addition, 200 of the above samples of milk were examined culturally for tubercle bacilli, and 21, or 10.5 per cent. proved positive. Eleven of these cultural positive results were confirmed by the biological test.

**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 XLVII.  
Mixed Milks Examined for *B. Tuberculosis*.

Class of Milk	West Riding Administrative Area						Other Authorities			Total		
	Milk supplied to Schools.			Other Mixed Milks								
	No. Examined	Positive	% Positive	No. Examined	Positive	% Positive	No. Examined	Positive	% Positive	No. Examined	Positive	% Positive
Certified, Grade "A" (T.T.) and Tuberculin Tested ...	—	—	—	96	6	6.2	3	—	—	99	6	6.0
Grade "A" and Accredited ...	—	—	—	1114	33	2.9	31	2	6.4	1145	35	3.0
Pasteurised ...	91	3	3.3	60	6	10.0	17	—	—	168	9	5.3
Ordinary ...	216	12	5.5	1565	70	4.4	221	18	8.1	2002	100	5.0
	307	15	4.8	2835	115	4.0	272	20	7.3	3414	150	4.3



74 samples of milk, taken from single cows, were received from various County Boroughs with positive results in 4 cases.

It was not possible during 1936 to carry out the biological test (animal inoculation) on 452 samples of mixed milk owing to lack of room in the animal house.

The total number of samples examined was 3,414 of which 150 or 4·3% were found to be tuberculous. It will be observed, from the table above, that a designated milk is not necessarily free from tubercle bacilli.

Of the 15 positive school milk samples, 6 also failed to fulfil the requirements of the standard set up as regards bacterial content.

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, 42 cows were slaughtered during the year, 11 being found and slaughtered during routine inspection between the time the sample was taken and the result of the biological test being known. One of these animals was not clinically tuberculous and was slaughtered only after a further biological test of its milk. As no lesions were visible on post-mortem examination, biological tests of the udder substance and milk from the udder were made with positive results. Two additional cows slaughtered in Wakefield abattoir were found to be suffering from tuberculosis whilst the results of the biological tests were pending. In 64 cases the offending animal could not be found.

In addition, 8 cases were referred to the Barnsley Medical Officer of Health, 1 to Bradford, 2 to Brighouse, 9 to Dewsbury, 5 to Keighley, 1 to Leeds, 4 to Wakefield, 1 to York and 4 to the East Riding and 1 to the Lancashire County Medical Officers of Health respectively.

#### EXAMINATION OF MILK FOR BACTERIAL CONTENT.

3,370 specimens of milk were examined for bacterial content, and of these, 794, or 23·5 per cent. were unsatisfactory.

These samples include the milk supplied to schools, designated milk, and milk sent by other Authorities.

The following table gives the details of examinations made:—

TABLE XLVIII.  
Mixed Milks Examined for Bacterial Content.

Designation	West Riding Administrative Area.						Other Authorities			Total		
	Supplied to Schools			Other								
	Total	Unsatisfactory		Total	Unsatisfactory		Total	Unsatisfactory		Total	Unsatisfactory	
		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage
Certified, Grade "A" (T.T.), and Tuberculin Tested ...	—	—	—	105	19	18·1	3	1	33·3	108	20	18·5
Grade "A" and Accredited ...	1	—	—	1277	146	11·4	29	5	17·2	1307	151	11·5
Pasteurised ...	108	24	22·2	68	10	14·7	8	—	—	184	34	18·4
Ordinary ...	267	83	31·1	1449	487	33·6	55	19	34·5	1771	589	33·2
	376	107	28·4	2899	662	22·8	95	25	26·3	3370	794	23·5

#### WATER.

520 specimens of water were examined, of which 192 were pure, 237 polluted and 58 of doubtful purity. The remaining 33 were samples of swimming-bath waters, of which 19 proved satisfactory and 14 unsatisfactory.

As was the case last year there has again been a large number of waters found unsatisfactory or doubtful. The Ministry of Health's recommendations as to method of examination and standard were still applied and this, together with the fact that a majority of the waters were from springs or wells from rural areas, is again the reason for the large number found unsatisfactory.

#### DIPHTHERIA.

During the year, 24,383 swabs were examined for the diphtheria bacillus.

**Swabs for Diagnosis.**—The number of swabs submitted by practitioners for diagnosis was 4,806 of which 1,029 or 21·4 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 16,528, and of these, 2,366 or 14·3 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 3,049 of which 196, or 6.4 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 302. This test is carried out when doubtful diphtheria-like organisms are found in swabs from suspected cases and when the diphtheria bacillus persists for an unduly long period of time in the throats and nasal passages of convalescents.

In the case of "contact" swabs giving a positive routine result, the organism is isolated if possible and tested for virulence. The results are given in the following table.

TABLE XLIX.  
Virulence Tests.

	Positive	Negative	Total
Cases for diagnosis ... ..	20	18	38
"Convalescents" ... ..	120	71	191
"Contacts" and "Carriers" ...	28	45	73
	168	134	302

The above strains were typed and classified as follows:—

Gravis ... ..	143
Mitis ... ..	22
Intermediate ... ..	3

As was the case last year a large majority belong to the "gravis" type of *B. Diphtheriæ*.

#### VENEREAL DISEASES.

The number of pathological examinations performed under the Public Health (Venereal Diseases) Regulations, 1916, was 9,715. Of these, 3,558 were made on behalf of the County Boroughs of Barnsley, Dewsbury, Doncaster, Halifax and Wakefield.

TABLE L.  
Nature of Test.

District	Specimens examined for								Total	Cost to Authority
	Wasser- man Reaction	Meinicke Reaction M.K.R. II.	Ballungs Reaction	Pallida Reaction	Mastic Reaction	Lange Gold Sol Test	Gonorr- hoea Comple- ment	Gono- cocci		
West Riding	3595	593	593	129	29	47	584	587	6157	£ s. d. —
Barnsley C.B.	1	—	—	—	—	—	—	—	1	7 0
Dewsbury C.B.	282	44	44	12	—	6	—	256	644	120 0 0
Doncaster C.B.	380	53	53	13	—	—	280	106	885	249 11 0
Halifax C.B.	875	153	153	36	3	1	19	8	1248	314 13 0
Wakefield C.B.	471	66	66	20	1	7	120	29	780	211 9 6
	5604	909	909	210	33	61	1003	986	9715	896 0 6

#### CEREBRO-SPINAL FEVER.

110 specimens of cerebro-spinal fluid were examined for the presence of meningococci. In 6 specimens of fluid the meningococcus was found which confirmed the diagnosis of cerebro-spinal fever, 6 showed the presence of pneumococci (pneumococcal meningitis) and 5 were proved, by culture, to be cases of tuberculous meningitis.

52 of the fluids which were negative as regards meningococci were inoculated to exclude tuberculosis, and in 5 the tubercle bacillus was found which proved that the disease was tuberculous meningitis. In 88 specimens the result was negative.

In addition, 53 swabs from persons who had been in contact with cases of cerebro-spinal fever were examined with negative results.

Only 1 of the 6 meningococcus positives could be typed and was proved to belong to Group II (Sporadic type). The remaining 5 did not grow on culture.



## HUMAN ANTHRAX.

14 specimens were received during the year for examination for *B. Anthracis*. In 4 cases the result was positive, particulars of which are as follows:—

- Female; age 31; Mirfield; wool worker; pustule on face.
- Male; age 36; Earlsheaton; wool worker; swab from pustule.
- Male; age 23; Dewsbury; pustule on neck.
- Male; age 17; Dewsbury.

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

36 samples of wool and 3 small household brushes were examined for the presence of *B. Anthracis* with positive result in the case of 3 samples of wool and one of the household brushes.

2 of the positive samples of wool were shoddy dust in which a man employed at Liversedge had worked; the other positive was a sample of East Indian Vicanere wool before washing received in connection with a case of anthrax at Staincliffe, Batley.

The small household brush had been used by a Goole woman who had contracted the disease, and *B. Anthracis* was isolated from the bristles of the brush. Two brushes of a similar make and type were subsequently examined with negative results.

## RINGWORM.

The number of specimens of hairs and scales examined was 192, and 73 or 38.0 per cent. gave a positive result.

## OPHTHALMIA NEONATORUM.

16 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.

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

## SILICOSIS.

Material from 15 post-mortem examinations was examined for suspected cases of silicosis. The lungs were examined by the naked eye, microscopically and chemically, and were mainly from men employed as masons or quarrymen. In addition to silicosis and tuberculosis being found to be the cause of death, various other contributing causes were found, including 5 cases of carcinoma. In one case silicosis was found in the lungs of a man who had committed suicide by hanging. Chemical examination showed that the ash of the lung contained silica to the extent of 0.44, 0.73, 0.398, 1.002, 0.28, 2.16, 4.22, 0.976, 0.049, 0.31, 0.20, 0.016, 0.236, 1.98, and 0.54 respectively.

## BIO-CHEMICAL EXAMINATIONS.

The number of bio-chemical examinations during 1936 was 805, a considerable increase over 1935. This increase is due to the appointment of Dr. D. W. Auchinachie as bio-chemist since the beginning of June, and from the date of his arrival the scope of this type of examination has materially extended.

The examinations comprised:—blood sugar estimations 146; blood urea estimations 120; urines for urea 49; faeces for occult blood 30; fractional test meals 18; urines for sugar 28; cerebro-spinal fluids for chloride 4; blood calcium 4; blood Van den Bergh 2; renal calculus 2; water for lead 2; carbolised saline for percentage of carbolic acid 1, faeces for lead 1; urinary diastase 1; Rideal-Walker test for coefficient of disinfectants 2; blood phosphatase 4; sugar tolerance tests 9; pasteurised milk for sourness 3; blood for carbon monoxide 1; urine for arsenic 3; urine for lead 5; swimming-baths waters for free chlorine 24; an apple for arsenic 1; milks for total solids 2; pasteurised milks for efficiency of pasteurisation (phosphatase test) 126; urines for creatin 2; icterus index 1; vomit for disinfectants 3; waters for p.H. value 6; cerebro-spinal fluids for cell count and globulin estimation 11, and blood for uric acid 1. The foregoing specimens were examined as a matter of routine but in addition 176 examinations (of blood for calcium, of blood for phosphorus, of blood for phosphatase and of blood for cholesterol) were made in connection with a special ante-natal investigation for the Ministry of Health, and 17 examinations in connection with an investigation of patients suffering from Paget's disease (of blood for phosphorus, blood for phosphatase and blood for calcium in each case) also for the Ministry of Health. Both these special investigations were proceeding at the year-end.

23 of the pasteurised milks mentioned above failed to pass the phosphatase test and of these 5 failed also to pass the bacteriological test and 4 showed the presence of tubercle bacilli on animal inoculation.

## VACCINES.

31 autogenous vaccines were prepared from the following materials:—9 urines, 2 sputa, 1 faeces, 14 specimens of pus, 4 swabs for organisms and 1 hairs from beard.

## ZONDEK ASCHEIM TESTS.

41 specimens of urine were received during the year for the Zondek Ascheim test; 17 of these proved positive.



## POST-MORTEM EXAMINATIONS AND INQUESTS.

During the year 99 examinations were made by Dr. Sutherland at the request of West Riding Coroners and evidence was given at 89 inquests. Evidence was also given at Leeds Assizes (8 cases), at the Bradford, Bingley, Harrogate, Pontefract, Goole, Rotherham and Wakefield Magistrates' Courts, and at Leeds Quarter Sessions.

Details of the cases examined were as follows:—

TABLE LI.

No.	Age	Sex.		No.	Age.	Sex.	
1	67	M.	Coronary thrombosis, carcinoma, silicosis and tuberculosis.	51		M.	Tuberculosis.
2	15 weeks	M.	Enteritis.	52	50	F.	Drowning. Suicide.
3	54	M.	Tuberculosis of pericardium and peritoneum and carcinoma of stomach.	53	5 months	F.	Asphyxia.
4	58	M.	Rupture of heart and silicosis.	54	70	M.	Coronary artery sclerosis and myocarditis.
5	63	M.	Carcinoma of lung.	55	68	F.	Food poisoning (B. Aertrycke).
6	43	M.	Chronic valvular disease of heart.	56	42	F.	Strangulation by ligature. Murder.
7	32	M.	Pneumonia.	57	11	F.	Diphtheria.
8	69	M.	Acute bronchitis and silicosis.	58	3	M.	Septic tonsillitis and bronchitis.
9	40	M.	Myocarditis.	59	40	M.	Fracture of base of skull and cerebral contusion. Manslaughter.
10	11 weeks	M.	Septic tonsillitis and broncho-pneumonia.	60		M.	Carcinoma.
11	37	M.	Fracture of skull. Motor accident.	61	45	M.	Fracture of cervical vertebrae. Manslaughter.
12	4 months	F.	Bronchitis.	62	37	M.	Luminal poisoning.
13	52	M.	Miliary tuberculosis.	63	3 months	F.	Asphyxia.
14	33	M.	Ethyl chloride anaesthesia.	64	9	M.	Fracture of skull, laceration of brain and hæmorrhage due to being knocked from cycle by bus.
15	New born	M.	Inattention at birth.	65	53	M.	Gun-shot wound.
16	54	M.	Carcinoma of oesophagus.	66	New born	F.	Still-born.
17	58	F.	Intestinal obstruction.	67	16	F.	Strangulation. Murder.
18	12	F.	Septicæmia secondary to septic sores on toes.	68	43	M.	Atheroma of coronary arteries and myocarditis.
19	1½	M.	Encephalitis.	69	49	M.	Lobar pneumonia.
20	3 weeks	M.	Congenital heart disease.	70	28	M.	Shock from anaesthetic and operation.
21	3	M.	Enteritis.	71	1 day	M.	Prematurity.
22	32	F.	Septicæmia following abortion.	72	57	M.	Atheroma of coronary arteries.
23	34	F.	Cerebral hæmorrhage.	73	49	M.	Septic pneumonia.
24	62	M.	Carcinoma of stomach. Silicosis.	74	52	F.	Chlorodyne poisoning.
25	26	M.	Asphyxia due to vomiting and inspiration of vomited matter.	75	44	M.	Coal-gas poisoning.
26	13/12	M.	Broncho-pneumonia.	76	22	F.	Eclampsia.
27	3	F.	Septicæmia.	77	2 days	M.	Prematurity.
28	51	F.	Coronary disease and myocarditis.	78	44	F.	Septic peritonitis and salpingitis.
29	29	F.	Septicæmia following tonsillitis.	79	4	F.	Osteomyelitis accelerated by anaesthetic.
30	29	M.	Stab wound, chest. Manslaughter.	80	New born	M.	Still-born.
31	14 weeks	M.	Pleurisy.	81	New born	M.	Still-born.
32	53	M.	Pneumonia and silicosis.	82	61	M.	Silicosis and tuberculosis.
33	31	M.	Acute arsenical poisoning.	83	65	M.	Fracture of base of skull, laceration of brain. Accident.
34	34	F.	Poisoning by atropine.	84	37	M.	Poisoning by chloral hydrate.
35	57	M.	Silicosis and tuberculosis.	85	51	M.	Tumour of brain (carcinoma).
36	14½	M.	Fracture of skull by motor car. Manslaughter.	86	59	M.	Shock from intestinal obstruction, operation and anaesthetic.
37	29	F.	Peritonitis and septicæmia following abortion.	87	58	M.	Ruptured duodenal ulcer.
38	57	M.	Pneumonia and silicosis.	88	16 days	M.	Bronchitis.
39	35	F.	Acute peritonitis following abortion.	89	33	M.	Tuberculosis.
40	50	M.	Hæmorrhage, silicosis and tuberculosis.	90	56	M.	Septicæmia.
41	37	F.	Cardiac failure resulting from labour.	91	36	F.	Eclampsia.
42	24	M.	Pyo-nephrosis and cystitis due to spinal paralysis caused by fracture of spine.	92		F.	Prematurity.
43	61	M.	Silicosis and tuberculosis.	93	55	M.	Silicosis and tuberculosis.
44	69	M.	Pneumonia accelerated by accident.	94	56	M.	Septicæmia.
45	52	M.	Empyema, tuberculosis and silicosis.	95	68	M.	Silicosis and tuberculosis.
46	32	M.	Death due to gun-shot wound in abdomen. Accidental death.	96	39	M.	Chronic nephritis.
47	3 months	M.	Drowning. Murder.	97	38	M.	Bronchitis.
48	70	M.	Atheroma of coronary arteries and myocarditis.	98	31	F.	Fracture of cervical vertebrae.
49	82	M.	Pneumococcal meningitis.	99	5 months	F.	Capillary bronchitis.
50	49	M.	Drowning.				

## EXAMINATIONS MADE FOR THE POLICE.

36 examinations were carried out for the Police (30 for the West Riding and 6 for Wakefield City) and the scope of this type of examination has considerably extended during the year. The majority of the specimens were of clothing, etc., for examination for spermatozoa in connection with cases of alleged criminal assault and gross indecency, but in addition, examinations were made of dust and coins in a case of safe breaking, of a white tile for blood in a case of attempted suicide, of clothing and paint in a burglary case, of fluid for sulphuric acid in a case of attempted murder, of white powder in a case of attempted abortion, of a letter to determine the age of the ink, of clothing and a sheep's skin in a case of attempted sheep stealing, and of clothing, feathers, etc., in two cases of fowl stealing. Experiments were also made with a shot-gun in connection with a case of alleged shooting.

## BIOLOGICAL EXAMINATIONS.

During the year 5,827 specimens were examined biologically involving the use of 11,715 animals (guinea-pigs) for diagnostic purposes. The tests were simple subcutaneous inoculations for the detection of tubercle bacilli in milk, sputum, urine and other materials, for the determination of the virulence of *B. diphtheriae* and for the detection of anthrax bacilli.

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

TABLE LII.

List of Sanitary Districts in the West Riding showing the Number of Specimens received from each during 1936.

Urban Districts.		Urban Districts.		Urban Districts.	
Adwick-le-Street	54	Knottingley	34	Whitley Upper	2
Altofts	39	Lepton	2	Whitwood	10
Ardley, East and West	32	Linthwaite	81	Wombwell	171
Baildon	31	Luddendenfoot	30	Worsborough	31
Barkisland	20	Maltby	34	Yeadon	15
Barnoldswick	220	Marsden	36		
Batley B.	288	Meltham	22	Rural Districts.	
Bentley-with-Arksey	106	Methley	25	Barnsley	13
Bingley	588	Mexborough	191	Bishophthorpe	18
Birkenshaw	4	Midgley	1	Bowland	42
Birstall	9	Mirfield	93	Doncaster	308
Bolton-upon-Dearne	67	Morley B.	1,493	Goole	31
Brighouse B.	587	Mytholmroyd	28	Great Ouseburn	114
Burley-in-Wharfedale	20	New Mill	10	Halifax	62
Calverley	31	Normanton	125	Hemsworth	200
Castleford	127	Oakworth	21	Hunslet	9
Clayton West	4	Ossett B.	122	Keighley	224
Conisbrough	75	Otley	72	Kiveton Park	48
Cudworth	19	Oxenhope	—	Knarborough	7
Darfield	30	Penistone	74	Pateley Bridge	31
Darton	58	Pontefract B.	204	Penistone	45
Denby and Cumberworth	25	Pudsey B.	69	Pontefract	120
Denholme	17	Queensbury	66	Ripon	18
Dodworth	5	Rawdon	35	Rotherham	229
Drighlington	10	Rawmarsh	49	Sedburgh	89
Earby	77	Ripon C.	20	Selby	14
Elland	47	Rishworth	14	Settle	126
Emley	1	Rothwell	54	Skipton	110
Farsley	57	Royston	33	Tadcaster	244
Featherstone	78	Saddleworth	28	Thorne	44
Flockton	2	Scammonden	4	Todmorden	120
Garforth	19	Selby	60	Wakefield	104
Gildersome	1	Shelf	3	Wetherby	118
Goilcar	44	Shelley	3	Wharfedale	50
Goole B.	301	Shepley	8	Wortley	81
Greasbrough	1	Shipley	173		
Greetland	3	Silsden	11	County Boroughs:—	
Guiseley	10	Skelmanthorpe	3	Barnsley	195
Gunthwaite and		Skipton	64	Dewsbury	226
Ingbirchworth	1	Staithwaite	21	Doncaster	7
Harrogate B.	120	South Crossland	5	Halifax	10
Haworth	12	Southwram	2	Wakefield	1,942
Hebden Bridge	44	Sowerby	53		
Heckmondwike	68	Soyland	5	Hospitals, etc.	
Hemsworth	141	Spenborough	107		12,976
Hipperholme	62	Springhead	1	School Medical Inspection	
Holme	10	Stainland-with-Old Lindley	9	and Child Welfare Staff	689
Holmfirth	49	Stanley	55	County Sanitary Inspectors	
Honley	25	Stocksbridge	87		3,535
Horbury	64	Swinton	40	Tuberculosis Staff	
Horsforth	239	Thurlstone	4		4,416
Hoyland Nether	271	Thurnscoe	111	Ministry of Health	
Hoylandswaine	2	Thurstonland and Farnley	10		65
Hunsworth	1	Tyas	8	Venereal Specimens	
Ilkley	72	Tickhill	109		9,715
Keighley B.	1,256	Todmorden B.	186	Specimens from Chief	
Kirkburton	45	Wath-upon-Dearne		Veterinary Officer and	
Kirkheaton	5			Staff	1,646
Knarborough	6			Government Wool Disin-	
				fecting Station, Liverpool	21
				Staff Appointments	
					250
				Total No. of Specimens	
				examined bacteriologic-	
				ally	58,349



## 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, 1936.

	Whole of Administrative County.	County Council's Maternity and Child Welfare Area.
Estimated Population, 1936	1,525,410	1,035,011
No. of Live Births (registered)	22,995	15,816
No. of Illegitimate Births	980	676
No. of Stillbirths	1,071	745
Birth Rate	15.1	15.2
Deaths under one year	1,452	986
Infantile Mortality Rate	63	62
<i>*Infantile Mortality Rate, average for 10 years, 1926-35</i>	70	70
Notified cases of Ophthalmia Neonatorum	112	86
Notified cases of Puerperal Fever	69	50
Notified cases of Puerperal Pyrexia	182	132
Maternal deaths from Sepsis	39	32
Maternal deaths from Other Causes	61	44
Maternal Mortality Rate (Per 1,000 Live and Still births)	4.16	4.59
„ „ „ (Per 1,000 Live births)	4.35	4.81
<i>*Maternal Mortality Rate, average for 10 years, 1926-35</i>	5.45	5.47

\* 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 1936, 625 midwives notified their intention to practise, and out of the total number of births, including still-births, *i.e.*, 24,066, they reported their attendance upon 16,603 cases in the capacity of midwives and 2,404 in the capacity of maternity nurses—a total of 19,007 cases or an average of approximately 30.4 cases each.

These 625 midwives are classified as follows:—

District Nurse-midwives	162
Employed in Institutions	98
Independent Midwives	365

The supervision is carried out by the County Medical Officer, his Assistants and four Inspectresses. Health Visitors make routine visits to the midwives and inspect their registers, books of forms and their bags. During the year, 815 visits of inspection were made. Four midwives were cautioned by the County Medical Officer for minor infringements of the Rules; and seven midwives died.

## Number of Births attended by Certified Midwives.

Midwives attended 16,603 births and 2,404 cases of confinement as Maternity Nurses, out of a total of 24,066 live and still births registered, or 79 per cent.

A steady increase is taking place in the number of confinements conducted by midwives.

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

TABLE LIII.

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	22,935	1,071	24,006	79.0

The following table shews the number of cases attended by individual midwives during the years 1932-36:—

TABLE LIV.

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				
	200 or over	100 to 200	50 to 100	Under 50	Nil	200 or over	100 to 200	50 to 100	Under 50	Nil	200 or over	100 to 200	50 to 100	Under 50	Nil
1932	1	28	70	216	34	—	—	5	56	5	—	1	12	149	32
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

#### Medical Aid Records.

The following table summarises the records received from midwives during the year 1936 and compares them with similar records for previous years:—

TABLE LV.

	1932	1933	1934	1935	1936
Records of sending for Medical aid ...	5,855	5,953	6,385	6,398	6,596
Deaths of (a) Mother ...	11	17	14	15	5
(b) Child ...	149	123	126	122	105
Still-births ...	358	322	327	216	294
Laying out the dead ...	35	27	35	47	31
Liability to be a source of infection ...	117	107	157	155	185
Substitution of artificial feeding for breast-feeding ...	139	174	189	193	232

The number of copy medical aid records received from midwives during the year was 6,596 or 34.7 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 LVI.

#### RULE E 12(1).

Nil.

#### RULE E.12(2)—PREGNANCY.

Ante-Partum Haemorrhage ...	271	Post Maturity ...	6	Toxæmia ...	11
Abortion or Miscarriage ...	248	Oedema ...	92	Hydræmnios ...	5
Threatened Abortion ...	136	Ante-natal Examination ...	139	Miscellaneous ...	285
Eclampsia ...	13	Purulent Discharge ...	21	Hyperemesis ...	61
Albuminuria ...	221	Varicose Veins ...	34	Contracted Pelvis ...	30
High Blood Pressure ...	25	Hæmorrhoids ...	10	Insanity ...	2

#### RULE E.12(3)—LABOUR.

Adherent Placenta ...	43	Contracted Pelvis ...	7	Eclampsia ...	4
Retained Placenta or Membrane ...	94	Rigid Cervix or Perineum ...	49	Miscellaneous ...	107
Placenta Prævia ...	25	Collapse ...	27	Prolapse ...	5
Ruptured Perineum ...	1,333	Breech Presentation ...	134	Albuminuria ...	10
Prolonged Labour ...	645	Undefined do. ...	78	Fœtal Distress ...	21
Obstructed Labour ...	177	Transverse do. ...	18	Debility ...	3
Precipitate Labour ...	23	Funis do. ...	18	Anæsthetic ...	22
Uterine Inertia ...	259	Face do. ...	21	Deformity of Mother ...	10
Laceration of Cervix ...	8	Hand do. ...	10	Raised Temperature and Pulse ...	14
Premature Labour ...	50	Foot Presentation ...	21	Heart Trouble ...	19
Hydræmnios ...	2	Occipito-Posterior Presentation ...	105	Hysteria and Distress ...	19

#### RULE E.12(4)—LYING-IN.

Post-partum Haemorrhage ...	129	Miscellaneous ...	132	Pyrexia ...	143
White Leg ...	3	Phlebitis ...	15	Mastitis ...	54
Oedema ...	4	Eclampsia ...	7	Albuminuria ...	6
Prolapse of Uterus ...	2	Debility ...	5	Sub-involution of Uterus ...	5
Thrombosis ...	3	Varicosity ...	12	Collapse ...	17
Anæmia ...	9	Post-natal Examination ...	18	Pyelitis ...	2
Purulent Discharge ...	2	Rigor ...	7	Weak Heart ...	5
				Puerperal Insanity ...	1



TABLE LVI.—(Continued.)

## RULE E.12(5)—THE CHILD.

Injuries at Birth ... .. 3	Unsatisfactory umbilicus ... 10	Tongue Tied ... .. 19
Twins and Triplets ... .. 21	Icterus Neonatorum ... .. 22	Inflammation of Eyes ... 230
Other Malformations ... .. 42	Miscellaneous ... .. 63	Prematurity ... .. 105
Pemphigus ... .. 1	Hare Lip and Cleft Palate ... 10	Phimosis ... .. 44
Convulsions ... .. 39	Spina Bifida ... .. 28	Rash ... .. 19
Dangerous Feebleness ... 201	Still-birth ... .. 59	Hæmorrhage from mouth ... 4
Talipes ... .. 7	Melæna ... .. 8	Asphyxia ... .. 47
Imperforate anus ... .. 2	Cystitis ... .. 3	Deaths of Infants ... .. 9

**Still-Births notified by Midwives.**

The number of still-births notified by midwives was 294 or 1.55 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 LVII.

Year	Number of Births attended by Midwives	Number of Still-births notified.	Percentage of Still-births to Births attended
1932	17,198	358	2.08
1933	17,284	322	1.86
1934	17,836	337	1.89
1935	18,409	316	1.72
1936	19,007	294	1.55

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

The number of notifications of liability to be a source of infection received from midwives was 185 compared with 155 for the previous year.

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

Puerperal Fever and Pyrexia ... .. 128
Scarlet Fever ... .. 21
Diphtheria ... .. 8
Pemphigus Neonatorum ... .. 4
Erysipelas ... .. 3
Other cases of Infection ... .. 21
185

During the year 7 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 1936, a sum of £210 was paid to the West Riding Nursing Association for the provision of 7 newly trained midwives to serve the areas of Elland, Meltham and Todmorden and Bishopthorpe, Rawcliffe (Goole R.), Sutton (Keighley R.), and Cowling (Skipton R.).

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

The County Council has a scheme in operation for contributing to the payment of midwifery fees in necessitous cases. The condition of payment is that the midwife charges a standard fee of 30/-, the patient contributing 10/- and the County Council £1. In cases where no maternity benefit has been received, the County Council pay the midwife the full fee of 30/-.

During 1936 a total sum of £2,544 was paid to midwives in the County Maternity and Child Welfare Area, representing 2,336 cases.

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

This is a statutory obligation under the Midwives Act, 1918, and during 1936, midwives practising in the West Riding issued 6,596 medical aid notices, and a sum of £8,508 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.

During 1936, 6 midwives were compensated under this heading at a total cost to the County Council of £11 17s. 6d.

**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 1936, 520 cases were referred to a maternity hospital, and a sum of £390 0s. 0d. was paid in compensation to midwives.

### Employment of Midwives as Maternity Nurses.

The County Council approved a scheme whereby assistance is granted in necessitous cases towards the fee of the midwife where she attends patients as a maternity nurse under the supervision of a medical practitioner, the patient contributing 10/- and the County Council 10/-.

During 1936, 18 cases received assistance under this scheme.

### Nursing Associations undertaking Midwifery Work.

During the year special or additional grants were paid by the County Council to three Nursing Associations working in the Riding, as under:—

Name of Association.	Amount of Grant.	Period.
Appletreewick (Skipton R.)	£ 40	1st October, 1936 to 31st July, 1937.
Denby and Cumberworth	18	Special Grant to meet immediate financial needs.
Green Hammerton (Gt. Ouseburn R.)	25	Do.

### The Local Government Act, 1929—Grants to Nursing Associations.

Section 101 of this Act deals with grants to Voluntary Associations and secures payment by the County Council of annual contributions towards the expenses of Voluntary Associations providing Maternity and Child Welfare services in the County according to the above Act.

The payments made under this scheme are in lieu of the grants which ceased to be payable as from the 31st March, 1930, and which were formerly paid by the Ministry of Health.

In January, 1937, the Minister of Health approved the scheme made by the County Council under this section of the Local Government Act, 1929, for the five years ending 31st March, 1942, and copies of the scheme as under were forwarded to each Nursing Association concerned.

TABLE LVIII.

VOLUNTARY ASSOCIATIONS TO WHICH ANNUAL CONTRIBUTIONS WILL BE PAID BY THE COUNCIL.

(1) Name of Association.	(2) Amount of Annual Contribution.	(1) Name of Association.	(2) Amount of Annual Contribution.
	£ s. d.		£ s. d.
<b>Midwifery Services.</b>		<b>Midwifery Services—contd.</b>	
West Riding County Nursing Association, 9, Bridgefield Place, Leeds	1,048 2 6	Ripon Victoria Nursing Institution	25 0 0
Aldborough and Boroughbridge and District	31 8 0	Sawley	35 0 0
Arthington and Pool	16 0 0	Scissett	7 0 0
Bentham	12 0 0	Sedburgh	24 0 0
Boston Spa and Thorparch	8 0 0	Sharow	28 0 0
Bretton and Woolley	12 0 0	Sitlington	7 16 0
Burton Leonard	8 0 0	South Crosland	5 8 0
Cantley	17 16 0	South Elmsall and District	15 0 0
Denaby Main and Conisbrough	8 0 0	Sowerby	23 0 0
Denby and Cumberworth	21 4 0	Spofforth	10 0 0
Emley	22 16 0	Stanningley and Farsley	12 0 0
Hampsthwaite	20 0 0	Steeton and Eastburn	9 0 0
Harrogate	25 0 0	Thurgoland	10 0 0
Heckmondwike	10 0 0	Tiekhill	10 0 0
Hensall and Pollington	9 19 5	Todmorden	23 0 0
Hipperholme and District	12 0 0	Upper Wharfedale	20 0 0
Holme Valley Memorial Hospital	8 0 0	Walton and Heath	11 4 0
Horsforth	8 0 0	Whitley Bridge	14 8 0
Hunsingore	17 4 0	Wetherby and District	20 0 0
Killinghall	26 0 0	Yeadon	5 0 0
Kirkby Malzeard	32 0 0		
Kirkburton	10 0 0	<b>Infant Welfare Centres.</b>	
Knarborough	15 0 0	Bentham Infant Welfare Centre—	
Ledsham and Ledston	14 8 0	St. Margaret's Sunday School,	
Long Marston	10 16 0	Robin's Lane, Bentham	5 4 7
Luddendenfoot Nursing Institution	12 0 0		
Micklefield	10 16 0	<b>Maternity Homes.</b>	
Mirfield	16 0 0	Heckmondwike District Nursing	
Meltham	9 0 0	Association—Maternity Home at	
Mytholmroyd	8 0 0	43, Cemetery Road, Heckmond-	
North Stainley	28 0 0	wike	214 4 11
Oakworth	10 8 6		
Otley	13 0 0	<b>Babies' Home.</b>	
Ouseburn and District	27 12 0	St. Agnes Babies' Home, Harrogate	206 6 5
Pannal and Beckwithshaw	16 0 0		
Rawcliffe	3 4 0		
Rawdon	7 0 0		
Rawmarsh and Parkgate District	21 11 3		
Ribblesdale District	20 0 0		



## THE PUBLIC HEALTH (NOTIFICATION OF PUERPERAL FEVER AND PUERPERAL PYREXIA) REGULATIONS, 1926.

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, Morton Banks.
Wharfedale Joint Hospital, Menston.	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.

The following table gives details of the special services provided by the County Council under the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926, together with the cost of such services to the County Council, during the year 1936.

		Cases	Amount		
			£	s.	d.
Hospital Treatment	...	142	1,975	6	4
*Consultant Obstetrician (18 cases)	...	1	81	8	0
Ambulance (8 cases)	...	—	5	16	2
Domiciliary Nurse	...	—	—	—	—
		143	£2,062	10	6

\*The services of Consultant Obstetricians were requested in 18 cases, and 17 of these patients were removed to hospital. The latter are included in the list of hospital cases.

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

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

1932	1933	1934	1935	1936
101	87	105	100	112

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.					
86	66	17	80	2	1	1	2

## The Nursing Homes Registration Act, 1927.

The above Act came into force on the 1st July, 1928, and repealed Part II. of the Midwives Act, 1926, which dealt with the registration of Maternity Homes.

Under the Nursing Homes Registration Act, 1927, 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 82, classified as follows:—

Type of Case.	No. Registered.
Medical, Surgical and Maternity ... ..	21
Medical and Surgical ... ..	4
Medical and Maternity ... ..	2
Medical and Chronic ... ..	1
Medical and Care ... ..	3
Medical only ... ..	1
Maternity and Care ... ..	2
Maternity only ... ..	41
Care only ... ..	7
	<hr/> 82

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

Nursing Homes ... ..	1
Maternity and Care ... ..	2
Maternity only ... ..	5
Medical only ... ..	2
	<hr/> 10

During the year one application for Exemption from Registration was granted, and one was refused.

### Midwives Act, 1936.

This Act came into operation on the 31st July, 1936 and has to be carried into effect by the 30th July, 1937.

The principal object of this new legislation is to improve the maternity services throughout the country by introducing a domiciliary service of salaried midwives. Incidentally the Act should have the effect of raising the status of the midwifery profession by providing adequate salaries, securing better prospects for midwives who enter the service, and by causing to retire on compensation those who on account of age or infirmity of mind or body are incapable of efficiently performing their duties as a midwife.

By the terms of the Act, Local Supervising Authorities were required to submit their proposals for carrying out their new obligations to the Minister of Health on or before the 31st January, 1937. Before doing so it was necessary to comply with the statutory requirement of consulting with voluntary organisations undertaking or willing to undertake midwifery duties, local organisations representing medical practitioners and midwives, and every Welfare Council in the Administrative County.

Owing to the great amount of time taken up in the preparation of the scheme and the necessity for consultation with the various bodies concerned, the Minister of Health granted an extension of two months in the submission of the scheme, on the understanding that the proposals would be ready to be carried into effect not later than the statutory date, *viz.*: 30th July, 1937.

The voluminous detailed schedules to the scheme have been published already and are therefore not reproduced in this report.

The following scheme was approved by the County Council on the 17th March, 1937, and submitted to the Minister of Health. It is intended to put the scheme into operation on the 1st July, 1937.

#### Scheme for the establishment of a Domiciliary Midwifery Service in accordance with the provisions of the Midwives Act, 1936.

A survey of the whole of the Administrative County indicates that the requirements for a complete domiciliary midwifery service are likely to be met most efficiently and economically by the services of 220 whole-time midwives, 161 district nurse-midwives, 15 midwives for emergency and relief duties.

Represented in part by the figure 220 is a number of midwives who for various reasons have elected to remain in independent private practice, and after allowing for these and for patients desirous of making private arrangements, it is recommended that:—

- (1) there shall be appointed by the County Council at the commencement of the scheme,

177 Whole-time Midwives for domiciliary midwifery, and  
12 Midwives for emergency and relief duties.

(Sixteen of these Midwives who are qualified "general trained" nurses will devote part of their time to health visiting and school nursing in remote rural areas.)



(2) there shall be incorporated in the scheme the services of:—

161 District Nurse-Midwives employed by 124 District Nursing Associations.

The estimate of cases of confinement to be attended is as follows:—

		Total births, 1935.
177 Salaried Midwives (average 75 cases each) ... ..	13,280	24,213
5 Salaried Emergency Midwives (average 35 cases each) ...	175	
7 Salaried Relief Midwives ... ..	—	
161 Nurse-Midwives (average 25 cases each) ... ..	4,025	
124 Independent Midwives (average 25 cases each) ... ..	3,100	
Institutional and private arrangements ... ..	3,633	
	<u>24,213</u>	<u>24,213</u>

NOTE.—As the independent midwife is at liberty to leave the area in which she practises, and as she may return her certificate and receive compensation within the next three years, the number of midwives to be employed by the County Council will in certain areas be dependent upon the number of private midwives in practice and therefore provision has been made for increasing the employed staff as circumstances dictate.

#### SUPERVISORS OF MIDWIVES.

It is recommended that two Supervisors be appointed to supervise the practical work of all midwives, the Supervisors to have in addition to nursing qualifications, the special qualifications laid down by the Minister of Health.

#### PROPOSED SALARY AND EMOLUMENTS OF SUPERVISORS.

£350 per annum rising by increments of £10 to £400.

Uniform, £8 per annum.

Motor car and subsistence allowance, approximately £150 per annum.

#### PROPOSED SALARIES, EMOLUMENTS AND EXPENSES OF MIDWIVES TO BE EMPLOYED BY THE COUNTY COUNCIL.

It is recommended that two scales of salaries be adopted as follows:—

Grade I. Certified Midwives not in possession of the certificate of General Nursing Training  
£170 per annum rising by increments of £10 to £200.

Grade II. Certified Midwives who possess the three years General Training Certificate.  
£200 per annum rising by increments of £10 to £240.

Laundry, Dresses, Aprons, Dressings, Disinfectants, etc. ...	£20	
Travelling expenses, including cycle allowance £3 ... ..	£10	£36
Telephone ... ..	£6	
Motor car allowance where necessary ... ..	£50	£50

#### Equipment.

Uniform and hat ... ..	£8	
Midwifery bag and contents ... ..	£5	
Daily visiting bag and contents ... ..	£3	£16

#### Holidays.

Four weeks per annum (two weeks only to be taken on summer vacation).

The equivalent of one day (of 24 hours) off duty each week.

One full day of 24 hours per month.

Usual Bank Holidays to be inclusive of the annual holiday.

#### Superannuation.

It is proposed that midwives appointed as whole-time salaried officers of the County Council shall hold designated posts under the Local Government and Other Officers' Superannuation Act, 1922.

#### FEES.

(Applicable to the whole of the Administrative County.)

£1 10s. 0d. per case, when acting as a midwife.

£1 0s. 0d. per case, when acting as a maternity nurse.

### SCALES OF PAYMENT.

No amendment is proposed in the present scales of payment, which are:—

#### MIDWIFE'S CASE.

Where the total family income, after deducting 5/- for each child under 14 years of age and not working.	Amount payable by Parent.	Amount payable by County Council.
Does not exceed 30/- per week ... ..	10/-	20/-
Over 30/- ... ..	Whole fee	Nil.

#### MATERNITY CASE.

Where the total family income, after deducting 5/- for each child under 14 years of age and not working.	Amount payable by Parent.	Amount payable by County Council.
Does not exceed 30/- per week ... ..	10/-	10/-
Over 30/- ... ..	Whole fee	Nil.

In necessitous cases, where no maternity benefit is received, the full fee will be paid.

Fees in necessitous cases will not be paid to independent practising midwives after the commencement of this Scheme, except in those cases where no salaried midwife is available.

### NURSING ASSOCIATIONS.

It is recommended that the grant paid by the County Council shall be as follows:—

- £100 per annum for one nurse-midwife.
- £50 per annum for each additional nurse-midwife employed whom the County Medical Officer may consider necessary, and
- £25 per annum towards the expenses of motor car transport.

The payment of a grant to District Nursing Associations will be subject to the conditions set out in the model agreement, contained in Circular 1569 of the Ministry of Health dated 18th September, 1936, with the following additions:—

1. The Nursing Association if so indicated shall provide motor transport for the nurse or nurses and a grant of £25 in respect of each motor car will be paid.
2. The Nursing Association shall instal and maintain a telephone at the nurses' residence.
3. The approval of the County Medical Officer shall be obtained before future appointments of nurses are made.
4. The County Medical Officer shall have power to re-arrange any nursing area for midwifery purposes.
5. The minimum salary paid to the nurse or nurses employed shall be £170 per annum, rising by increments of £10 to £200.
6. The grant shall be inclusive of all grants paid by the County Council—the Nursing Association to retain all fees.
7. The Nursing Association shall provide facilities for each nurse-midwife employed by them to attend a refresher course of not less than one month every seven years or as instructed by the Central Midwives Board.
8. The arrangements with Nursing Associations will be subject to review after the expiry of twelve months from the date of commencement.

It is recommended that all Nursing Associations should affiliate with the County Nursing Association.

It is not proposed, upon the initiation of the scheme, to make arrangements with Nursing Associations for the provision of midwifery services, which have not provided this service voluntarily hitherto. Modifications of the scheme may be found necessary after the scheme has been in operation for a year or two.

### SECTION 101, LOCAL GOVERNMENT ACT, 1929.

#### PAYMENT OF GRANTS TO NURSING ASSOCIATIONS UNDERTAKING MIDWIFERY DUTIES.

The County Council distribute the sum of £1,933 1s. 8d. to Nursing Associations for midwifery services in or for the benefit of the County, as follows:—

Directly to Nursing Associations by County Council ...	£884 19s. 2d.
Through the County Nursing Association ... ..	£1,048 2s. 6d.

It is proposed to delete these grants from the scheme made under Section 101 of the Local Government Act, 1929, with the exception of the sum of £8 paid to the Denaby Main Nursing Association.



The County Nursing Association retained the sum of £223 16s. 6d. for the year ended the 31st March, 1936, for administrative expenses, and as they are required to provide nurses and relief nurses for the affiliated nursing associations a sum of £1,000 is to be paid to them for this service.

#### WELFARE COUNCILS.

It is proposed to make arrangements with the following Welfare Councils who are a Part III Authority for Elementary Education and who also employ a whole-time Medical Officer of Health, for the employment of salaried midwives under the Midwives Act, 1936:—

##### Boroughs of:—

Batley	Keighley
Brighouse	Morley
Harrogate	Todmorden

##### Urban Districts of:—

Shipley	Spenborough
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subject to the following conditions:—

1. The Welfare Council shall adopt the County Council's scheme for the employment of salaried midwives.
2. The County Council will re-imburse the Welfare Council for the nett cost of the service.
3. The appointment of midwives will be subject to the approval of the County Medical Officer, and with the consent of the County Public Health and Housing Committee the Council may appoint a midwife at a higher commencing salary according to experience of the midwife and provided that the higher salary falls within the limits of the prescribed scales.
4. The service shall be carried on to the satisfaction of the County Medical Officer.
5. The midwives employed shall be subject to inspection and supervision by the Local Supervising Authority.
6. The midwives employed shall serve in adjoining areas at the request of the County Medical Officer.
7. The Welfare Council shall be responsible for the collection of fees.

#### POST CERTIFICATE TRAINING.

In accordance with Section 7 of the Midwives Act, 1936, the Central Midwives Board is empowered to make rules regarding post-certificate training.

The Board require that every practising midwife shall attend a residential course of instruction for a period of four weeks every seven years, and as there will be approximately 570 practising midwives in the County area, provision has been made for the employment of seven relief midwives. These relief midwives would be able to undertake the work of successive relays of 84 midwives attending a four weeks' course annually over a period of seven years.

The number of practising midwives is made up as follows:—

Salaried midwives	...	...	...	...	177
Emergency and relief	...	...	...	...	12
District nurse-midwives	...	...	...	...	161
Independent midwives	...	...	...	...	124
Employed in Institutions	...	...	...	...	96
					<hr/> 570 <hr/>

#### SUMMARY OF THE PERSONNEL IN THE SCHEME FOR THE PROVISION OF AN ADEQUATE MIDWIFERY SERVICE.

RECOMMENDATIONS.			SPECIAL TRANSPORT REQUIRED.
To remain in independent practice	...	124	—
To be appointed for midwifery only	...	161	19 motor cars.
To be appointed for health visiting, school nursing and midwifery	...	16	15 motor cars.
Nurses to be employed by District Nursing Associations	...	161	46 motor cars.
For emergency and relief duties	...	12	12 motor cars.
Non-medical Supervisors of Midwives	...	2	2 motor cars.
Midwives to resign	...	44	—

**MIDWIVES ACT, 1936.**  
**FINANCIAL STATEMENT AS TO COST OF NEW MIDWIFERY SERVICE.**

EXPENDITURE.			INCOME.		
	Immediate £	Ultimate £		Immediate £	Ultimate £
<b>1. SALARIED MIDWIVES.</b>			<b>1. FEES.</b>		
(a) Salaries—					
133 @ £170-10—£200 =	22,610		300 cases—no charge.		
56 @ £200-10—£240 =	11,200		1,566 „ @ 10/- each	783	
2 @ £350-10—£400 =	700		3,497 „ @ 20/- „	3,497	
	34,510	40,840	8,092 „ @ 30/- „	12,136	
(b) Emoluments—				16,416	17,500
177 @ £23 =	4,071				
2 @ £8 =	16				
12 @ £23 =	276				
	4,363	4,363			
(c) Expenses—			<b>2. Transfer from Maternity and Child Welfare Service in respect of Midwives undertaking health visiting and school nursing duties (16 @ £50 each).</b>	800	800
177 @ £21 =	3,717				
2 @ £150 =	300		Transfer from Maternity and Child Welfare Service in respect of five Nursing Associations undertaking health visiting and school nursing.	171	171
12 @ £115 =	1,380				
	5,397	5,397			
(d) Equipment—					
189 @ £8 =	1,512	1,512			
Renewals =	250	1,762			
(e) Motor Transport—					
46 @ £50 =	2,300	2,300			
<b>2. GRANTS TO NURSING ASSOCIATIONS.</b>			<b>3.* Grant from Ministry of Health re compensation (50%) (non-recurring).</b>	5,000	—
161 District Nurses =	14,570				
46 Motor Transport =	1,150		<b>4. Estimated nett saving on Maternity and Child Welfare expenditure.</b>	4,839	4,839
County Nursing Association =	1,000			27,226	23,310
	16,720	16,720			
<b>3.* RESIGNATIONS.</b>					
Compensation (44 cases) (non-recurring) =	10,000	—			
<b>4. ADMINISTRATIVE CLERICAL STAFF.</b>	700	1,150			
<b>5. PRINTING, Stationery, postages, telephone charges and office equipment.</b>	550	550			
<b>6. FEES. Payment in necessitous cases. (Approx.)</b>	1,500	1,500	<b>Additional Cost of Service exclusive of grant from Ministry of Health.</b>	53,876	55,132
<b>7. POST-CERTIFICATE COURSE OF INSTRUCTION.</b>					
84 per annum @ £20 each.	1,680	1,680			
<b>8. SUPERANNUATION. (Equivalent contributions).</b>	1,870	2,180			
	81,102	78,442		81,102	78,442

\* These payments will be spread over a period of three years.

**FINANCIAL STATEMENT AS AFFECTING THE MATERNITY AND CHILD WELFARE SCHEME.**

	£	s.	d.	£	s.	d.
<b>ESTIMATED SAVING ON CURRENT EXPENDITURE.</b>						
Three Health Visitors and School Nurses to be relieved in Rural areas						
1 at £360 }				880	0	0
2 at £260 }						
Transfer of health visiting and school nursing duties from Sherburn District Nursing Association to whole-time midwife				40	0	0
Transfer of health visiting and school nursing duties from Barkston Ash District Nursing Association to whole-time midwife				50	0	0



Grants to Nursing Associations:—		£	s.	d.	£	s.	d.
Sec. 101 Local Government Act, 1929	...	1,925	0	0			
Special Midwifery Grants	...	265	0	0			
Payment of fees to midwives in necessitous cases	...	2,650	0	0			
					=	5,810	0 0

## ESTIMATED ADDITIONAL EXPENDITURE.

16 Midwives to undertake health visiting and school nursing duties (£50 each)	...	800	0	0			
Payment for additional duties for health visiting and school nursing work in extended area	...						
		£					
Kettlewell District Nursing Association	...	5					
Addingham District Nursing Association	...	6					
Transfer of health visiting and school nursing duties to							
Settle District Nursing Association	...	60					
Ribblesdale District Nursing Association	...	50					
Silsden District Nursing Association	...	50					
			171	0	0		
						971	0 0

ESTIMATED NETT SAVING ... 4,839 0 0

**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:—

- In urban and populous rural areas ante-natal clinics were established at convenient centres where expectant mothers could receive ante-natal supervision.
- 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 24,000 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 6,000 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 additional cost involved is estimated to be £1,500 per annum.

The new arrangements will commence as from the 1st April, 1937.

**Services of Consultants in Midwifery Service.**

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 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 service much improved by the introduction of the domiciliary consultant scheme.

The fees approved are as follows:—

- 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 78 in 1935 to 91 at the end of 1936, an increase of 13 clinics.

Additional sessions were also arranged at the existing ante-natal clinics at Hoyland, Wales (Kiveton Park R.), West Melton (Wath U.).

TABLE LIX.

Location	Day and Hours of Attendance	Medical Staff—Names and Qualifications	Number of		Average attendance per Session
			Health Visiting Staff	Nursing Staff (Midwives)	
1 Adwick-le-Street U.D., Woodlands Wesleyan Chapel ... ..	Every Tuesday, 2 to 5 p.m.	Dora Chapman, M.B., Ch.B.	2	3	26
2 Airedale (Pontefract R.D.), Holy Cross Hut ... ..	First and third Thursday, 2 to 5 p.m.	Christina M. Hawick, M.B., Ch.B.	1	2	24
3 Allerton Bywater (Tadcaster R.D.), Methodist Sunday School ... ..	Third Thursday, 2 to 4-30 p.m.	Dorothy Summers, M.B., Ch.B.	1	—	7
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	13
5 Askern (Doncaster R.D.), Wesleyan Sunday School ... ..	Last Thursday, 2 to 4 p.m.	D. Malloch, M.B., Ch.B.	1	2	11
6 Barnoldswick U.D., Bethesda Baptist Chapel ... ..	Second Friday, 2 to 4 p.m.	Annie V. Neilson, M.B., B.S.	1	1	4
7 Bentley U.D., Welfare Pavilion ... ..	First and third Fridays, 2 to 6 p.m.	Bessie Cook, M.B., Ch.B.	2	2	12
8 Birstall, 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	—
9 Carcroft (Adwick-le-Street U.D.), Presbyterian Sunday School ... ..	First Monday, 2 to 5 p.m.	Bethia M. Newlands, M.B., Ch.B.	1	2	15
10 Catcliffe (Rotherham R.D.), House in Rotherham Road ... ..	Alternate Mondays, 2 to 5-30 p.m.	Rosie B. Becker, M.D., M.B., Ch.B., D.P.H.	1	1	7
11 Chapeltown (Wortley R.D.), Miners' Welfare Institute ... ..	First Friday, 2 to 4-30 p.m.	Enid F. Cook, M.B., Ch.B.	1	3	3
12 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	1	14
13 Cortonwood (Rotherham R.D.), Methodist Chapel ... ..	First and third Wednesday, 2 to 4 p.m.	Dora Chapman, M.B., Ch.B.	1	1	—
14 Crigglestone (Wakefield R.D.), Village Institute ... ..	First Friday, 2 to 4 p.m.	Katherine M. Hick, M.R.C.S., L.R.C.P.	1	1	6
15 Crofton (Wakefield R.D.), United Methodist Church ... ..	First Thursday, 2 to 4 p.m.	Doris M. Ringrose, M.B., Ch.B., D.P.H.	1	2	9
16 Cudworth U.D., Wesley Hall ... ..	First and third Friday, 2 to 6 p.m.	Jean J. Smith, M.B., Ch.B.	1	3	33
17 Dalton (Rotherham R.D.), Primitive Methodist Chapel ... ..	Last Thursday, 2-30 to 5 p.m.	Barbara Demaine, M.B., Ch.B., D.P.H.	1	1	11
18 Darfield U.D., Wesleyan Sunday School ... ..	Second Friday, 2 to 5-30 p.m.	Mary Boyd, M.B., Ch.B.	1	2	13
19 Darton U.D., Primitive Methodist Chapel ... ..	First Friday, 2 to 5 p.m.	Doris M. Ringrose, M.B., Ch.B., D.P.H.	2	3	12
20 Denby and Cumberworth U.D., Victoria Memorial Hall ... ..	First Tuesday, 2 to 4 p.m.	Jean V. Kirkwood, M.B., D.P.H.	1	2	11
21 Dinnington (Kiveton Park R.D.), Wesleyan Sunday School ... ..	First and third Fridays, 2 to 4 p.m.	Marjorie T. Jago, M.B., Ch.B.	1	3	8
22 Dodworth U.D., Wesleyan Chapel ... ..	Fourth Thursday, 2 to 5 p.m.	Joan Gumpert, M.B., Ch.B.	1	2	18
23 Drighlington U.D., Wesleyan Sunday School ... ..	Last Thursday, 2 to 4 p.m.	Dorothy Summers, M.B., Ch.B.	1	1	19
24 Dunscoft (Thorne R.D.), Church Hall ... ..	Second and fourth Friday, 2 to 6 p.m.	Bessie Cook, M.B., Ch.B.	1	1	27
25 Earby U.D., Old Grammar School ... ..	Fourth Friday, 2 to 4 p.m.	Annie V. Neilson, M.B., B.S.	1	1	8
26 Ecclesfield (Wortley R.D.), Gatty Memorial Hall ... ..	First Thursday, 2 to 4 p.m.	Barbara Demaine, M.B., Ch.B., D.P.H.	1	1	9
27 Edlington (Doncaster R.D.), United Methodist Church ... ..	First and Third Thursday, 2 to 4 p.m.	Marjorie Rushbrooke, M.B., B.S.	2	1	16
28 Ferrybridge (Pontefract R.D.), Wesleyan Church ... ..	First Friday and Third Tuesday, 2 to 4 p.m.	Marjorie Steven, M.B., Ch.B.	1	1	19
29 Fitzwilliam (Hemsworth U.D.), Church Hut ... ..	First Wednesday, 2 to 4-30 p.m.	M. S. Ross, M.B., Ch.B.	1	1	18
30 Garforth U.D., St. Mary's Hall ... ..	Third Friday, 2 to 4 p.m.	Dorothy Summers, M.B., Ch.B.	1	2	23
31 Gawber (Darton U.D.), Adult School ... ..	Second and fourth Wednesday, 2 to 4-30 p.m.	Doris M. Ringrose, M.B., Ch.B., D.P.H.	1	1	6
32 Glasshoughton (Pontefract R.D.), St. Paul's Institute ... ..	Fourth Monday, 2 to 5 p.m.	Emily E. Johnson, M.B., Ch.B.	1	1	9
33 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	2
34 Greetland U.D., Clay House ... ..	Second Wednesday, 9-30 to 11-30 a.m.	Hilda Leake, M.B., Ch.B.	1	1	5
35 Guiseley U.D., Baptist Church ... ..	First Wednesday, 10 to 12 noon.	Dorothy Summers, M.B., Ch.B.	2	3	16
36 Hebden Bridge U.D., Old Secondary School, Pitt Street ... ..	Last Friday, 2 to 4 p.m.	Elizabeth Thompson, M.B., Ch.B.	1	2	5
37 Hemsworth U.D., Army Hut, West End Council School ... ..	First Tuesday, 2 to 5-30 p.m.	Jean J. Smith, M.B., Ch.B.	1	3	20
38 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	10
39 Hipperholme U.D., Wesleyan Sunday School ... ..	First Friday, 2 to 4 p.m.	Elizabeth Thompson, M.B., Ch.B.	1	2	14
40 Holmfirth U.D., Town Hall ... ..	Fourth Wednesday, 2 to 4 p.m.	Hilda Leake, M.B., Ch.B.	1	2	9



TABLE LIX.—(Continued.)

Location	Day and Hours of Attendance	Medical Staff—Names and Qualifications	Number of		Average attendance per Session
			Health Visiting Staff	Nursing Staff (Midwives)	
41 Horbury U.D., Wesleyan Sunday School	First and third Thursday, 2 to 4 p.m.	Annabella Rennie, M.B., Ch.B.	1	2	14
42 Horsforth U.D., St. Margaret's Hall	First Monday, 3 to 4 p.m.	C. W. Dudley, M.B., Ch.B.	1	1	6
43 Hoyland U.D., 8, Kirk Balk	Every Monday, 2 to 5 p.m.	Enid F. Cook, M.B., Ch.B.	2	5	24
44 Kirk Sandall (Doncaster R.D.), Assembly Hall	First Monday, 2-30 to 4 p.m.	Joseph Graham, M.B., Ch.B.	1	1	7
45 Knaresborough U.D., Fysche Hall Cottage	Alternate Mondays, 2 to 4 p.m.	L. Allison Thomas, M.R.C.S., L.R.C.P.	1	2	11
46 Knottingley U.D., Old Secondary School	Second and fourth Tuesday, 2 to 4 p.m.	Marjorie Steven, M.B., Ch.B.	1	1	21
47 Lepton U.D., Ashfield Liberal Club	Third Thursday, 2 to 4 p.m.	Hilda Leake, M.B., Ch.B.	1	2	12
48 Maltby U.D., Congregational Chapel	First Tuesday, 2 to 5 p.m.	W. Land Dibb, M.B., Ch.B.	1	1	20
49 Marsden U.D., Conservative Club	Third Monday, 2 to 4 p.m.	Annabella Rennie, M.B., Ch.B.	1	1	11
50 Meltham U.D., Baptist Church	First Thursday, 2-30 to 5 p.m.	Hilda Leake, M.B., Ch.B.	1	1	12
51 Micklefield (Tadcaster R.), Wesleyan Chapel	First Tuesday, 10 a.m. to 1 p.m.	Marjorie Brown, M.B., Ch.B.	1	1	4
52 Milnsbridge (Linthwaite U.D.), 93, Manchester Road	First and third Wednesday, 2 to 4 p.m.	Annabella Rennie, M.B., Ch.B.	1	1	15
53 Mirfield U.D., Ings Grove	Third Tuesday, 2 to 5 p.m.	Hilda Leake, M.B., Ch.B.	1	1	12
54 Moorends (Thorne R.D.), Wesleyan Chapel	Second Wednesday, 11 a.m. to 1 p.m., and 2 to 5 p.m.	Helen Lindsay, M.B., Ch.B.	1	2	17
55 Mytholmroyd, Methodist Chapel Sunday School	First Monday, 2 to 4 p.m.	Stella Brown, M.B., Ch.B.	1	1	2
56 Normanton U.D., Park Pavilion	Second and fourth Thursday, 10 a.m. to 12-30 p.m.	Gertrude M. Mayhall, M.R.C.S., L.R.C.P.	1	1	12
57 Otley U.D., Primitive Methodist Chapel	First Tuesday, 2 to 4-30 p.m.	W. H. Galloway, M.R.C.S., L.R.C.P.	1	1	10
58 Outwood (Stanley U.D.), Church Institute	Second Wednesday, 2 to 4 p.m.	J. D. Bottomley, M.B., Ch.B.	1	1	11
59 Penistone U.D., Shrewsbury Methodist Chapel	First Friday, 2 to 4 p.m.	Muriel Wilby, M.R.C.S., L.R.C.P.	1	3	9
60 Queensbury U.D., Cricket Pavilion	First Friday, 2-30 to 4-30 p.m.	George C. Sharp, M.B., Ch.B.	1	2	14
61 Rawmarsh U.D., Spiritual Temple, Parkgate	Every Thursday, 2 to 6 p.m.	Doris Pindar, M.B., Ch.B.	2	7	26
62 Ripon U., Alma House	Alternate Wednesdays, 2 to 4 p.m.	Gladys Kay, M.D., M.B.	1	4	8
63 Rossington (Doncaster R.D.), United Methodist Church	First and third Thursdays, 2 to 5 p.m.	Helen Lindsay, M.B., Ch.B.	1	2	13
64 Royston U.D., Wesleyan Sunday School	First and third Tuesday, 2 to 5 p.m.	Marian Jones, M.B., Ch.B.	1	2	15
65 Saddleworth U.D., Mechanics' Institute, Uppermill	Fourth Thursday, 2 to 4 p.m.	Annabella Rennie, M.B., Ch.B.	1	3	11
66 Selby U., Museum Hall	First Monday, 2 to 4 p.m.	Phyllis Eardley, M.B., Ch.B.	1	2	6
67 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	4
68 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	8
69 Shelf U., Witchfield Methodist Sunday School	First Wednesday, 2 to 4 p.m.	Katherine M. Hick, M.R.C.S., L.R.C.P.	1	1	—
70 Skipton U.D., Methodist Sunday School	First Monday, 2 to 4 p.m.	Henrietta Frost, M.B., B.Ch.	1	1	12
71 South Milford (Tadcaster R.D.), St. Mary's Sunday School	Fourth Friday, 2 to 4 p.m.	Katherine M. Hick, M.R.C.S., L.R.C.P.	1	1	8
72 Sowerby Bridge U.D., Allan House	First Tuesday, 2 to 4-30 p.m.	Janet M. Macmillan, M.B., Ch.B.	3	1	12
73 Springhead U.D., Congregational Chapel	Second Monday, 2 to 4 p.m.	Constance Dickson, B.A., M.B., B.Ch., L.M.	1	1	11
74 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	—
75 Stainforth (Thorne R.D.), New Wesleyan Chapel	First Wednesday, 11 a.m. to 1 p.m. and 2 to 4-30 p.m.	Helen Lindsay, M.B., Ch.B.	1	2	12
76 Stanley U.D., Zion Congregational Chapel	First Friday, 2 to 4 p.m.	Dorothy Summers, M.B., Ch.B.	1	1	10
77 Swallownest (Rotherham R.D.), Church Hall	Second Thursday, 2 to 4 p.m.	Dora Chapman, M.B., Ch.B.	1	1	10
78 Swillington (Tadcaster R.D.), Hut, near Church	First Thursday, 2 to 5 p.m.	Dorothy Summers, M.B., Ch.B.	1	—	14
79 Swinton U.D., Rock House	First and third Friday, 2 to 5 p.m.	Mary Boyd, M.B., Ch.B.	2	2	15
80 Tadcaster (Tadcaster R.), Shann House	Third Friday, 2 to 4 p.m.	Katherine M. Hick, M.R.C.S., L.R.C.P.	1	1	6
81 Thorne (Thorne R.), Temperance Institute	Alternate Mondays, 2 to 4 p.m.	Margaret M. Creaser, M.B., Ch.B.	1	2	12
82 Thurncroft (Rotherham R.D.), Methodist Church	First Thursday, 2 to 5 p.m.	Dora Chapman, M.B., Ch.B.	1	3	10
83 Thurnscoe U.D., St. Helen's Sunday School	Alternate Fridays, 2 to 5 p.m.	Barbara Demaine, M.B., Ch.B., D.P.H.	1	2	16
84 Wales (Kiveton Park R.D.), Methodist Chapel	Second and fourth Thursday, 2 to 4 p.m.	Marjorie Rushbrooke, M.B., B.S.	1	1	12
85 Wath-upon-Deane U.D., Dunford House	First and third Friday, 2 to 5 p.m.	Dora Chapman, M.B., Ch.B.	2	4	—
86 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	22
87 Wetherby (Wetherby R.D.), Methodist Chapel	First Friday, 2 to 3 p.m.	Osra M. Phillips, M.B., Ch.B.	2	4	7
88 Whitwood U.D., Memorial Hall	First Tuesday, 3 to 5 p.m.	Marjorie Steven, M.B., Ch.B.	1	1	14
89 Worsborough Bridge (Worsborough U.D.), Ambulance Hall	Alternate Tuesdays, 2 to 5 p.m.	Joan Gumpert, M.B., Ch.B.	2	3	6
90 Worsborough Dale (Worsborough U.D.), Wesleyan Sunday School	Alternate Tuesdays, 2 to 5 p.m.	Joan Gumpert, M.B., Ch.B.	2	3	20
91 Yeaton U., Town Hall	Third Wednesday, 10 to 12 noon.	Dorothy Summers, M.B., Ch.B.	1	3	10

TABLE LX.

## ANTE-NATAL CLINICS.

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

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
First	Carcroft Horsforth Kirk Sandall Mytholmroyd Selby Skipton	Denby and Cumberworth Hemsworth Maltby †Middlefield Otley Royston Sowerby Bridge Whitwood	Cortonwood Fitzwilliam *Conisborough †Guisley High Green Milnsbridge Shelf *Stainforth	Airedale Crofton Ecclesfield Edlington Grassington Horbury Meltham Rossington Swillington Thurcroft	Bentley Darton Chapelton Criggliestone Cudworth Dinnington Ferrybridge Hipperholme Penistone Queensbury Stanley Swinton Wetherby Wath
Second	Springhead	Knottingley Settle	Glasshoughton †Greetland *Moorends Outwood West Melton	Ardsley West Kiveton Park †Normanton Swallownest	Barnoldswick Birstall Darfield *Dunscroft Sprotborough Swinton (Birth Control)
Third	Marsden	Ferrybridge Mirfield Royston	Conisborough Cortonwood Milnsbridge †Yeadon Doncaster (Birth Control)	Airedale Allerton Bywater Edlington Horbury Lepton Rossington	Bentley Cudworth Dinnington Garforth Sharlston Swinton Tadcaster Wath
Fourth	Gawber	Knottingley	Glasshoughton Holmfirth West Melton	Dodworth Kiveton Park †Normanton Saddleworth	Dunscroft Earby South Milford Sprotborough Swinton (Birth Control)
Last				Askern Dalton Drighlington	Hebden Bridge
Alternate	Catcliffe Knaresborough Thorne	Worsborough Dale Worsborough Bridge	Ripon		Thurnscoe
Weekly	Hoyland.	Adwick-le-Street	†Leeds (Birth Control)	Rawmarsh	

† Sessions held in morning.

\* Sessions held in morning and afternoon.

All other sessions held in afternoon only.



TABLE LXI.

## ANTE-NATAL CLINICS.

The following table shews the distribution of the 49 Medical Officers at the various clinics:—

Conducted by whole-time School and M.C.W. Medical Officers.	Conducted by part time Medical Officers of Health of Sanitary Districts.	Conducted by part time Medical practitioners.	Conducted by part-time Officers not engaged in private practice.
Catcliffe Denby Dale Sowerby Bridge Normanton	*Maltby	*Outwood { Swinton { Darfield	{ Edlington { Kiveton Park { (Wales)
{ Carcroft { Conisborough		{ Bentley { Dunscoft	*Queensbury { Ferrybridge { Whitwood { Knottingley
{ Horbury { Marsden { Milnsbridge { Saddleworth		*Horsforth *Otley *Kirk Sandall Airedale Dinnington Glasshoughton	{ Allerton Bywater { Ardsley-E. and W. { Drighlington { Garforth { Guiseley { Stanley { Swillington { Yeadon
{ Cudworth { Hemsworth		{ Moorends { Rossington { Stainforth	{ Chapeltown { Hoyland
*Grassington		*Askern Rawmarsh *Fitzwilliam	{ Crofton { Darton { Gawber { Sharlston
		Knaresborough	{ Greetland { Holmfirth { Lepton { Meltham { Mirfield
		{ Dodworth { Worsboro Dale { Worsboro Bridge	Penistone
		Ripon	{ Hebden Bridge { Hipperholme
			{ Dalton { Ecclesfield { High Green { Thurnscoe
			Micklefield Mytholmroyd Selby Springhead Sprotborough. Thorne

\* Clinics conducted by male Medical Officers (M). All other clinics conducted by female Medical Officers (F).  
Clinics conducted by the same Medical Officer bracketed together.

## Consultant Ante-Natal Clinics.

In connection with the scheme to combat the high rate of maternal mortality in the Riding, further progress has been made by the establishment of consultant ante-natal clinics at Leeds, Sheffield and Doncaster.

These 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 clinics, and patients and 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 1936, 216 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 1936, 39 consultant clinics were held and 100 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 their 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 1936, 27 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 1936, 38 patients were referred to the several consultants in Sheffield.

### Domiciliary Consultations.

In connection with requests from medical practitioners for a consultant opinion, 51 patients were examined at their homes.

### Home Helps.

The question of the provision of home helps was considered by the Child Welfare Sub-Committee in November, 1931, but so far action in this matter has been postponed.

When the new salaried midwifery service comes into operation in July 1937, it will no doubt be necessary to re-open this matter. There is also some likelihood of Government Legislation to provide for a salaried service or payment of a fixed fee for Home Helps.

### Maternal Mortality.

Below are tables giving comparative statistics as to maternal mortality. It will be noted that the rates for 1936, 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 3.

TABLE LXII.

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
1926	1.60	1.66	2.52	3.16	4.12	4.82	70	73
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
Average for 10 years 1926-35	1.75	2.07	2.54	3.38	4.29	5.45	65	70
1936	1.40	1.70	2.41	2.65	3.81	4.35	59	63

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.

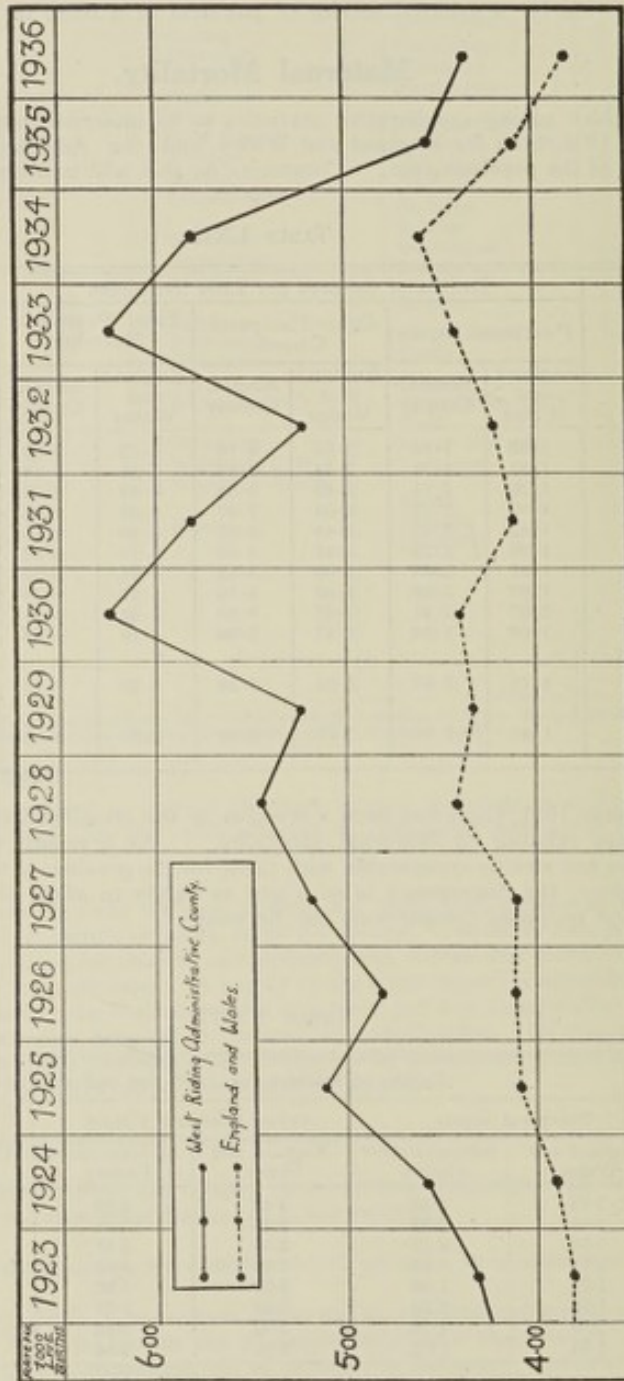
TABLE LXIII.

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

Columns 15-17 of Table IV, headed "Births, Deaths, Annual Rates, etc., 1936," folded in at page 18 contain the maternal mortality rates for the year 1936 and the average rates for the five years 1931-35 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.



*MATERNAL MORTALITY RATE PER 1000 LIVE BIRTHS  
IN THE WEST RIDING ADMINISTRATIVE COUNTY AND ENGLAND AND WALES  
DURING THE YEARS 1923 TO 1936.*



The following is a summary and report by **Dr. Rhoda Adamson** in respect of her analysis of the 96 deaths of women which were associated with pregnancy and reported in the County Council Maternity and Child Welfare Area during 1936.

TABLE LXIV.

Case No.	Age	Occupation.	Circumstances.	Cause of death.		Where death occurred.		Might death have been prevented if there had been:—			
				Sepsis.	Other causes.	Hospital.	Home.	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.
1	39	Housewife	Comfortable	—	Eclampsia, section.	1	—	—	—	—	—
2											
3	44	do.	Poor	—	A.P.H., placenta praevia.	1	—	Yes	—	—	Yes
4	31	do.	Very poor	—	Influenza, broncho-pneumonia, parturition.	— (In bed with husband)	1	Yes who was suffering from influenza	Yes	—	Yes
5	33	do.	Comfortable	Septicæmia, source doubtful.	—	1	Delivered	—	—	—	—
6	27	do. formerly mill hand	do.	—	Pulmonary embolism, partus, albuminuria.	1	Miscarried	—	—	—	—
7	36	—	Poor	?	Abortion, pulmonary embolism.	1	—	—	—	—	—
8	41	Housewife	Comfortable	—	Puerperal mania.	1	—	—	—	—	Yes
9	28	do.	do.	Septicæmia, self infection.	Mental.	—	1 (Removed perineal stitches with fingers and repeatedly examined vagina.	Yes (refused)	Yes	Yes	Yes
10	38	do	Poor	—	Late P.P.H.	1	—	—	—	—	—
11	30	do.	do.	Septicæmia.	—	1	—	—	—	—	—
12	26	do. formerly cotton winder	?	—	Accidental abortion, curetting under spinal anaesthesia percaïne. Inquest.	1	— (Idiosyncrasy to percaïne)	Yes	Yes	Yes	Yes
13	38	?	Very poor	Septicæmia.	—	—	1	Yes	—	—	—
14	36	Housewife	Comfortable	—	Acute pneumonia.	—	1	—	Yes	—	—
15	31	do.	do.	—	Syncope, forceps delivery under Evipan followed by excitement.	1	Delivered	Yes pyelitis	—	—	—
16	28	do.	Poor	Sepsis, general peritonitis.	—	1	Labour	Yes	Yes	Yes	Yes



TABLE LXIV.—(Continued).

Case No.	Age	Occupation.	Circumstances.	Cause of death.		Where death occurred.		Might death have been prevented if there had been:—			
				Sepsis.	Other Causes.	Hospital.	Home.	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.
17	19	Housewife	Poor	Septicæmia, long labour, 53 hours, Failed forceps.	—	1	Delivered	Yes	Yes	Yes	—
18	37	do.	do.	—	A.P.H., P.P.H.	1	—	Yes (gonorrhœa)	Yes	Yes	Yes
19	36	do.	Comfortable	Septicæmia.	—	—	1	—	Yes	Yes	—
20	40	do.	do.	—	Syncope, accidental A.P.H.	—	Undelivered	Yes	Yes	Yes	Yes
21	38	do.	Poor	—	Pulmonary oedema, chronic nephritis.	Advised not to become pregnant, uterus should have been evacuated.		—	—	—	—
22	27	do.	Comfortable	Septicæmia.	—	1	Delivered	Yes Chronic otitis	—	—	—
23	34	do.	Poor	—	Section, pulmonary embolism.	1	—	—	—	—	—
24	29	do.	Comfortable	Abortion, Septicæmia.	—	1	—	Yes, interference denied	—	—	—
25	28	do.	do.	Abortion, Septicæmia.	—	1	—	Yes ? Interference	—	—	—
26	32	do.	do.	—	Double mitral bronchitis, partus syncope.	—	1	Yes	Yes	Yes	Yes
27	33	do.	?	Abortion, Septicæmia.	—	Early evacuation and sterilisation should have been considered.		Yes, self induced	—	—	Yes
28	21	do.	?	Sepsis. Frequent self induced attempts at abortion.	—	—	1	Yes	—	—	Yes
29	23	do.	?	—	Toxic vomiting, hysterotomy.	1	—	—	—	—	—
30	30	do.	Destitute	—	Eclampsia, chronic nephritis.	1	Delivered	Yes	Yes	Yes	—
31	35	do.	Poor	Abortion, Septicæmia. Inquest.	—	1	—	Yes	—	—	—
32	30	do.	do.	Septicæmia, probable Erysipelas contact.	—	1	—	Yes	—	—	—
33	28	do.	do.	—	Lobar pneumonia, terminal abortion.	1	—	—	—	—	—
34	37	do.	Comfortable	—	A.P.H. placenta previa.	1	—	—	—	—	—

TABLE LXIV.—(Continued).

Case No.	Age	Occupation.	Circumstances.	Cause of death.		Where death occurred.		Might death have been prevented if there had been:—			
				Sepsis.	Other Causes.	Hospital.	Home.	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.
35	31	Unmarried, 3rd illegitimate	Destitute	—	Advanced chronic nephritis, myocarditis.	1	—	Yes	—	—	Yes
36	26	Housewife	Poor	Septicæmia. Failed forceps.	—	1	Failed forceps	Yes	Yes	Yes	—
37	38	do.	Comfortable	—	Found dead in bed. P.M. chronic nephritis, pericardial effusion. Pulmonary oedema.	Delivered	—	—	—	—	—
38	36	do.	do.	—	Ruptured ectopic. Oper. Acute pyelitis and anuria. Death from renal condition.	1	—	—	—	—	—
39	29	do.	Poor	—	Hyperemesis gravidarum evacuation.	1	—	Yes	—	—	—
40	37	—	do.	Abortion. Septicæmia.	—	1	—	—	—	—	—
41	35	do.	do.	Septicæmia. General peritonitis.	Placenta prævia, torn cervix.	1	—	Yes	—	—	—
42	37	do.	Comfortable	—	Broncho-pneumonia (influenzal). Diabetes, appendicitis. Partus	1	—	—	—	—	Unfit for childbearing.
43	40	do.	Poor	—	Endocarditis. Terminal abortion.	1	—	—	—	—	do.
44	32	do.	do.	Septicæmia. Pulmonary embolus.	—	1	—	—	—	—	—
45	35	do.	Destitute	—	Broncho-pneumonia, partus.	—	1	Yes	Yes	—	Yes, self-neglect.
46	35	do.	Poor	Septicæmia. Compound Potts fracture and placenta prævia.	—	1	Transferred from General Surgical ward. Would have been better delivered where she was in the infirmary.	—	—	—	Yes, attempted self-induced abortion.
47	20	?	Comfortable	—	Subacute yellow atrophy of the liver. Full time pregnancy.	1	—	Yes	—	—	—
48	29	Housewife	do.	—	Asthma of pregnancy. Evacuation, P.M. and inquest.	1	—	—	—	—	—
49	18	do.	?	—	Concealed A.P.H. and eclampsia.	1	—	Yes	Yes	Yes	Yes
50	25	do.	?	—	Mitral stenosis, partus.	—	1	—	Yes	Yes	—



TABLE LXIV.—(Continued).

Case No.	Age	Occupation.	Circumstances.	Cause of death.		Where death occurred.		Might death have been prevented if there had been:—			
				Sepsis.	Other Causes.	Hospital.	Home.	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.
51	42	Housewife	?	—	Eclampsia.	1	—	Yes	—	—	Yes
52	23	do.	Poor	—	Eclampsia, pregnant 6½ months.	1	—	—	—	—	—
53	27	do.	Comfortable	—	Obstetric shock, long labour. Failed forceps, manual removal of retained placenta.	1	—	—	Yes	Yes	—
54	?	do.	?	Septicæmia. General peritonitis. Drainage.	—	1	—	—	—	—	—
55	23	do.	Poor	—	Toxæmia preceding pyelonephritis.	1	—	Yes, greatly neglected	Yes earlier	Yes earlier	Yes
56	40	do.	do.	Abortion. Septicæmia.	—	1	—	Yes	—	—	Yes
57	24	do.	Comfortable	P.P.H. Septicæmia. Secondary P.P.H.	—	—	1	—	—	Yes	—
58	?	do.	do.	Pneumonia. Sepsis. Peritonitis.	—	1	Delivered at home	—	—	—	—
59	36	do.	Destitute	—	A.P.H. placenta prævia.	1	—	Yes	Yes earlier	Yes	Yes, neglect.
60	32	do.	Poor	Peritonitis. Section for occlusion of cervix. Preceding sepsis.	—	1	—	Yes	Yes	Yes	Yes
61	34	do.	Comfortable	—	Phlebitis. Pulmonary embolism	—	1	—	—	—	Yes, refused to stay in bed
62	37	do.	Poor	Septicæmia.	—	1	Delivered at home, forceps	—	—	—	—
63	28	do.	do.	Abortion self induced. Sepsis. Peritonitis.	—	1	—	Yes	—	—	Yes
64	36	?	Comfortable	Sepsis after difficult labour. Pulmonary infarct.	—	1	—	—	—	—	—
65	40	Housewife	?	—	Concealed accidental A.P.H. 6½ months pregnant.	1	—	Yes	—	—	Yes
66	33	do.	Poor	P.P.H. Manual removal of placenta. Sepsis.	—	1	Delivered at home	—	Yes	Yes	—
67	30	do.	do.	Ruptured uterus. Shoulder presentation. General peritonitis. P.M. inquest.	—	1	Attempted version at home	Yes 3 days delay in sending for midwife.	Yes	Yes	Yes
68	28	do.	do.	—	Accidental A.P.H.	1	—	—	Yes	Yes	Yes

TABLE LXIV.—(Continued).

Case No.	Age	Circumstances.	Occupation.	Cause of death.		Where death occurred.		Might death have been prevented if there had been:—			
				Sepsis.	Other causes.	Hospital.	Home.	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.
69	36	Housewife	Comfortable	—	Toxaemia.	1	—	—	8 pregnancies	in 11 years.	—
70	39	do.	Poor	Prolonged labour. Failed forceps. Craniotomy after 6 days. Pelvic cellulitis. Broncho-pneumonia.	—	1	—	—	—	Yes earlier	—
71	31	do.	do.	—	Toxaemia, terminal abortion.	1	—	—	—	—	—
72	32	do.	Comfortable	Toxaemia. Sepsis.	—	1	Delivered at home	Yes	Yes	Yes	Yes
73	33	do.	do.	—	Puerperal mania. Pulmonary embolism.	1	Delivered at home	—	—	—	—
74	38	do.	Poor	—	Mitral stenosis. Pulmonary infarct, undelivered 24 weeks.	1	—	—	—	—	Yes
75	32	do.	Comfortable	—	Wassermann reaction positive Toxic. Precipitate labour, obstetric shock. Retained placenta, P.P.H.	1	—	—	—	—	—
76	35	do.	Poor	—	A.P.H. marginal placenta praevia, puerperal mania, pulmonary embolism.	1	—	—	—	—	—
77	35	do.	do.	Long labour. A.P.H. Placenta praevia. Tear in fornix from packing at home. Sepsis. General peritonitis. P.M. Inquest.	—	1	—	—	Yes earlier	Yes	—
78	25	do.	Comfortable	—	Post operative massive collapse of lung after operation for retroverted gravid uterus.	1	—	—	—	—	—
79	28	do.	Poor	—	Toxaemia, impacted shoulder delayed labour (3 days), obstetric shock.	1	—	Yes	—	—	—
80	34	do.	Comfortable	—	Eclampsia.	1	—	Yes	—	Yes	—
81	25	do.	Poor	Septicaemia. Embolism.	—	1	Delivered at home	—	—	Yes earlier	—
82	32	do.	Comfortable	—	Toxaemia, cerebral haemorrhage 8 weeks pregnant.	1	—	Yes	—	—	Yes earlier
83	?	do.	Poor	—	A.P.H., central placenta praevia, section, syncope.	1	—	Yes	Yes	Yes earlier	Yes



TABLE LXIV.—(Continued).

Case No.	Age	Occupation.	Circumstances.	Cause of death.		Where death occurred.		Might death have been prevented if there had been:—			
				Sepsis.	Other causes.	Hospital.	Home.	Better ante-natal supervision.	Better obstetric facilities at delivery.	Specialist treatment in hospital.	Intelligent co-operation of patient.
84	27	Cotton weaver	Comfortable	—	Empyema, source of infection not traced, pelvis normal.	—	1	—	—	—	—
85	28	Housewife, formerly mill hand	do.	—	Pulmonary tuberculosis, valvular heart disease.	—	1	—	—	—	—
86	21	?	?	—	Hyperemesis gravidarum. Toxic myocarditis, 16 weeks pregnant. Evacuation.	1	—	Yes	Yes earlier	Yes earlier	—
87	27	?	Poor	Septicæmia. Peritonitis secondary to salpingitis.	—	1	Delivered at home	—	—	—	—
88	24	Housewife	?	—	Malignant disease of thyroid. Toxic myocarditis. Cerebral hæmorrhage.	1	—	Not fit for child bearing.	—	—	—
89	35	do.	Poor	—	Failed forceps, failed version, myomatous uterus, section ileus paralyticus.	1	—	Yes	Yes earlier	Yes	Yes
90	28	do.	do.	—	Accidental A.P.H.	1	—	Yes	—	Yes	Yes
91	42	do.	do.	—	Hydramnios, S.B. twins, retained placenta and P.P.H. Obstetric shock.	1	Twins born, born at home	—	Yes	Yes	—
92	24	?	?	Septicæmia. Pulmonary embolus.	—	1	Delivered at home	—	—	—	—
93	41	?	?	—	Delivered 1 month, chronic nephritis, chronic bronchitis, coronary thrombosis.	—	1	—	—	—	—
94	40	Housewife	?	—	Cardiac failure, chronic bronchitis. Bronchiectasis and pregnancy, undelivered.	1	—	—	—	—	—
95	27	?	?	Septicæmia. Abortion. Toxæmia of pregnancy. Cardiac failure.	—	1	—	Yes	—	—	—
96	?	Housewife	?	—	Severe chorea gravidarum, 4 months pregnant, sudden syncope.	1	—	—	—	—	—

During the year 1936 there were 96 deaths in association with pregnancy in the County Maternity and Child Welfare area.

Of these, 10 women died undelivered and 8 women suffered from some fatal condition complicated by a terminal abortion or were treated by therapeutic evacuation of the pregnancy in an unsuccessful attempt to save the patient's life.

There were 9 cases of abortion probably due to criminal interference and 1 patient died from a ruptured ectopic pregnancy.

Two patients died as a result of catastrophes associated with the administration of anaesthetics. Case 12 was given a spinal anaesthetic of percaine for a curetting after an accidental abortion and possessed an idiosyncrasy towards this drug which produced a fatal result and case 15 was given an intravenous injection of evipan for an easy forceps delivery in her own home by her family doctor. Return to consciousness was accompanied by acute mania and ended in sudden death. 44 babies were born alive and of these 3 died during the neonatal period. 19 women were delivered of 20 still-born foetuses. Thus there were only 41 surviving children from these 96 fatal pregnancies.

Of the undelivered cases 3 cases were toxic as a result of their pregnancy and 2 cases suffered from severe ante-partum bleeding. These all died of conditions directly due to the pregnancy.

One patient had malignant disease of the thyroid gland from which she died, one case suffered from chronic nephritis, one case had bronchiectasis with cardiac embarrassment. These 3 cases were not fit to become pregnant and contraception should have been practised.

Of the delivered cases there were 5 cases of advanced renal disease and 3 cases of organic heart disease with failure of compensation. Their death was definitely hastened by the strain of pregnancy and labour upon diseased organs. 8 patients died of pulmonary disease. Of these, 1 developed severe asthma as a toxic manifestation and died of it. 2 cases with bronchopneumonia, 2 with lobar pneumonia, 1 influenzal pneumonia, 1 severe bronchitis and 1 case of organic heart disease complicated by pulmonary tuberculosis could not support the extra exertion of labour at the height of their acute disease and died of syncope after delivery.

There were 17 deaths from grave toxæmia of pregnancy and of these the immediate cause of death was eclampsia in 5 instances. One case died of acute yellow atrophy of the liver post-partum and 1 patient died of cerebral hæmorrhage when only 8 weeks pregnant.

There were 12 instances of fatal ante-partum hæmorrhage. Five patients suffered from accidental ante-partum bleeding and 7 had bleeding from a placenta prævia site. The seriousness of preceding toxic symptoms was apparently not appreciated in the first group and warning hæmorrhage in the second group was treated too lightly. In all 12 cases the patients came to treatment in an institution by an obstetric specialist in such a condition that it was unreasonable to expect a safe outcome to treatment carried out along accepted scientific lines. At this stage of general obstetric teaching it should be unnecessary to repeat that known toxæmia of pregnancy and ante-partum hæmorrhage, however slight, should be treated with respect in bed with competent nursing in an institution where the services of a skilled obstetric surgeon are available at short notice if an emergency should arise.

If the number of beds available for such ante-natal cases is insufficient the provision of a further number should be looked upon as a prime necessity.

There were 35 cases of septicæmia including 9 following an abortion, 1 insane patient who infected herself by repeated vaginal examinations on herself after delivery and two cases where repeated attempts to produce abortion had been made by the patients unsuccessfully earlier in the pregnancy.

In 10 cases of death from sepsis, pregnancy and labour were entirely uneventful and there was no obvious source of infection. In 1 normal case delivered in hospital a near neighbour was removed to the local fever hospital with erysipelas on the same day as the maternity case left home in labour. It is possible that the one case here may have infected the other before the two were removed to their respective hospitals.

There was a history of complicated labour and operative interference in 10 instances. Of these, 1 patient was definitely neglected by the midwife in charge, who left the patient for three days with an impacted shoulder presentation before she recognised an abnormality and sent for medical aid. On finally reaching the care of an obstetric specialist she had already a ruptured uterus and an infected peritoneum (case 67). One case (No. 77) had a torn cervix up into the lower uterine segment from packing introduced by the doctor at home before sending the patient into hospital with a bleeding placenta prævia. One case (No. 60) had an occlusion of the cervix and scarring of the vaginal vault so that all landmarks were obliterated from preceding attempts to procure an abortion in a multipara. The cavity of the uterus was recognised to be infected during the ensuing cesarian section but the abdomen was closed without drainage leaving the uterus with a stenosed cervical canal in situ, with a resulting death from general peritonitis. Case 70 was in labour for six days and during that time delivery was unsuccessfully attempted with forceps and the uterus finally evacuated after craniotomy. Case 17 was in labour 53 hours during which time attempts were made at forceps delivery.

In most cases of septicæmia recorded, no investigation was undertaken to identify the organism. There was therefore no general scientific basis for treatment of these cases nor a possibility of elimination of further infection from possible contacts. Such an investigation would have been especially useful in the routine care of those cases following uncomplicated deliveries. It would appear desirable for puerperal pyrexia cases, from whatever source, to be treated in a well equipped institution which is served by a bacteriological department on the spot.



In addition to the above causes of maternal death, there were 5 cases of post-partum hæmorrhage with retained placenta who died of shock after manual removal of the placenta. It should be recognised that most cases of this abnormality are better treated by warmth, intravenous transfusion and, after improvement in the patient's condition, by injection of the cord to promote placental separation to obviate the shock associated with insertion of the hand into the uterus. A simple apparatus for injection of the umbilical cord can easily be carried in the obstetric bag.

Reviewing the total list of deaths for the year, one gains the impression that some lives have been lost by neglect of the ordinary principles of antenatal care, partly on the part of the patients themselves and partly on the part of those who have made themselves responsible for their pregnancy and labour. Certain grave abnormalities have been looked upon as "minor midwifery" and their treatment undertaken under impossible conditions by practitioners who would not have hesitated to send the patients into hospital at once if their experience had been more extensive.

Apart from these considerations for some of the cases a definite proportion of fatalities occurred in women who were suffering from disease which precluded an entirely safe pregnancy and labour. The question of a popular conscience with regard to fitness for motherhood has yet to be born.

R. H. B. ADAMSON.

### Maternity Homes.

The County Council has arrangements with 30 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 3,274. This figure shows an increase of 72 over the previous year. The main increases occurred at Huddersfield Municipal (38); Huddersfield Royal (16); Wakefield Municipal (69); and York Municipal (24). Decreases in admissions were recorded at Ilkley Private (15); Leeds Maternity Hospital (71); Jessop Hospital for Women at Sheffield (28). Statistics relating to these admissions are given in Table LXV on page 96.

In addition to the above-mentioned accommodation there are 60 beds available in the County Public Assistance Institutions, and information with regard to these is given in Table LXVI on page 97.

Schemes for the provision of maternity home accommodation received further consideration during the year; they dealt mainly with the Harrogate and South Yorkshire areas:—

#### Harrogate and District General Hospital.

Satisfactory working arrangements have now been made between the Hospital Committee, the Harrogate Corporation and the County Council for the erection in the grounds of the hospital of a maternity block, containing 12 maternity and 2 isolation beds. This increased accommodation necessitates extensions to the nursing staff quarters and the total cost of the scheme is approximately £10,500. Of this the County Council will contribute £2,994 and the Corporation £736, the remainder of the cost being met by the Hospital Committee. It is proposed to allocate the 12 beds as follows:—

- 6 will be maintained by the hospital.
- 3 will be maintained by the Harrogate Corporation at the actual ascertained cost not exceeding £3 3s. 0d. per week.
- 3 will be maintained by the County Council.

The plans have now received the final approval of the Ministry of Health.

#### South Yorkshire.

Further progress has been made towards the provision by the County Council of two homes of 20 beds each, at Wickersley (Rotherham R.) and at Chapeltown (Wortley R.), to serve a combined population of approximately 165,000.

The home at Wickersley is in course of construction and will in all probability be ready for the reception of patients towards the end of 1937.

The home at Chapeltown is to be erected on the Greenhead Farm Estate at a cost approximating to that at Wickersley and plans are now before the Ministry of Health.

#### Doncaster Royal Infirmary.

During the year negotiations have been proceeding between the Infirmary Board, the Doncaster Corporation and the County Council regarding the provision of a maternity unit proposed to be attached to the Doncaster Royal Infirmary.

The Corporation intimated that they did not wish to participate in this joint scheme as they (the Corporation) had an alternative proposal under consideration. In these circumstances the County Council is continuing negotiations on its own account and conferences have taken place with officials of the Ministry of Health and the Board's architects with a view to the submission to the County Council in the near future of a complete scheme for the erection of a maternity unit of 80 beds to serve a large populous area around Doncaster.

It is proposed to allocate the 80 beds as under:—

Ante-natal and normal cases	...	...	...	...	42
Potentially septic cases	...	...	...	...	12
Separation unit (for observation cases)	...	...	...	...	6
Isolation unit (for septic cases including septic abortions)	...	...	...	...	10

In addition, accommodation is to be found for 10 beds for non-septic abortion cases, either in a separate block or preferably in the main Infirmary building.

In making provision for an extension of the existing nurses' home at the Doncaster Royal Infirmary due consideration will be given to the requirements of the Midwives Act, 1936, relating



to "Refresher Courses" for midwives, and to the possibility of such a large number of beds being recognised by the Central Midwives Board as a training school for pupil midwives.

#### **Leeds Maternity Hospital.**

In connection with the admission of West Riding patients to the Leeds Maternity Hospital, arrangements were made during the year for such cases who require surgical nursing to be sent to the Ida Convalescent Home, Leeds, at a cost of 35/- per patient per week. This arrangement relieves to some extent the heavy pressure on the beds at the Maternity Hospital and also reduces the cost to the County Council of patients requiring extended treatment on account of some surgical operation, i.e., caesarian section, appendicectomy, or other abdominal operations.

#### **Ilkley Maternity Home.**

During the year, the County Council terminated the arrangement whereby West Riding patients were admitted to the Ilkley Maternity Home. The decision to terminate this agreement followed upon the increase from £5 5s. 0d. to £7 7s. 0d. in the charge of fees per patient per week.

#### **Royal Halifax Infirmary.**

During the year, consideration was given to an application by the Board of Management of the Halifax Royal Infirmary for an annual grant towards the cost of the treatment of West Riding patients.

This hospital relies on voluntary subscriptions and the Board are of the opinion that patients treated in this Institution should not be asked to repay any part of the fees for treatment. In consequence the Board have not submitted any accounts to the County Council in respect of patients whose income exceeded the sum of 30/- per week.

In one particular year it was stated that after taking into account voluntary contributions by patients and fees paid by the County Council, the nett cost to the Hospital for the treatment of West Riding maternity cases was £900.

As a contribution to this deficit for the year ending 31st March, 1937, the County Council decided to make a grant of £350, such sum to include any payment already made to the Infirmary in respect of maternity patients from the County Maternity and Child Welfare Area during that period.

#### **County Maternity Home, Mexborough.**

The work undertaken during the year at the County Maternity Home, Montagu Hospital, Mexborough, is given below:—

Twenty maternity beds are provided by the County Council, and during 1936, 385 patients were admitted, and 339 cases delivered, the average duration of stay being 14 days.

The midwives employed in the wards delivered 321 cases and the doctors 18 cases. Medical assistance was sought in 89 cases, an increase of eighteen over the previous year. One case of puerperal fever and five cases of puerperal pyrexia were notified during 1936. There were no cases of pemphigus neonatorum, but two cases of ophthalmia neonatorum were notified and after treatment were cured.

The number of infants not entirely breast fed while in the institution was 24.

Three maternal deaths occurred during the year, the same number as in the previous year.

The cause of death in these three cases was:—

1. Post-operative shock—Caesarian section—eclampsia.
2. Ante-partum hæmorrhage—post-partum hæmorrhage.
3. Obstetric shock—twin pregnancy—manual removal of placenta.

Number of infant deaths:—

- (i) Stillborn 18 (a decrease of 5 from the previous year).
- (ii) Within 10 days of birth, 5 (an increase of one over the previous year).

The still-births were ascribed to:—

Ante-partum hæmorrhage 5; breech deliveries 4; anencephalic 1; prolapsed cord 1; albuminuria 2; delayed labour 1; prematurity 4.

The deaths of infants were due to:—prematurity (3); congenital debility (1); hydrocephalic (1).

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.



The arrangements whereby other Local Authorities exercising their own powers under the Maternity and Child Welfare Act, are allowed to send patients to the maternity wards at the County Maternity Home, are working satisfactorily and the distribution of the 385 cases admitted during 1936 was as under:—

West Riding (M. & C.W. area) ... ..	269
Bolton-upon-Deane Urban District ... ..	48
Mexborough Urban District ... ..	62
Wombwell Urban District ... ..	6
	<hr/> 385 <hr/>

#### Deaths in Maternity Homes.

Although the majority of admissions to maternity homes are of an abnormal character, it is gratifying to report that at 20 of these homes there were no deaths of West Riding women. At the remaining 10 there were 32 deaths of women in childbirth, the same number as for the previous year.

The majority of deaths occurred at Edenfield, Doncaster (9), (where as pointed out in previous reports 90% of the cases are admitted in emergency, Harrogate and District General Hospital (4), and Leeds Maternity Hospital (4).

#### MATERNITY PATIENTS ADMITTED TO HOSPITALS AND MATERNITY HOMES.

The following table gives particulars regarding the admission of patients to Maternity Homes during 1936:—

TABLE LXV.

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 1936	Deaths of Mothers	Deaths of Infants	Still-Births	Fees of Home per week
1	2	3	4	5	6	7
1. Barnsley Corporation ... ..	7	39	—	2	4	£ 3 3 0
2. Batley Corporation ... ..	10	13	—	—	—	3 0 0
3. Blackburn Corporation ... ..	20	—	—	—	—	4 14 6
4. Bradford Royal Infirmary ... ..	—	36	—	—	2	3 3 0
5. Burnley Corporation ... ..	21	1	—	—	—	4 4 0
6. Castleford U.D.C. ... ..	13	151	—	2	6	4 4 0
7. Colne Corporation ... ..	16	83	—	3	4	4 4 0
8. County Maternity Home, Montagu Hospital, Mexborough ... ..	22	385*	3	5	18	3 7 6
9. Doncaster, Edenfield (Private) ... ..	33	577	9	18	41	3 7 6
10. Goole Corporation ... ..	4	26	—	—	1	3 3 0
11. Royal Halifax Infirmary ... ..	26	178	3	7	11	2 9 0
12. Halifax General Hospital ... ..	35	61	2	1	2	2 12 6
13. Harrogate and District General Hospital ... ..	6	57	4	5	9	3 3 0
14. Heckmondwike Nursing Association ... ..	7	1	—	—	—	2 7 0
15. Holmfirth, Holme Valley Memorial Hospital ... ..	5	76	—	2	3	3 3 0
16. Huddersfield Corporation ... ..	32	276	—	6	8	4 0 0
17. Huddersfield Royal Infirmary ... ..	15	56	—	2	8	3 3 0
18. Ilkley ... ..	11	25	—	—	—	5 5 0
19. Keighley, St. John's Hospital ... ..	14	28	—	—	1	2 12 6
20. Leeds Maternity Hospital ... ..	140	487	4	16	34	3 15 10
21. Morley Corporation ... ..	8	35	—	—	1	3 5 0
22. Oldham Corporation ... ..	15	24	—	—	1	3 3 0
23. Ripon Nursing Institution ... ..	5	39	—	—	1	4 4 0
24. Rotherham Corporation ... ..	10	12	—	—	—	3 17 6
25. Sheffield, Jessop Hospital for Women ... ..	28	256†	2	12	36	3 3 0
26. Shipley and Bingley Joint Municipal ... ..	19	—	—	—	—	3 10 0
27. Skipton and District Hospital ... ..	6	111	2	3	11	3 7 6
28. South Elmsall, etc. ... ..	6	5	—	1	1	3 3 0
29. Wakefield Corporation ... ..	35	136	2	4	11	3 3 0
30. York Corporation ... ..	30	100	1	—	6	3 7 6
	599	3274	32	89	220	

\* This figure includes 62 cases from Mexborough, 48 from Bolton-upon-Deane, and 6 from Wombwell Urban Districts, where the local Councils are the authority for administering the Maternity and Child Welfare Act.

† 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), Royal Halifax Infirmary, Huddersfield Royal Infirmary, Leeds, Sheffield and York, where the fees are inclusive, a surgeon's fee is chargeable for special cases.

The total number of admissions of West Riding patients to maternity homes in the County and neighbouring County of Lancashire numbered 3,274, against 3,202 in 1935, an increase of 72 patients.

### 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 1936, 444 patients were admitted. The following table gives particulars of these institutions, shewing beds available, cases admitted, and number of maternal and foetal deaths.

TABLE LXVI.

Name of County Institution.	No. of maternity beds.	No. of cases admitted during 1936.	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	81	75	6	24	—	4	—	1	1	12	7
2. Clayton ... ..	6	13	11	2	1	—	—	—	—	—	2	—
3. Goole ... ..	4	3	3	—	—	—	—	—	—	—	—	1
4. Grenoside ... ..	1	2	2	—	—	—	—	—	—	—	—	—
5. Hemsworth ... ..	2	3	3	—	—	—	—	—	—	—	—	—
6. Keighley ... ..	14	258	212	46	23	—	2	—	—	—	3	12
7. Knaresborough ... ..	4	10	10	—	—	—	—	—	—	—	—	2
8. Otley ... ..	2	4	4	—	—	—	—	—	—	—	—	—
9. Pontefract ... ..	5	12	12	—	—	—	—	—	1	—	1	—
10. Ripon ... ..	3	3	1	2	—	—	1	—	—	—	—	—
11. Selby ... ..	2	32	24	8	9	—	—	1	—	—	1	1
12. Settle ... ..	2	2	—	2	—	—	—	—	—	—	—	—
13. Skipton ... ..	1	1	1	—	—	—	—	—	1	—	—	—
14. Tadcaster ... ..	1	1	1	—	—	—	—	—	—	—	—	—
15. Todmorden ... ..	1	2	2	—	—	—	—	—	—	—	—	—
16. Wakefield ... ..	2	17	16	1	1	5	1	—	2	2	—	1
	60	444	377	67	58	5	8	1	5	3	19	24

**MATERNAL DEATHS.** Three maternal deaths occurred in two institutions, a decrease of six from the previous year.

**INFANT DEATHS.** These numbered 24, an increase of three over 1935.

**MIDWIVES.** In the 16 County Institutions referred to above, 35 midwives notified their intention to practise.

### 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 July 1934, 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 5/- for each child under 14 years of age, and not working.	Amount payable by Patient.
Does not exceed 30/- per week ... ..	Nil
Between 30/- and 40/- per week ... ..	Amount of Maternity Benefit received
Between 40/- and 50/- per week ... ..	Half Fees.
Exceeds 50/- per week ... ..	Whole Fees.

In ascertaining the weekly income of the family, the average earnings for the four weeks preceding the birth are taken.

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:—

	1932	1933	1934	1935	1936
Whole fees ... ..	308	179	280	315	349
Half fees ... ..	263	334	250	320	264
Maternity benefit ... ..	464	979	681	426	288
	<u>1,035</u>	<u>1,492</u>	<u>1,211</u>	<u>1,061</u>	<u>881</u>

The following statement is for the period 1st October, 1935 to 30th September, 1936.

	£.	s.	d.	£.	s.	d.
Amount outstanding 1st October, 1935 ...	1,747	1	6			
Less amounts written off ... ..	519	8	11			
				1,227	12	7
Accounts rendered ... ..				5,531	0	10
				6,758	13	5
Less fees collected by West Riding Treasurer				4,188	8	11
Amount outstanding 30th September, 1936 ...				2,570	8	11

### RECOVERY OF MATERNITY BENEFIT IN RESPECT OF MATERNITY HOME FEES.

During the year consideration was given to the provisions of Section 3 of the National Health Insurance and Contributory Pensions Act, 1935, whereby under certain circumstances the maternity benefit payable to married persons, where the confinement takes place in a maternity home, may be paid direct to the authorities of the maternity home and applied towards the cost of treatment.

The Midwives Act, 1936, will be in full operation by the 31st July, 1937, and the consequent provision of domiciliary midwifery service may have some effect on the number of admissions to maternity homes. It was decided therefore to defer consideration of action to be taken regarding maternity benefit until practical experience of the effect of the new domiciliary service of salaried midwives has been obtained.

### Supply of Milk to Expectant and Nursing Mothers and Children under Five Years of Age.

The County Council's scheme for the distribution of milk is as follows:—Dried milk only is supplied because of its convenience in handling, its concentration and the greater ease of recovering 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, and
- Expectant mothers.

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:—

- In districts having a Child Welfare Centre where the Medical Officer of the Centre is of opinion that a supply is essential "on grounds of health."
- In districts where there is no Centre when the local Medical Officer of Health is of opinion that a supply is essential "on grounds of health."

A special Sub-Committee deals with all applications for a supply of dried milk free or at less than cost price, to review circumstances of all people making application, and all authorisations for such supplies.

The Committee determine the degree of "necessity" in each case and have adopted a fixed scale of income below which dried milk may be distributed free or at less than cost price.

The following scale of family income has been adopted by the Committee as a guide to the supply of dried milk free, or at less than cost price, viz:—

Where the net weekly income of the family, after deducting 5/- for each child under 14 years of age, does not exceed 30/-, the County Council provide dried milk free.

Where the net weekly income of the family, calculated as above, is over 30/-, but does not exceed 40/-, the County Council provide dried milk at half the cost price.

Where the net weekly income of the family, calculated as above, exceeds 40/-, the applicant must pay the cost price for dried milk.

In ascertaining the weekly income of the family, the average earnings for the four weeks prior to the application is 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 the statement.

The certificate of the Medical Officer that milk is needed on "grounds of health" is valid for four weeks and may be renewed where the applicant's family circumstances have not improved. Each applicant signs a receipt in the space provided on the form. Stock books, vouchers, etc., are kept and stock is taken quarterly.

During 1936, 281,116 lb. cartons of dried milk were distributed at child welfare centres. Of this number, 161,363 lb. cartons were issued free of cost and 119,797 were sold at cost or half price.

On the 6th March, 1935, the Child Welfare Sub-Committee authorised the supply of three standard dried milk powders in accordance with prescriptions prepared by the County Medical Officer. These are supplied to child welfare centres for sale and distribution in 1-lb. cartons bearing the name of the County Council in place of a proprietary name, and are sold at 1/5 per 1-lb. carton. These milks are known as Sunrose No. 1, No. 2 and No. 3.

Hitherto the practice in regard to the issue of milk, etc., from child welfare and ante-natal centres has been to require the mother to attend herself if she needed the milk, or to bring the child if the latter was to be the recipient. The medical officer at the centre then certified that a supply of milk was necessary on medical grounds and at the same time consideration was given to the financial circumstances of the family.

In many districts it is not always convenient or even possible for a mother or child to attend at a centre at the appointed time owing to illness, difficulties in regard to travelling, etc. The County Council has, therefore, decided to extend the scheme for the supply of milk from child welfare centres so as to make it possible for the medical attendant of a family to sign the necessary certificate which, along with the prescribed form relating to the family circumstances, may be presented by a member of the family at the child welfare centre for the purpose of obtaining a supply of milk either free or at reduced price.

The following is a list of foods officially authorised for sale and distribution:—

Sunrose No. 1.	... Full cream dried milk powder ...	...	...	...	...	...	...	...	...
Sunrose No. 2	... Full cream dried milk powder with added iron and calciferol ...	...	...	...	...	...	...	...	...
Sunrose No. 3	... Humanised milk, half cream ...	...	...	...	...	...	...	...	...
Cow & Gate ...	... Full cream ...	...	...	...	...	...	...	...	...
Fresh milk ...	... This is only supplied where dried milks have been tried and found to be unsuitable.								
Glucose D. ...	... This is now being widely recommended by ante-natal officers for expectant mothers and is available in 14-lb. tins at a cost of 16/6d.								
Virol ...	... 1/4d. per lb. carton.								
Malt and Cod Liver Oil ...	Supplied in 1-lb. containers at 6/- per dozen.								
Pure Cod Liver Oil ...	Supplied in 8-oz. bottles, 7/- per dozen. (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 ...	Made up in 8-oz. bottles at 6/- per dozen.								
Olive Oil ...	Supplied in 10-oz. bottles at 8/- per dozen.								

### 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.

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 5/- for each child under 14 years of age and not working	Amount payable by patient	Amount payable by County Council
Does not exceed 30/- per week	Nil	Whole Fees
Is between 30/- and 50/- per week	Half Fees	Half Fees
Exceeds 50/- per week	Whole Fees	Nil

Where exceptional cases exist which render the payment of a whole or the portion of the fee a hardship, the case is specially reported to the Committee.

During 1936, 358 expectant and nursing mothers received treatment under this scheme at a total cost to the County Council of £2,122 5s. 0d.

## Convalescent Treatment for Mothers and Infants.

A stay in a Convalescent Home is specially important for recovery after certain cases of confinement, and for some conditions in young children.

The County Council have arrangements with the following Institutions for the admission of mothers and children:—

TABLE LXVII

Name of Convalescent Home.	Class of Patient admitted.	No. of W.R. patients admitted during 1936.	Fees of Home per week.
			£ s. d.
Scarborough, Royal Northern Sea Bathing Infirmary ... ..	Mothers	24	Letter of Recommendation ... 1 1 0 Board, etc. ... 0 12 6
Bridlington, St. Anne's ... ..	Mothers	—	Letter of Recommendation ... 1 5 0 Board, etc. ... 0 15 0
Ilkley ... ..	Mothers	—	Board, Residence, etc. 1 0 0
Wentbridge, Convalescent Home for Children ... ..	Children	—	do. ... 0 10 0
Yorkshire Home, Withernsea ... ..	Mothers and Babies	40	do. ... 1 15 0
Do. Harrogate ... ..	do.	32	do. ... 1 15 0
		96	

## Children under School Age.

In May, 1936, the Minister of Health issued Circular 1550, with reference to the supervision of the health of children between the ages of 18 months and 5 years. The Circular deals mainly with the unsatisfactory condition of many children when they enter school.

(1) It is generally conceded that babies are well cared for up to the end of 12 or 18 months while they are attending child welfare centres. The result of the work at the child welfare centres and of health visitors is shown in the infantile mortality rate, which for the past three years has remained fairly stationary in the Riding at a figure of 60 deaths of infants under one year per thousand births.

(2) The Minister points out that in many areas insufficient attention has been given to the health of young children between the ages of 18 months and 5 years. It is understood that more than 16% of the children entering school are found to require treatment for some disease or defect, and many of these conditions could have been quickly cured if adequate supervision of the health of the children had been exercised throughout the pre-school years. The experience in the West Riding is that after the children have attained the age of 18 months the attendances fall off, with a consequent decline to some extent in the condition of the children.

Of the 281,308 attendances of children at child welfare centres during 1936, 127,501 were made by the 14,845 children between the ages of 1 and 5 years who were on the registers at child welfare centres at the end of 1936. Taking each year separately the number of births occurring in the County Maternity and Child Welfare Area shows that approximately only 20% of toddlers continued to attend at child welfare centres.

In addition to attendance at centres the health visitors make domiciliary visits and during 1936 the number of visits to such children was 128,779. In the Administrative County during 1936 there were 534 deaths of children between the ages of one and five years which gives a "toddlers" death rate of approximately 6.0 per thousand of toddlers living. The most frequent causes of death were diphtheria, other acute infectious diseases, pulmonary tuberculosis, non-pulmonary tuberculosis, respiratory ailments, digestive diseases, certain forms of accident or violence.



The school medical inspection staff have been asked to make a report on "Entrants" to the schools at five or younger, who show signs of malnutrition. There will be very few in class "D" but the number classified as "C" may be sufficient to give some safe guidance as to the causes of low grade nutrition.

A.—Excellent.	} Board of Education Official Classification.
B.—Normal.	
C.—Slightly sub-normal.	
D.—Bad.	

(3) The policy of the Government in regard to the provision of nursery schools and the admission of children under five years of age to the infants' departments of elementary schools was explained in the Board of Education Circular 1444 issued in January 1936. The Minister points out that whatever provision is made on these lines, very considerable numbers of children under the age of five years will remain at home, and in the interests of their health it is essential that there should be systematic periodical health visiting for these young children who are not in attendance at school.

There is no doubt that nursery schools form the best means of meeting the needs of young children as the result of bright, well ventilated buildings, the provision for bathing, for meals, and periods of rest and quiet, alternating with play. The only drawback to the nursery school is that it does not take children until three years of age, while there is still the earlier period to cater for, and it would be a step in the right direction if the nursery school could extend its function to meet the needs of an earlier age.

(4) The Minister refers to the duties of health visitors in seeing these children at regular intervals. In the County Maternity and Child Welfare Area we have 112 whole-time and 63 part-time health visitors who are constantly visiting the homes and are always on the lookout for any signs or symptoms which suggest a departure from the normal health. If there is any ground for suspected disease or defect, the mother is advised to consult the family doctor or to take the child to the child welfare centre. To supplement the work of the clinics the County Council has arrangements with 14 homes and hospitals for the treatment of ailments of children under five years of age, and during 1936, 180 children were treated in these homes, the majority of them at Scarborough Convalescent Home for Children.

(5) No special arrangements are made for holding toddlers' clinics at the infant welfare centres but the figures at the centres show that the number of infants and toddlers attending child welfare centres are about equally divided. The suggestion to hold special sessions at centres for toddlers would of course mean additional clinic work for the health visitors and would reduce an already limited time for domiciliary visitation. If special toddlers' clinics were provided in conjunction with the existing child welfare centres the cost of additional sessions for rent would be in the region of £3,300, and added to this would be the fees of the doctors, probably another £6,500, a total approximating £10,000.

The difficulty in connection with toddlers' clinics is that many mothers have also babies in the family, and the majority of women cannot spare the time to attend one session with the baby and another with the toddler. It might be possible to arrange for joint clinics to be held at one and the same time but this would necessitate additional accommodation being provided at the majority of existing child welfare clinics. If this proposal were adopted the mother having an infant in arms and a toddler of 2, 3 or 4 years of age would take her seat in the waiting room and be drafted in turn to the infant consultation clinic with one doctor in one consultation room and later to the toddlers' clinic where the toddler would be interviewed by another doctor. On the face of it this proposal appears impracticable and probably the better arrangement would be to take all steps to secure a better attendance of toddlers at existing clinics, when the same doctor would see all members of the family under 5 years of age at one and the same time.

(6) In paragraph 6 of Circular 1550, reference is made to the school clinic being available for the treatment of minor ailments and special defects in young children. All the school clinics provided by the County Council are available for treatment, if necessary, and a medical officer can recommend any child for treatment under the Hospital Scheme.

Another point which is stressed by the Minister is that continuity of supervision of children from birth until the end of school life should be secured by placing the responsibility for carrying out the maternity and child welfare services and the school medical services in the hands of one authority. In the West Riding there are 11 autonomous areas for maternity and child welfare not exercising powers under Part III of the Education Act.

(7) On the question of the absorption of these autonomous areas in the County Scheme there is provision made in Section 60 of the Local Government Act, 1929, and this is one of the matters to be considered at a later date when the Minister of Health has given his final decisions in connection with the Review of County Districts.

(8) The Minister refers in this Circular to the fact that the success of any efforts to secure adequate supervision of the health of young children will depend to a large extent on the efficiency of the health visiting staff and the numbers employed in that capacity. Here again the result of the Review of County Districts will have some effect on the ultimate number of health visitors to be employed in the West Riding, and a preliminary survey has already been made of the health



visiting staff and it is estimated that about 30 additional whole-time health visitors will be necessary. Also, under the Midwives Act, 1936, especially in those areas where it is not possible to form a nursing association or to get an existing nursing association to undertake midwifery work, the County Council may appoint a salaried nurse-midwife and allocate to her, in addition to the duties of midwifery, the health visiting and school nursing work.

In September a special report was submitted on the difficulty experienced in obtaining suitable applicants for the post of child welfare nurse, and the County Council have decided that as from the 1st April, 1937, the scale of salaries for child welfare nurses shall be increased to £200 per annum rising by increments of £10 to £240 per annum.

(9) The Minister deals in his Circular, with the provision of day nurseries in areas where the mothers go out to work, and with districts where the home conditions are such that the health of the children would benefit by daily supervision, which could be secured by the provision of a number of day nurseries or an increased number of health visitors. Children could be admitted to day nurseries at an earlier age than that at which they are eligible for admission to nursery schools, and it is also possible to keep them for longer hours each day than at a nursery school. In the West Riding however, there does not appear to be any great need for the provision of day nurseries, as the number of mothers who are regularly employed away from home is not sufficiently great to justify their provision. This assumption is based on the fact that of the child population in the County only 233 are boarded out with foster mothers. Many may be cared for during the day by relatives but as such persons are exempt from the provisions of the Children and Young Persons Act of 1932, the numbers falling in this class are not available.

To sum up the present position it is clear that:—

(a) The percentage of toddlers attending child welfare centres is small and also the present multifarious duties of the health visitors curtail to some extent the home visiting.

(b) It is difficult for mothers with young babies and also toddlers to attend two sessions at the centre in one week, but separate accommodation might be arranged to hold separate clinics for infants and for toddlers at the same time, or alternatively more intensive action might be taken to secure better attendance of toddlers at existing clinics.

(c) Until the result of the Review of County Districts is known, it is not possible to say exactly how many additional whole-time health visitors will be required, and coupled with this there is also the question of the eleven areas autonomous for maternity and child welfare which are not also the local Education Authority. On the question of salary, recommendation for an increase in the scale has already been approved by the County Council as mentioned above under paragraph (8).

(d) Nursery schools would appear to form the best means of meeting the present difficulties, particularly if such schools could extend their function to meet the needs of an earlier age. The ideal position would be for the appropriate committees in combination (Education and Public Health) to build a pre-school building which would serve as a child welfare centre and a nursery school with enlarged scope.

The special sub-committee appointed to consider this matter asked for a further report on (i) the need for increased domiciliary inspection of children between the ages of one and five; (ii) the need for more commodious premises for child welfare and school clinic purposes; and (iii) additional hospital and convalescent accommodation for children. A comprehensive report on the subject is in course of preparation, and will deal with all phases of this important matter of child life. Meanwhile, the health visitors have been circularised, drawing attention to the Minister's memorandum, so that they may take steps to encourage the attendance at child welfare centres of all children under five years of age.

### Homes and Hospitals for Children under Five Years of Age.

The following table shews that during the year 180 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 LXVIII.

Name of Home or Hospital	No. of patients treated by County Council during 1936	Inclusive fees of Home per week		
		£	s.	d.
1. Edenfield Private Maternity Home, Doncaster	40	1	1	0
2. Halifax (General Hospital)	3	1	1	0
3. Harrogate Municipal Babies' Hospital	27	1	10	0
4. Harrogate and District General Hospital	1	3	3	0
5. Huddersfield Maternity Home	4	1	1	0
6. Huddersfield Royal Infirmary	15	1	1	0
7. Leeds General Infirmary	2	1	1	0
8. Leeds Maternity Hospital	26	1	1	0
9. Marguerite Home, Thorparch (Orthopaedic)	10	1	15	0
10. Scarborough Children's Convalescent Home	38	1	1	0
11. Skipton and District Hospital	2	1	1	0
12. York Municipal Maternity Hospital	3	1	1	0
13. Yorkshire Children's Orthopaedic Hospital, Kirbymoorside	—	1	18	6
14. Other Institutions	9			
Total ...	180			



### 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 four clinics open in the County where advice and instruction in birth control methods is 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 LXIX.

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 ... ..	Fourth Friday in month at 2 p.m.	Margaret M. Owen, M.B., Ch.B.	2	—

During 1936, 390 married women received advice at the above clinics, an increase of 111 over the previous year, and these were distributed between them as under:—

Doncaster ... ..	131
Hipperholme ... ..	9
Leeds ... ..	40
Swinton ... ..	210
Total	390

### Notification of Births Acts.

During the year, 15,816 live births (15,140 legitimate, 676 illegitimate) and 745 still births (714 legitimate, 31 illegitimate), were registered in the County Notification of Births Area, and 14,929 (14,445 live births, and 484 still births) were notified. Of the 14,929 births, 11,913 were notified by midwives, and 3,016 by doctors and parents.

In 1936 there were 10 Boroughs, 11 Urban Districts and 1 Rural District exercising powers under the Maternity and Child Welfare and Notification of Births Acts, namely:—The Boroughs of Batley, Brighouse, Goole, Harrogate, Keighley, Morley, Ossett, Pontefract, Pudsey and Todmorden; the Urban Districts of Bingley, Bolton-upon-Dearne, Castleford, Featherstone, Heckmondwike, Ilkley, Mexborough, Rothwell, Shipley, Spenborough and Wombwell, and the Rural District of Hemsworth.

The estimated mid-year population in 1936 of the Administrative County was 1,525,410 and deducting the 22 autonomous areas enumerated above, having a total population of 490,399 the population of the County Notification of Births Area totalled 1,035,011.

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: Bolton-upon-Dearne, Bingley, Heckmondwike, Rothwell and Wombwell Urban Districts.

Districts where the County Council employ whole-time school nurses on account of large size of area: Goole Borough, Castleford, Featherstone, and Mexborough Urban Districts and Hemsworth Rural District.



At Ilkley, the County Council's Nurse does health visiting for the Ilkley Authority.

At Bolton-upon-Deane, Heckmondwike, Ilkley and Wombwell, the County Council's school clinics combine with the maternity and child welfare centres belonging to the Local Authority.

The Bolton-on-Deane, Featherstone and Mexborough Urban District Councils are three of the twenty-two autonomous areas that have applied to the County Council for their districts to be included in the County Scheme, and the necessary application for the transfer of powers under the Maternity and Child Welfare and Notification of Births Acts has been made by the County Council to the Ministry of Health.

### Assistant Inspectors of Nurses and Midwives.

TABLE LXX.

	Miss A. Brooke	Miss A. M. Clarke	Miss M. Davenport	Miss R. O'Brien	TOTAL
Visits to Whole-time Health Visitors ... ..	232	24	117	5	378
„ „ Part-time „ „ ... ..	34	21	25	6	86
„ „ Child Welfare Centres and Ante-natal Clinics ... ..	60	56	88	4	208
„ „ Ultra-Violet Ray Clinics ... ..	7	—	1	1	9
„ „ Midwives ... ..	186	229	402	52	869
„ „ Children nursed for reward ... ..	5	—	2	—	7
„ „ Maternity Homes ... ..	15	13	17	4	49
Premises inspected as to their suitability for Child Welfare Centres ... ..	46	1	21	—	68
Special visits (ophthalmia neonatorum, puerperal fever, uncertified practice, concealment of birth, abortifacients, pemphigus and deaths of children)	32	10	70	—	112
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 ... ..	82	9	52	—	143
	699	363	795	72	1929

In addition during the year the Inspectors carried out the following duties:—

- Attended official openings and also gave addresses at Child Welfare Centres.
- Met and instructed local Voluntary Committees in their duties.
- Assisted the County Superintendent in the formation of new Nursing Associations.
- Attended the Bingley Refresher Course for Health Visitors and assisted in its organisation.

They also instructed new nurses in their duties; interviewed Medical Officers of the Ministry of Health; assisted with the preparation of schedules of furniture and equipment for Maternity Homes, Child Welfare and Ante-Natal Clinics. A considerable portion of their time towards the latter end of the year was spent in connection with the scheme for the provision of the new salaried midwifery service.

Miss Houghton, the Superintendent of the West Riding County Nursing Association, and the Inspectresses worked in complete harmony. Miss Houghton retired early in 1937 and was succeeded by Miss Greenwood, who was latterly Matron of the Nursing Home belonging to the County Nursing Association in Leeds.

It is with regret I have to report that owing to ill-health, Miss Williams was compelled to sever her connection with the department. She had been in the service of the County Council for 16 years and for 13 of these years she held the responsible position of Assistant Inspector of Health Visitors and Midwives. Her promotion was, at the time, generally welcomed by her colleagues and was amply justified in the succeeding years.

It is also with regret I have to report the death of Miss E. R. McDonald, who was appointed as a temporary Assistant Inspector of Nurses and Midwives in July, 1936, and who died the following October. During the short period Miss McDonald was in the service of the County Council, she adapted her training and experience to her duties with such effect that there was every indication of a very successful career.

Miss R. O'Brien, one of the Child Welfare nurses, was brought in during the year to the Central Office to act as temporary Assistant Inspector of Nurses and Midwives.

## Nursing Staff.

The establishment of the Nursing Staff employed in connection with Maternity and Child Welfare work numbered 115 at the end of the year, comprising as under:—

4 Assistant Inspectors of Nurses and Midwives (one temporary).

1 Emergency Nurse.

111 Child Welfare Nurses undertaking combined duties of Health Visiting and School Nursing.

63 Part-time nurses employed by Nursing Associations to undertake, on behalf of the County Council, the Health Visiting and School Nursing work. The majority of these Associations serve sparsely populated rural areas.

During the year two Child Welfare Nurses resigned their appointments; one on obtaining a more remunerative post with the Nottinghamshire County Council and the other returning to India.

One new nurse was appointed and at the end of the year, by obtaining temporary assistance, all the districts were being served effectively.

In September the Child Welfare Sub-Committee considered the question of the amendment to the scale of salaries for Child Welfare Nurses, and a recommendation was forwarded to the appropriate Committees and subsequently approved by the County Council in January 1937, to alter the scale from £180—£10—£230 to £200—£10—£240 per annum. The new scale will operate as from the 1st April, 1937.

## Fifth Revision Course for Nurses.

The Fifth Revision Course for Nurses arranged by the County Council took place at the Bingley Training College from the 23rd to the 29th April, 1936.

The course was attended by 143 nurses who were in residence for the full course. In addition, 15 nurses, who did not reside in the college, attended the full course of lectures and 35 nurses, employed by other authorities, attended odd lectures.

The course was well supported by other authorities, and below is given a list of the authorities sending their health visitors.

### IN RESIDENCE.

West Riding County Council	...	...	...	...	121
Bolton-upon-Deane U.D.	...	...	...	...	1
Brighouse Borough	...	...	...	...	2
Featherstone U.D.	...	...	...	...	1
Eccles Borough	...	...	...	...	1
Grimsby County Borough	...	...	...	...	1
Jarrow County Borough	...	...	...	...	1
Middleton Borough	...	...	...	...	1
Oldham County Borough	...	...	...	...	1
Preston County Borough	...	...	...	...	2
St. Helens County Borough	...	...	...	...	3
Salford County Borough	...	...	...	...	2
Stockport County Borough	...	...	...	...	2
North Riding County Council	...	...	...	...	1
Cheshire County Council	...	...	...	...	1
Westmorland County Nursing Association	...	...	...	...	2

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### FULL LECTURES ONLY.

West Riding County Council	...	...	...	...	11
Bingley U.D.	...	...	...	...	2
Shipley U.D.	...	...	...	...	1
Keighley Borough	...	...	...	...	1

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### ODD LECTURES.

West Riding County Council	...	...	...	...	10
Burnley	...	...	...	...	3
Leeds County Borough	...	...	...	...	22

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The Course was opened with an address by County Alderman Miss Unwin, who outlined some of the curious anomalies of maternal mortality distribution and of the problems of nutrition.

The lectures on the professional or technical subjects bore chiefly on maternal mortality and growth of children between one and five years.



The following is a summary of the lectures and lecturers.

Subject.	Lecturer.
1. Inaugural Address.	Miss H. Unwin, County Alderman; Vice-Chairman of the Child Welfare Sub-Committee, W.R.C.C.
2. The Care of the Sick in the Middle Ages.	A. Hamilton Thompson, Esq., M.A. (Camb.), Hon. D.Litt. (Durham), F.B.A., F.S.A.; Professor of History, University of Leeds.
3. Ante-natal Supervision.	A. M. Claye, Esq., M.D., F.R.C.S. (Eng.); Professor of Obstetrics and Clinical Lecturer in Gynaecology, University of Leeds; Hon. Assistant Surgeon, Hospital for Women, Leeds.
4. Remedial Exercises during Pregnancy and the Puerperium.	Miss M. Randell, S.R.N.; Sister, St. Thomas's Hospital, London, S.E.1.
5. Do. do.	
6. Growth and Development in the pre-school child.	H. A. Harris, Esq., M.D., B.S., D.Sc. (Lond.), M.R.C.P.; Professor of Anatomy, University of Cambridge.
7. Behaviour in the pre-school child.	
8. The Problem of Maternal Mortality.	M. Phillips, Esq., Hon. M.D. (Bristol), M.B., B.S. (Lond.), F.R.C.S. (Eng.); Hon. Consulting Surgeon, Jessop Hospital, Sheffield; Emeritus Professor of Obstetrics and Gynaecology, University of Sheffield.
9. How the Mind of the Child Works.	D. R. MacCalman, Esq., M.D. (Glasgow); General Secretary, London Child Guidance Council.
10. Difficult Children.	
11. Diseases of the New-born.	Leonard G. Parsons, Esq., M.D., F.R.C.P.; Physician, General Hospital, Birmingham; Professor, Infant Hygiene and Diseases of Children, University of Birmingham.
12. Do. do.	
13. Feeding the Family.	Miss M. C. Broatch, Dietician, University College Hospital, London.
14. Pink Disease.	C. Wilfred Vining, Esq., M.D., B.S. (Lond.), F.R.C.P. (Lond.), D.P.H.; Professor of Children's Diseases, University of Leeds; Hon. Physician, Children's Department, Leeds General Infirmary.

### Award of Bursarships for Intending Nurses.

These awards are made with a view to increasing the supply of Health Visitors in the West Riding, and the Education Committee agreed to the award of Bursarships to girls in attendance at Secondary Schools who have reached the age of 16 years and wish to become nurses.

A Bursarship provides the whole or some portion of the tuition fees, games subscriptions, charges for the use of books, and necessary travelling expenses if the holder lives more than two miles from the school attended, and is tenable ordinarily at a Secondary School for two years. The award thus enables the holder to continue at school until she is old enough to serve as a probationer nurse.

A maintenance allowance may be granted if need be shown. Full details of the scheme appeared in the annual report for 1932.

The following summary gives information regarding awards already made during the past five years.

Year of award.	Number of awards made.	Number who have entered upon their hospital training.	Number withdrawn due to illness.
1932-33	Nine	Nine*	—
1933-34	Eight	Six	One
1934-35	Six	Six	—
1935-36	Nine	Seven	One
1936-37	Seven	—	One

Ten awards have been offered for the school year 1937-38.

Twenty-nine Bursars are now in training at the following hospitals:—Battersea General (1); Bradford Royal (3); Clayton, Wakefield (2); Derby Royal (1); Guys Hospital (1); Huddersfield Royal (1); Leeds General Infirmary (10); Nottingham General (1); Paddington Infirmary (2); Preston Royal Infirmary (1); Royal Halifax (1); Sheffield Royal (3); Sheffield General (1); White-chapel, London (1).

\*One bursar completed her training at the Barnsley Beckett Hospital. She did not proceed to take her midwifery training, but obtained a post at the Sheffield General Hospital. Another bursar completed her training at the Keighley Victoria Hospital and has proceeded for midwifery training at the Jessop Hospital for Women, Sheffield.







## Home Visits.

Visits made by Health Visitors during the year were as follows (for detailed analysis see table folded in at this page).

Expectant Mothers ... ..	12,385
Infants under one—first visits ... ..	16,071
Infants under one—Total ... ..	105,948
Children 1/5 ... ..	128,779
Special Visits (ophthalmia neonatorum, teething, marasmus, feeding, circumcision, etc.) ... ..	3,880
Measles cases ... ..	1,410

## Measles.

During 1936 the Health Visitors made 1410 visits to measles cases distributed over 66 sanitary districts, being an increase of 994 over the previous year (see table folded in at this page). The districts mainly affected were the Barnoldswick and Rawmarsh Urban Districts, and the Penistone, Ripon and Tadcaster Rural Districts.

## Child Welfare Centres.

### Attendances at Child Welfare Centres.

The total attendances at child welfare centres show a decrease of 19,448 infants compared with the previous year.

The fall in the attendances of infants at child welfare centres is probably accounted for by the inclement weather experienced during 1936 and the subsequent illness amongst children, which no doubt had some material effect on the attendances.

The attendances of expectant mothers show a large increase and the numbers have gone up from 15,104 in 1935 to 19,362 in 1936, an increase of 4,258.

With regard to the increase in the number of expectant mothers attending for ante-natal examination, these figures are very gratifying. Intensive education of mothers on the wisdom of ante-natal care and supervision appears to be bearing fruit.

The number of expectant mothers and children attending a child welfare centre for the first time were 5,953 and 13,012 respectively (see table), an increase of expectant mothers over the previous year of 922, and a decrease of 726 children. The percentage of notified live births represented in this number was 69.8, while the percentage of expectant mothers was 37.7.

The total attendances at the 126 County Council Child Welfare Centres in operation at the end of the year were 19,362 expectant mothers and 281,308 children. The average attendance per session being 12 and 50, against 14 and 54 respectively in 1935.

### Establishment of Infant Welfare Centres.

During the year, child welfare centres were established at Brampton Bierlow (Rotherham R.D.), Mytholmroyd, Ripponden (Soyland U.D.), Worsborough Bridge (Worsborough U.D.).

In connection with the two years' programme approved by the County Council early in 1936, further progress is being made and premises have been obtained at Burley-in-Wharfedale, Grenoside and Tankersley (Wortley R.D.).

With regard to ante-natal clinics, these have been provided in connection with the following child welfare centres:—

Dodworth.	Royston.
Shelf.	Springhead.
Worsborough Bridge.	Yeadon.

Owing to increased attendances it was necessary to provide additional ante-natal sessions at Hoyland, West Melton (Wath U.D.), and Kiveton Park (R.D.).

In addition to the foregoing a building programme of combined clinics has been decided on in areas where the existing accommodation is inadequate and where other suitable accommodation in the district is not available.

Sites have been obtained at Conisbrough, Hoyland and Rawmarsh.

Perambulator sheds were provided at Brampton Bierlow (Rotherham R.D.), Conisbrough U.D., Grassington (Skipton R.D.), Mirfield and Stanley U.D.'s.



# 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 LXII.

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 1936			Present arrangements for medical supervision	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1936				Total No. of children who were in attendance at the Centre and who at the end of the year were:—	
			Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five			Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five	Children Total	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	26	69	167	128	10	Whole-time M.O.H.	48	608	728	606	974	2343	3317	128	142
2. Airedale (Pontefract R.D.), Holy Cross Hut ...	Do.	Mon. 2-4	24	53	92	101	9	Part-time Medical woman	46	405	1192	405	1594	835	2429	81	110
3. Allerton Bywater (Tadcaster R.D.), Miners' Welfare Inst. ...	Do.	Mon. 2-4	7	41	19	62	30	Part-time Medical man	47	82	1095	82	989	915	1904	69	141
4. Altofts, Red Triangle Club ...	Do.	Wed. 2-4	—	20	—	50	3	Do.	48	—	249	—	587	366	953	41	52
5. Ardsley East (Ardsley E. & W. U.D.), Primitive Methodist Chapel ...	Do.	Tues. 2-4	—	37	36	53	3	Do.	47	—	654	77	921	840	1761	42	3
6. Ardsley West (Ardsley E. & W. U.D.), 1, Syke Lane, West Ardsley ...	Do.	Mon. 2-4	13	35	40	54	2	Do.	46	98	439	98	894	690	1584	47	2
7. Arnthorpe (Doncaster R.D.), Miners' Welfare Institute ...	Do.	Thurs 2-4	—	81	—	106	18	Do.	48	—	1154	—	1948	1918	3866	106	117
8. Askern (Doncaster R.D.), Baptist Chapel ...	Do.	Mon. 2-4	11	33	64	129	26	Do.	47	131	730	131	1300	225	1525	119	146
9. Baildon, Methodist S. School ...	Do.	Mon. 2-4	—	28	7	62	17	Do.	47	9	857	9	847	451	1298	55	123
10. Barnoldswick, Bethesda Baptist Chapel ...	Do.	Thurs 2-4	4	42	20	91	3	Part-time Medical woman	47	50	236	53	1000	929	1929	90	160
11. Bentley, Park Pavilion ...	Do.	Wed. 2-4	12	71	101	119	25	Whole-time M.O.H.	49	271	1410	271	1805	1655	3460	85	180
12. Birdwell (Worsborough U.D.), United Methodist Chapel ...	Do.	Wed. 2-4	—	43	10	46	20	Part-time Medical man	48	45	704	100	1100	988	2058	36	90
13. Birkenshaw, Methodist Free Church ...	Do.	Tues. 2-4	—	53	2	72	17	Do.	46	6	943	6	1312	1118	2430	83	30
14. Birstall, St. John's School ...	Do.	Wed. 2-4	—	37	11	61	5	Do.	48	32	546	33	608	1166	1774	55	159
15. Boston Spa (Wetherby R.D.), Congregational Chapel ...	Do.	Wed. 2-4	—	29	—	51	55	School M.I.	50	—	1500	—	643	798	1441	31	64
16. Bramley (Rotherham R.D.), Miners' Welfare Hall ...	Do.	Wed. 2-4	—	41	19	110	20	Part-time Medical man	49	—	715	38	1316	683	1999	73	77
17. Brampton Bierlow (Rotherham R.D.), Cortonwood Methodist Church ...	Do.	Thurs. 2-4	9	45	13	25	25	Part-time Medical woman	5	27	63	27	111	111	222	25	25
18. Carcroft (Adwick-le-Street U.D.), Presbyterian Sunday School ...	Do.	Thurs. 2-5	15	55	113	84	37	Whole-time M.O.H.	49	305	686	342	1927	764	2691	70	51
19. Catcliffe (Rotherham R.D.), Church Mission Hall ...	Fortnightly	Wed. 2-4	7	49	50	75	2	Part-time Medical man	26	159	1253	159	739	514	1253	62	104
20. Chapelton (Wortley R.D.), Miners' Welfare Pavilion ...	Weekly	Wed. 2-4	3	44	19	61	10	Whole-time M.O.H.	49	34	593	34	957	1165	2122	47	114

TABLE LXXII.—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 1936				Present arrangements for medical supervision	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1936				Total No. of children who were in attendance at the Centre and who at the end of the year were:—	
			Expectant Mothers	Children	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	
21. Conisborough, Army Hut, Balby Street Council School ...	Weekly	Tues. 2-4	14	90	123	149	8	School M.I.	50	316	1708	316	2578	1905	4483	106	212	
22. Conisborough (Upper), Miners' Welfare Institute ...	Do.	Mon. 2-4	—	90	—	105	5	Part-time Medical woman	48	—	1234	—	3622	709	4331	104	173	
23. Crigglestone (Wakefield R.D.), Village Institute ...	Do.	Wed. 2-4	6	37	36	61	2	Part-time Medical man	47	76	1272	76	916	803	1719	52	130	
24. Crofton (Wakefield R.D.), United Methodist Church ...	Do.	Mon. 2-4	9	34	39	53	12	Do.	47	105	964	106	784	794	1578	44	118	
25. Cudworth, Wesley Hall ...	Do.	Wed. 2-4	33	73	112	140	54	Do.	51	459	912	750	2857	840	3697	122	72	
26. Dalton (Rotherham R.D.), Primitive Methodist Chapel ...	Do.	Wed. 2-4	11	58	51	150	76	Do.	48	124	862	124	2478	327	2805	62	32	
27. Darfield Methodist Chapel, Barnsley Road ...	Do.	Wed. 2-4	13	37	58	55	3	Do.	48	131	616	150	600	1150	1750	56	70	
28. Darton (Staincross), Wesleyan S.S., Barnsley Road ...	Do.	Thurs. 2-4	—	53	7	54	8	Do.	48	1	473	26	1335	1217	2552	54	8	
29. Darton (Darton), Primitive Methodist Chapel ...	Do.	Wed. 2-4	12	69	46	89	21	Do.	48	150	667	150	1974	1356	3330	84	35	
30. Darton (Gawber), Adult School ...	Do.	Tues. 2-4	6	52	22	50	16	Do.	47	56	591	60	999	1442	2441	72	178	
31. Derby and Cumberworth, Victoria Memorial Hall ...	Fort-nightly	Wed 2-4	11	44	52	65	15	School M.I.	25	123	829	123	922	190	1112	52	137	
32. Dinnington (Kiveton Park R.D.), Wesleyan Sunday School ...	Weekly	Tues. 2-4	14	130	70	140	72	Part-time Medical woman	45	179	1058	179	5160	700	5860	140	72	
33. Dodworth, Mechanics' Institute, High Street ...	Do.	Tues. 2-4	18	74	105	101	15	Part-time Medical man	45	206	1080	220	2044	1275	3319	87	187	
34. Drighlington, Wesleyan Sunday School ...	Do.	Mon. 2-4	19	58	62	82	27	Part-time Medical woman	46	223	1515	223	1536	1132	2668	85	122	
35. Dunscoft (Thorne R.D.), Church Hall ...	Do.	Tues. 2-4	27	70	117	286	30	Part-time Medical man	47	583	1428	583	2866	328	3294	136	145	
36. Earby, Old Grammar School ...	Do.	Wed. 2-4	8	35	29	45	2	Do.	47	58	206	92	922	694	1616	29	81	
37. Ecclesfield (Wortley R.D.), Gatty Memorial Hall ...	Do.	Mon. 2-4	9	40	55	80	17	Whole-time M.O.H.	46	107	586	107	779	1085	1864	74	123	
38. Edlington (Doncaster R.D.), United Methodist Chapel ...	Do.	Tues. 2-4	16	50	91	80	3	Do.	46	367	1102	367	1857	463	2320	77	68	
39. Elland, Drill Hall ...	Do.	Wed. 2-4	—	59	12	94	3	Part-time Medical man	48	41	751	50	1457	1397	2854	67	114	



TABLE LXXII.—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 1936				Present arrangements for medical supervision	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1936				Total No. of children who were in attendance at the Centre and who at the end of the year were:—	
			Expectant Mothers	Children	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	
40. Farsley, United Methodist Church	Weekly	Tues. 2—4	—	54	4	70	5	Part-time Medical man	46	4	500	1135	4	1235	2370	54	126	
41. Ferrybridge (Pontefract R.D.), Wesleyan Chapel ...	Do.	Wed. 2—4	13	32	54	62	3	Do.	48	156	553	503	232	1050	1553	60	218	
42. Garforth, St. Mary's Hall	Do.	Mon. 2—4	23	62	52	50	8	Do.	47	279	1713	1285	350	1614	2899	48	138	
43. Glasshoughton (Pontefract R.D.), St. Paul's Institute	Do.	Mon. 2—4	9	57	66	85	23	Part-time Medical woman	47	203	1226	1317	203	1377	2694	65	108	
44. Glusburn (Skipton R.D.), Glusburn Institute	Fortnightly	Tues. 2—4	—	46	1	53	48	Do.	23	3	652	376	3	680	1056	41	60	
45. Golcar, Council Offices	Weekly	Wed. 2—4	—	54	14	93	25	Do.	51	21	1025	1297	31	1440	2737	69	127	
46. Grassington (Skipton R.D.), Church House	Fortnightly	Thurs. 2—4	2	19	13	15	9	School M.I.	24	14	454	139	27	321	460	16	101	
47. Greasborough, Town Hall	Weekly	Mon. 2—4	—	—	—	—	—	Part-time Medical man	—	—	—	—	—	—	—	—	—	
48. Grestland, Clay House	Do.	Tues. 2—4	5	54	16	72	6	Do.	45	52	474	524	52	1885	2409	61	79	
49. Guiseley, Baptist Church, Oxford Road	Do.	Thurs. 2—4	16	44	70	98	20	Part-time Medical woman	48	191	891	1186	191	940	2126	82	146	
50. Haworth, Hall Green Baptist School	Do.	Tues. 2—4	—	36	11	81	9	Do.	47	31	950	1109	40	573	1682	62	83	
51. Hebden Bridge, Old Secondary School, Pitt Street	Do.	Wed. 2—4	5	31	29	72	9	Do.	50	62	855	1032	62	532	1564	68	138	
52. Hensworth, Army Hut, West End	Do.	Mon. 2—4	20	70	73	136	36	School M.I.	47	213	915	2301	225	969	3270	105	147	
53. Hensworth (Fitzwilliam) Church Hut	Do.	Tues. 2—4	18	60	89	84	14	Part-time Medical man	49	336	1174	1892	441	1059	2951	104	412	
54. High Green (Wortley R.D.), Methodist Chapel S. School	Do.	Tues. 2—4	10	43	27	46	22	Part-time Medical Woman	47	116	1085	513	116	1506	2019	46	138	
55. Hipperholme, Wesleyan Sunday School	Do.	Mon. 2—4	14	48	40	58	7	Do.	47	136	1248	844	141	1420	2264	54	110	
56. Holmfirth, Town Hall	Do.	Thurs. 2—4	9	28	41	62	18	Do.	47	111	699	668	111	658	1326	53	116	
57. Horbury, Wesleyan Sunday School	Do.	Mon. 2—4	14	78	123	128	14	Part-time Medical man	46	311	1377	2155	326	1437	3592	101	213	
58. Horsforth, St. Margaret's Hall	Do.	Wed. 2—4	6	78	20	115	10	Do.	48	47	407	2095	68	1670	3765	69	154	
59. Hoyland Miners' Welfare Institute	Do.	Tues. 2—4	24	139	239	142	10	Do.	46	871	1544	4247	1032	2133	6380	118	210	
60. Hoyland Common (Hoyland Nether U.D.), Wesleyan Chapel	Do.	Thurs. 2—4	—	53	18	81	4	School M.I.	50	65	1262	1641	144	999	2640	69	167	
61. Ingleton (Settle R.D.), Literary Institute	Fortnightly	Tues. 2—4	—	25	2	13	4	Part-time Medical man	22	6	384	213	6	335	548	13	41	
62. Kippax (Tadcaster R.D.), Trinity Methodist Chapel	Weekly	Tues. 2—4	—	19	10	54	29	Do.	47	87	910	468	87	453	921	54	135	

TABLE LXXII.—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 1936			Present arrangements for medical supervision	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1936				Total No. of children who were in attendance at the Centre and who at the end of the year were:—	
			Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five			Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five	Children Total	Under one year of age	Between the ages of one and five years
63. Kirkburton, Drill Hall ... ..	Fortnightly	Tues. 2-4	—	42	10	59	9	Part-time Medical man	25	8	278	10	463	582	1045	44	100
64. Kirk Sandall (Doncaster R.D.), Assembly Hall ... ..	Weekly	Thurs. 2-4	7	56	30	109	102	Do.	49	81	738	81	1173	1493	2666	52	129
65. Knaresborough, Fysche Hall ... ..	Do.	Tues. 2-4	11	55	48	31	7	School M.I.	45	201	1265	201	408	2274	2682	48	82
66. Knottsgate, Isles Lane ... ..	Do.	Mon. 2-4	21	54	55	78	6	Part-time Medical man	46	243	944	256	489	1959	2448	61	239
67. Lepton, Liberal Club ... ..	Do.	Tues. 2-4	12	55	83	101	29	Do.	47	149	804	215	563	2021	2584	108	249
68. Linthwaite, Bungalow, 93, Manchester Road, Milsbridge ... ..	Do.	Tues. 2-4	15	36	91	55	4	School M.I.	47	323	969	324	770	896	1666	49	111
69. Luiddenden Foot, The Institute ... ..	Do.	Tues. 2-4	—	38	—	66	14	Part-time Medical man	47	—	983	—	796	988	1784	—	7
70. Maltby, Congregational Chapel ... ..	Do.	Mon. 2-4	20	69	104	180	113	Do.	47	242	694	242	2104	1132	3236	151	90
71. Marsden, Conservative Club ... ..	Do.	Thurs. 2-4	11	49	36	55	7	Do.	49	131	882	131	1017	1404	2421	48	212
72. Meltham, Baptist Church ... ..	Do.	Tues. 2-4	12	57	55	67	2	Do.	46	139	315	139	1246	1371	2617	53	121
73. Micklefield (Tadcaster R.D.), Wesleyan Chapel ... ..	Fortnightly	Tues. 2-4	4	39	20	26	2	School M.I.	25	36	900	48	234	747	981	20	98
74. Mirfield, Ings Grove ... ..	Weekly	Friday 2-4	12	55	70	115	20	Part-time Medical woman	46	140	771	140	1743	767	2510	100	166
75. Moorends (Thorne R.D.), Wesleyan Chapel ... ..	Do.	Tues. 2-4	17	55	132	157	14	Part-time Medical woman	48	368	1291	410	2076	561	2637	195	81
76. Mytholmroyd, Methodist ... ..	Do.	Wed. 2-4	2	15	3	12	10	2 Part-time Medical Men	25	9	183	9	210	146	356	12	10
77. Normanton, Park Pavilion ... ..	Do.	Tues. & Thurs. 2-4	12	39	78	157	30	School M.I.	97	283	2855	283	2244	1518	3762	157	363
78. Otley, Primitive Methodist Chapel, Station Road ... ..	Do.	Thurs. 2-4	10	77	35	102	2	Part-time Medical man	49	115	709	115	1868	1905	3773	251	115
79. Oulton (Hunslet R.D.), Village Institute ... ..	Do.	Tues. 2-4	—	17	5	28	2	Do.	49	12	735	25	556	264	820	22	50
80. Ourwood (Stanley U.D.), Church Institute ... ..	Do.	Mon. 2-4	11	64	56	93	19	Do.	47	136	1628	136	1398	1628	3026	86	138
81. Oughtibridge (Wortley R.D.), Church Hall ... ..	Do.	Thurs. 2-4	—	34	8	41	20	Do.	48	36	1233	36	479	1172	1651	33	97
82. Penistone, Shrewsbury Road Methodist Chapel ... ..	Do.	Mon. 2-4	9	57	45	84	19	Part-time Medical woman	47	109	695	109	1558	1110	2668	55	145
83. Queensbury, Cricket Pavilion ... ..	Do.	Tues. 2-4	14	63	26	57	9	Part-time Medical man	47	172	936	172	1101	1835	2936	77	123
84. Rawmarsh, Spiritual Temple, Parkgate ... ..	Do.	Tues. 2-4	26	69	486	201	490	School M.I.	48	848	2217	1112	1406	1896	3302	201	894
85. Ripon City, Alma House ... ..	Do.	Mon. 2-4	8	68	62	49	16	Do.	45	169	1431	169	1009	2077	3086	49	133
86. Ripponden (Soyland U.D.), ... ..	Do.	Tues. 2-4	—	14	3	8	6	Part-time Medical woman	2	3	26	3	14	11	25	8	6
87. Royston, Wesleyan Sunday School ... ..	Do.	Wed. 2-4	15	89	75	139	12	Part-time Medical man	50	120	1070	179	2705	1757	4462	120	161



TABLE LXXII.—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 1936			Present arrangements for medical supervision	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1936				Total No. of children who were in attendance at the Centre and who at the end of the year were :—	
			Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five			Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five	Children Total	Under one year of age	Between the ages of one and five years
88. Rossington (Doncaster R.D.), United Methodist Church	Weekly	Tues. 2-4	13	66	104	120	17	Part-time Medical man Do.	47	310	917	310	2304	809	3113	180	83
89. Saddleworth, Mechanic's Institute, Uppermill	Do.	Wed. 2-4	11	70	48	100	4	Do.	50	139	528	139	1340	2135	3475	76	143
90. Selby, Museum Hall, Park Street	Do.	Fri. 2-4	6	33	8	48	9	Whole-time M.O.H.	49	17	1031	18	774	865	1639	49	117
91. Settle (Settle R.D.), Wesleyan Sunday School	Do.	Thurs. 2-4	4	24	12	26	4	School M.I.	24	30	279	30	283	287	570	24	41
92. Sharlston (Wakefield R.D.), St. Luke's Hall	Do.	Tues. 2-4	8	46	38	76	10	Part-time Medical man	47	93	1355	93	1045	1108	2153	60	138
93. Shelf, Methodist Chapel, Wichfield Hill	Do.	Mon. 2-4	5	33	13	24	10	Part-time Medical woman	46	51	602	63	1094	421	1515	18	86
94. Silsden, Ambulance Station, Kirkgate	Fortnightly	Tues. 2-4	—	40	4	32	50	Do.	25	—	320	11	228	773	1001	25	57
95. Skipton, Wesleyan Methodist Sunday School, Water Street	Weekly	Wed. 2-4	12	56	3	72	101	School M.I.	48	149	979	149	838	1845	2683	40	133
96. Slaithwaite, United Methodist Sunday School, Carr Lane	Do.	Wed. 2-4	—	48	—	49	6	Part-time Medical man	51	—	1010	—	1009	1428	2437	34	100
97. Snaith (Goole R.D.), House, Market Place	Do.	Thurs. 2-4	—	17	2	41	16	Part-time Medical man	49	2	889	2	349	482	831	48	7
98. South Milford (Tadcaster R.D.), St. Mary's Schoolroom	Fortnightly	Tues. 2-4	8	41	47	47	5	School M.I.	26	93	1055	93	719	336	1055	47	57
99. Sowerby Bridge, Allan House	Weekly	Tues. & Thurs. 2-4	12	29	46	202	30	Do.	90	139	1802	152	1486	1152	2638	190	200
100. Springhead, Congregational Chapel	Do.	Fri. 2-4	11	72	42	96	27	Part-time Medical woman	46	128	883	128	1502	1798	3300	88	136
101. Stainforth (Thorne R.D.), Wesleyan S.S., Church Road	Do.	Tues. 2-4	12	70	91	131	37	Do.	47	288	1575	291	2712	567	3279	108	60
102. Stanley, Zion Congregational Chapel	Do.	Mon. 2-4	10	32	63	68	4	Part-time Medical man	48	112	1099	175	590	961	1551	68	117
103. Stannington (Wortley R.D.), Underbank Chapel	Do.	Wed. 2-4	—	35	9	23	15	Part-time Medical woman	48	18	769	33	535	1141	1676	14	94
104. Stocksbridge, Mozart House, Deepcar	Do.	Tues. 2-4	—	52	10	93	22	Part-time Medical man	47	23	751	44	1350	1093	2443	112	152
105. Swallownest (Rotherham R.D.), Church Hall	Fortnightly	Mon. 2-4	10	50	40	64	4	Part-time Medical woman	24	113	915	119	856	345	1201	61	110
106. Swillington (Tadcaster R.D.), Hut, near Church	Do.	Wed. 2-4	14	57	88	70	6	Part-time Medical man	27	269	1503	269	690	856	1546	49	98
107. Swinefleet (Goole R.D.), Prospect House	Weekly	Tues. 2-4	—	13	23	33	6	Part-time Medical woman	48	55	634	55	220	380	600	39	42
108. Swinton, Rock House	Do.	Mon. & Wed. 2-4	15	42	114	234	199	Part-time Medical woman and man	98	346	629	346	2430	1687	4117	163	268

TABLE LXXII.—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 1936			Present arrangements for medical supervision	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1936				Total No. of children who were in attendance at the Centre and who at the end of the year were :—	
			Expectant Mothers	Children	Expectant Mothers	Children under one	Children between one and five			Expectant Mothers	Children	Children under one	Children between one and five	Total Children	Under one year of age	Between the ages of one and five years	
109. Tadcaster (Tadcaster R.D.), Shann House, Westgate ...	Fort-nightly Weekly	Tues. 2—4	6	36	18	39	13	Part-time Medical man	27	66	695	659	306	965	38	92	
110. Thorne (Thorne R.D.), Temperance Institute ...	Do.	Wed. 2—4	12	46	30	80	8	Part-time Medical man	48	101	1015	1178	1048	2226	75	113	
111. Thurncroft (Rotherham R.D.), Miners' Welfare Institute ...	Do.	Mon. 2—4	10	49	37	42	20	Do.	46	107	438	1974	272	2246	110	20	
112. Thurnscoe, Central Hall ...	Do.	Mon. and Tues. 2—4	16	62	128	147	10	Do.	47	280	834	2376	564	2940	124	72	
113. Wales (Kiveton Park R.D.), Methodist Chapel ...	Do.	Mon. 2—4	12	33	40	104	62	Do.	47	142	259	852	702	1554	86	74	
114. Wath, Wesleyan Assembly Hall ...	Do.	Mon. 2—4	—	62	—	86	6	Do.	45	—	761	738	2130	2868	70	108	
115. West Melton (Wath U.D.), Wesleyan Chapel ...	Do.	Tues. 2—4	22	81	173	92	10	Do.	48	486	816	1899	2015	3914	69	65	
116. Wetherby (Wetherby R.D.), Wesleyan Sunday School ...	Do.	Thurs. 2—4	7	31	24	23	12	Do.	49	31	203	765	751	1516	21	57	
117. Whiston (Rotherham (R.D.), Church Institute ...	Fort-nightly Weekly	Thurs. 2—4	—	34	4	44	4	Part-time Medical woman	26	8	518	434	453	887	31	80	
118. Whitwood, Memorial Hall ...	Do.	Wed. 2—4	14	80	54	117	50	Do.	49	176	1339	2498	1434	3932	103	114	
119. Wrenthorpe (Stanley U.D.), Church Sunday School ...	Do.	Thurs. 2—4	—	26	17	29	3	Do.	48	58	527	327	898	1225	24	47	
120. Worsborough, Wesleyan Sunday School, Worsborough Dale ...	Do.	Thurs. 2—4	20	70	98	233	36	Part-time Medical man	50	485	1860	2104	1408	3512	142	261	
121. Worsborough Bridge (Worsborough U.D.), St. John's Ambulance Hall ...	Do.	Mon. 2—4	6	50	8	72	57	S.M.I.	40	17	1203	891	1123	2014	80	113	
122. Yeadon, Town Hall ...	Do.	Tues. 2—4	10	52	18	88	15	Part-time Medical man	46	31	1333	1386	999	2385	77	131	



# VOLUNTARY INFANT WELFARE CENTRES.

TABLE LXXIII.

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 1936			Present arrangements for medical supervision	Total No. of Sessions held	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1936				Total No. of children who were in attendance at the Centre and who at the end of the year were :—	
			Mothers	Children	Mothers	Children under one	Children between the ages of one and five									Under one year of age	Between the ages of one and five years
1. Bentham (Settle R.D.), St. Margaret's Sunday School ...	Fort-nightly	Thurs. 2—4	—	13	—	8	5	Part-time Medical woman	24	—	167	—	102	216	318	14	29
2. Bardsey (Wetherby R.D.), Trustees Hall ...	Do.	Tues. 2—4	—	21	—	13	2	Do.	24	—	364	—	270	226	496	13	33
3. Kirkhamgate (Wakefield R.D.), Church Mission Room ...	Fort-nightly	Wed. (1st & 3rd) 2—3	—	12	—	11	4	Do.	22	—	215	—	166	106	272	10	23
4. Methley, Micklethorn Institute ...	Weekly	Mon. 2—4	—	26	14	52	2	Part-time Medical man	47	23	755	35	906	330	1236	41	52
<b>TOTAL</b> ...			—	—	5953	10083	2924		5579	17339	111278	19362	153807	127501	281308	8881	14845

### Medical Officers of Centres.

The following new appointments were made during the year:—

Name of Centre.	Medical Officer.	Name of Centre.	Medical Officer.
Cortonwood (ante-natal officer)	Dora Chapman.	Mytholmroyd (ante-natal officer)	Stella Brown.
Crigglestone ... ..	M. Smith.	Ripon do. ...	Gladys Kay.
Darton (ante-natal officer) ...	Doris M. Ringrose.	Selby do. ...	Phyllis Eardley.
Dalton do. ...	Barbara Demaine.	Swinton (Birth-control Clinic) ...	Margaret M. Owen.
Dodworth do. ...	Joan Gumpert.	Tadcaster (ante-natal officer) ...	Katherine M. Hick.
Ferrybridge ... ..	B. H. Gillbanks.	Thurnscoe do. ...	Barbara Demaine.
Glusburn ... ..	Henrietta Frost.	Thorne do. ...	Margaret M. Creaser.
Gawber (ante-natal officer) ...	Doris M. Ringrose.	Worsboro' Dale do. ...	Joan Gumpert.
Knaresborough do. ...	L. Allison Thomas.	Worsboro' Bridge do. ...	Joan Gumpert.
Micklefield do. ...	Marjorie Brown.	Worsborough Bridge ... ..	C. B. Ball.
		Yeadon (ante-natal officer) ...	Dorothy Summers.

The following resigned their appointments:—

Name of Centre.	Medical Officer.
Crigglestone ... ..	O. V. Burrows.
Dalton (ante-natal officer) ... ..	Enid F. Cook.
Dodworth do. ... ..	Barbara Demaine.
Ferrybridge ... ..	T. McCarthy (died).
Glusburn ... ..	Dorothy Summers.
Knaresborough (ante-natal officer) ... ..	Muriel Keyes.
Swinton (Birth-control Clinic) ... ..	Mary Boyd.
Worsborough Dale (ante-natal officer) ... ..	H. A. L. Banham.

### 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 LXXIV.

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
Miners' Welfare Institute, Conisbrough ...	Thursday, 2 p.m.	D. C. Rice, M.B., Ch.B.	3
Army Hut, West End Council School, Hemsworth ... ..	Wednesday, 1-30 p.m.	D. C. Rice, M.B., Ch.B.	1
Town Hall, Holmfirth ... ..	Monday and Thursday, 10 to 12 noon.	Muriel V. Wilby, M.R.C.S., L.R.C.P.	1
Allan House, Sowerby Bridge ... ..	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
Clayton Hospital, Wakefield ... ..	Any day.	—	—
Leeds General Infirmary. ... ..	Any day.	—	—

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.

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.

The following fourteen Child Welfare Centres are established within the selected area:—Altofts, Ardsley East, Ardsley West, Crigglestone, Crofton, Lepton (Flockton cases only), Horbury, Kirkhamgate, Normanton, Oulton, Outwood, Sharlston, Stanley, Wrenthorpe.

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. In addition to the centres enumerated above, the following came into the scheme.

#### OSGOLDCROSS.

Methley, Whitwood, Glasshoughton, Knottingley, Airedale, Hemsworth, Fitzwilliam, Ferrybridge.

#### DON VALLEY.

Thorne, Stainforth, Dunscoft, Rossington, Edlington, Armthorpe, Conisbrough, Conisbrough Upper, Thurnscoe, Woodlands, Carcroft, Bentley, Kirk Sandall, Askern, Mooreds.

#### ROTHER VALLEY.

Wath, West Melton, Swinton, Rawmarsh, Dalton, Bramley, Whiston, Maltby, Thurcroft, Kiveton Park, Dinnington, Catcliffe and Swallownest.

The table below shows the results achieved during the year:—

TABLE LXXV.

Applications in respect of:—	No. Investigated by County Public Assistance Officer.	No. found Incorrect.	Percentage found Incorrect as affecting Scheme.
Supply of Milk at Centres ... ..	5,124	877	17.11
Supply of Virol at Centres ... ..	871	77	8.84
Supply of Cod-Liver Oil at Centres ... ..	29	3	10.3
Supply of Malt and Oil at Centres ... ..	7	1	14.3
Convalescent Home Treatment for mothers and children	2	—	—
Dental Treatment for expectant and nursing mothers ...	256	49	19.1
Distress Fund ... ..	114	—	—
Hospital Treatment for babies ... ..	11	—	—
Maternity Home Treatment ... ..	939	178	18.95
Mid-day Meals for expectant mothers ... ..	112	1	—
Midwives' fees in necessitous cases ... ..	1,244	168	13.5
<b>TOTAL ...</b>	<b>8,709</b>	<b>1,354</b>	<b>15.54</b>

### Children and Young Persons Act, 1932 (Part V).

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 Part I of the Children Act, 1908, as amended by Part V of the Children and Young Persons Act, 1932, during the year 1936.

#### 1. Notification:—

- (i) Number of foster parents on the Register at the end of the year ... 182
- (ii) Number of children on the Register
  - (a) at the end of the year ... .. 233
  - (b) who died during the year ... .. 1
  - (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 ... .. 112
  - (b) Female, other than Health Visitors ... .. 3
  - (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 1936 the Infant Protection Visitors made 437 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 1936.

### **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 1936, 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 1/4 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  $4\frac{1}{2}$  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 5/- for each child under fourteen years of age and not working, does not exceed 30/- per week.



## PART IV.

## TUBERCULOSIS SCHEME.

DR. G. S. JOHNSTON.—Chief Clinical Tuberculosis Officer.

TABLE LXXVI.

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	
1926	966	736	230	0.62	0.65	0.56	0.77
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	0.56	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
Average for 10 years, 1926-35	860	644	216	0.56	0.59	0.49	0.72
1936	669	486	183	0.44	0.45	0.41	0.58

TABLE LXXVII.

## 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	
1926	348	258	90	0.23	0.23	0.22	0.19
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
Average for 10 years, 1926-35	272	193	79	0.18	0.18	0.18	0.15
1936	185	130	55	0.12	0.12	0.12	0.11

TABLE LXXVIII.

## Tuberculosis Deaths in 1936 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.	2	2	1	1	47	41	47	67	60	14	3	285	
	F.	2	1	—	6	59	52	23	29	21	8	—	201	
Rural Districts	M.	—	—	—	2	15	13	15	27	24	5	—	101	
	F.	1	—	3	1	21	25	11	9	6	3	2	82	
Administrative County		5	3	4	10	142	131	96	132	111	30	5	669	
OTHER TUBERCULOUS DISEASES—														
Urban Districts	M.	7	7	5	17	14	6	7	4	5	2	1	75	
	F.	3	5	11	7	19	5	2	2	—	1	—	55	
Rural Districts	M.	5	6	1	4	5	2	3	1	—	2	1	30	
	F.	1	—	4	1	4	5	5	2	2	1	—	25	
Administrative County		16	18	21	29	42	18	17	9	7	6	2	185	

TABLE LXXIX  
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, and 1936.

AGES.	URBAN DISTRICTS.				RURAL DISTRICTS.				ADMINISTRATIVE COUNTY.			
	1911-20	1921-30	1931-35	1936	1911-20	1921-30	1931-35	1936	1911-20	1921-30	1931-35	1936
MALES.												
Under 15 years ...	27	14	7	5	21	12	8	3	25	14	7	4
15 and under 25 years ...	106	77	54	53	79	60	50	37	99	72	53	48
25 and under 45 years ...	150	107	78	54	124	90	60	40	143	102	73	50
45 and under 65 years ...	175	127	101	108	127	89	86	108	163	117	97	108
65 and upwards ...	82	65	61	55	53	48	64	40	73	60	62	50
All ages ...	104	79	61	55	78	59	49	44	97	73	57	52
FEMALES.												
Under 15 years ...	37	19	7	8	25	21	7	9	34	19	7	8
15 and under 25 years ...	111	106	86	68	100	99	80	57	108	104	84	65
25 and under 45 years ...	109	83	61	42	109	76	61	54	109	81	61	46
45 and under 65 years ...	73	51	33	37	65	51	33	32	71	51	33	36
65 and upwards ...	48	37	29	20	39	28	17	38	46	35	26	25
All ages ...	79	62	44	36	69	55	41	37	77	60	43	36

TABLE LXXX  
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, and 1936.

AGES.	URBAN DISTRICTS.				RURAL DISTRICTS.				ADMINISTRATIVE COUNTY.			
	1911-20	1921-30	1931-35	1936	1911-20	1921-30	1931-35	1936	1911-20	1921-30	1931-35	1936
MALES.												
Under 15 years ...	96	62	33	30	73	50	30	27	89	58	32	29
15 and under 25 years ...	25	22	15	16	20	15	12	12	24	20	14	15
25 and under 45 years ...	19	12	11	8	15	11	8	7	18	12	10	8
45 and under 65 years ...	18	14	6	8	18	13	9	2	18	14	7	6
65 and upwards ...	20	15	9	10	11	8	12	24	17	13	9	14
All ages ...	45	28	16	14	36	24	15	13	43	27	16	14
FEMALES.												
Under 15 years ...	80	47	25	22	61	52	29	10	74	48	26	18
15 and under 25 years ...	26	22	15	22	20	21	13	11	24	22	14	19
25 and under 45 years ...	14	11	6	4	14	10	8	15	14	11	7	7
45 and under 65 years ...	14	12	5	1	11	9	5	9	14	12	5	3
65 and upwards ...	14	12	7	3	19	11	16	8	15	12	9	4
All ages ...	35	22	12	10	30	2	14	11	34	22	12	10



Chart shewing Mortality from Tuberculosis during the Years 1921-36 in the West Riding Administrative County and England and Wales.

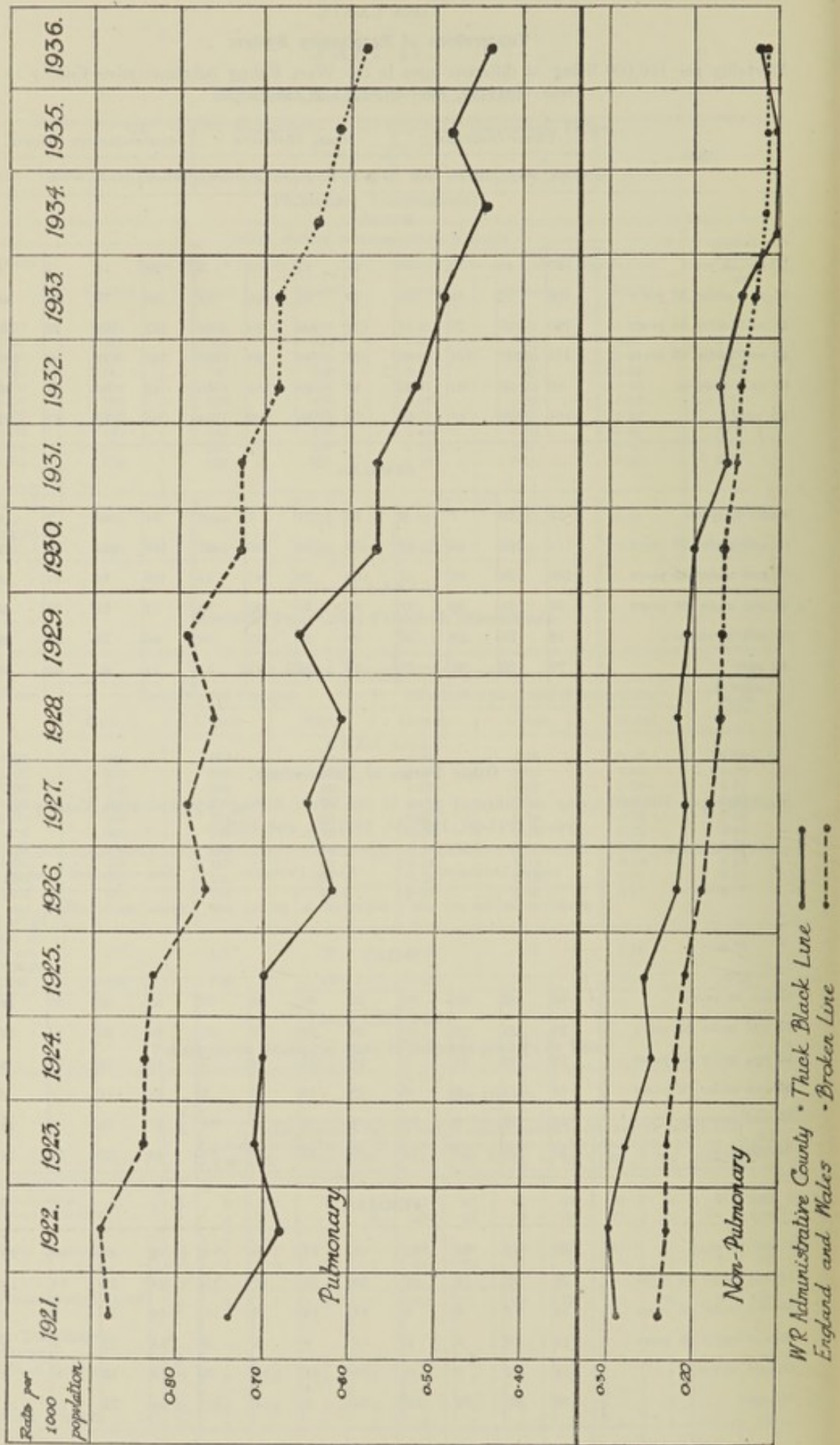


TABLE LXXXI.  
Tuberculosis Mortality—Comparison of Dispensary Areas.

Dispensary Area and Centre.	Estimated Population (mid. 1936).	DEATHS IN 1936.				DEATH RATES PER 1,000 ESTIMATED POPULATION.	
		PULMONARY.		NON-PULMONARY.		Pulmonary.	Non-Pulmonary.
		Male.	Female.	Male.	Female.		
No. 1. (Skipton) ...	142,299	29	22	8	3	0.36	0.08
No. 2. (Harrogate) ...	160,419	37	33	14	10	0.44	0.15
No. 3. (Doncaster) ...	392,575	118	89	27	22	0.53	0.12
No. 4. (Barnsley) ...	471,823	111	73	26	23	0.39	0.11
No. 5. (Sowerby Bridge) ...	360,591	91	66	30	22	0.44	0.14
County Totals ...	1,527,707	386	283	105	80	0.44	0.12

### NOTIFICATION OF TUBERCULOSIS.

TABLE LXXXII.

Notifications received during the period 1922-1936 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

TABLE LXXXIII.

### Public Health (Tuberculosis) Regulations 1930.

Summary of Notifications during the period from the 1st January, 1936, to the 31st December, 1936, 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 ... ..	1	5	21	21	55	71	114	93	74	70	14	539	580
„ Females ... ..	2	10	17	41	64	78	104	63	42	20	5	446	469
Non-pulm. Males ... ..	8	37	56	40	25	20	34	15	18	6	2	261	266
„ Females ... ..	4	29	50	42	40	28	23	13	8	4	2	243	251

### 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	1	1	6	10	11	10	19	21	5	86
" Females ...	1	4	1	2	8	7	13	7	8	4	4	59
Non-pulm. Males ...	6	7	3	6	6	2	6	3	1	—	3	43
" Females ...	1	11	4	5	2	3	3	3	—	2	3	37

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 ...	77	32
{ transferable deaths from Registrar General ...	15	19
Posthumous notifications ...	9	16
"Transfers" from other areas (other than transferable deaths) ...	43	13
Other sources ...	1	—



TABLE LXXXIII.—(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, 1936 on the Registers of Notifications kept by District Medical Officers of Health in the County.	5088	3809	8897	2333	2010	4343	13240
Number of cases removed from the Registers during the year by reason inter alia of:—							
1. Withdrawal of Notification	16	13	29	4	8	12	41
2. Recovery from the disease	155	118	273	107	87	194	467
3. Death	328	270	598	57	42	99	697

TABLE LXXXIV.  
Notified Cases in the West Riding in December, 1935 and 1936.

	Pulmonary.		Non-Pulmonary.		Totals.
	Males.	Females.	Males.	Females.	
No. of cases on registers of local Medical Officers of Health at end of 1935	5,303	4,011	2,411	2,019	13,744
New Cases notified in 1936	625	505	304	280	1,714
Cases removed from registers during 1936	840	707	382	289	2,218
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

### Dispensary Scheme.

It will be observed from the table showing the work of the dispensaries that some progress has been made during the year. The number of new cases and contacts examined at the dispensaries has increased by 523. There is evidence of more searching diagnosis as observed in the number of X-Ray and sputum examinations. A gradual weeding out of old cases, non-tuberculous, and recovered cases has reduced the numbers on the dispensary registers at the end of 1936 to 8,806. This represents a reduction of 704 cases during the preceding twelve months. Pulmonary cases number 6,067, 1,609 of which are known to have "positive" sputum. During 1936, 874 cases were marked off the registers "recovered," 598 were reported to have died, and 740 were found to have no further need of assistance under the County Scheme, had left the district or were lost sight of.

There is still evidence of gross overcrowding in certain parts of the Riding. It will be observed from Table XCVIII on page 133 that there were reported 442 cases of infectious pulmonary disease sleeping "two in a bed," 15 living under worse conditions, and 281 infectious cases sleeping in the same room as others.

During the year, a report was prepared setting out the number of open and infectious cases of pulmonary tuberculosis in the West Riding and known to the dispensary staff, who were living in overcrowded and wretched housing conditions. In this report it was suggested that, in conjunction with the Public Assistance Committee, certain necessitous tuberculous subjects should receive priority in obtaining housing accommodation and, where necessary, the rent should be augmented. The report is still under consideration.

During the year 147 positive cases returned from institutional treatment to live with children and young adults. Steps were taken by the dispensary staff to segregate as many of these as possible in shelters, or in separate rooms, etc.

Dispensary attendances of old and new cases (including contacts) during the years 1932-1936. (inclusive):—

New cases examined:—

	1932	1933	1934	1935	1936
(a) Contacts	1,334	1,025	1,282	1,425	1,659
(b) Others	3,342	3,469	3,210	4,274	3,658
Attendances (all cases)	34,266	33,646	32,990	30,992	30,318

Of the applications for treatment during the year:—

1,372	were recommended	Sanatorium Treatment
195	„	Hospital „
63	„	Dispensary „
1,103	„	Dispensary Supervision
406	„	referred to their own Doctor.

The total number of definite cases of tuberculosis on the dispensary registers on the 31st December, 1936, was 8,806.

TABLE LXXXV.  
Table shewing the work of the Dispensaries during 1936.

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 ... ..	375	275	23	33	85	76	105	85	460	351	128	118	1057	
(b) Diagnosis not completed ... ..	—	—	—	—	—	—	—	—	160	99	97	89	445	
(c) Non-tuberculous ... ..	—	—	—	—	—	—	—	—	795	640	356	365	2156	
B.—CONTACTS examined during the year:—														
(a) Definitely tuberculous ... ..	27	34	10	13	1	1	10	9	28	35	20	22	105	
(b) Diagnosis not completed ... ..	—	—	—	—	—	—	—	—	16	44	72	67	195	
(c) Non-tuberculous ... ..	—	—	—	—	—	—	—	—	220	330	414	391	1359	
C.—CASES written off the Dispensary Register as:—														
(a) Recovered ... ..	197	149	116	92	44	25	133	118	241	174	249	210	874	
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ... ..	—	—	—	—	—	—	—	—	1077	1073	813	812	3775	
D.—NUMBER OF CASES on Dispensary Register on December 31st:—														
(a) Definitely tuberculous ... ..	2995	1933	623	516	452	437	1044	806	3447	2370	1667	1322	8806	
(b) Diagnosis not completed ... ..	—	—	—	—	—	—	—	—	190	150	172	173	685	
1. Number of cases on Dispensary Register on January 1st ... ..	9984				2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ... ..				177					
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ... ..	740				4. Cases written off during the year as Dead (all causes) ... ..				598					
5. Number of attendances at the Dispensary (including Contacts) ... ..	30318				6. Number of Insured Persons under Domiciliary Treatment on the 31st December				532					
7. Number of consultations with medical practitioners:— (a) Personal ... .. (b) Other ... ..	1244 5552				8. Number of visits by Tuberculosis Officers to homes (including personal consultations) ... ..				3627					
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes ... ..	41181				10. Number of:— (a) Specimens of sputum, etc., examined ... .. (b) X-ray examinations made ... .. in connection with Dispensary work				3691 4422					
11. Number of "Recovered" cases restored to Dispensary Register, and included in A(a) and A(b) above ... ..	24				12. Number of "T.B. plus" cases on Dispensary Register on December 31st ... ..				1609					



It will be observed that only 70% of the notifications for pulmonary tuberculosis in 1936 were referred to the dispensary staff and that 10.3% of new cases died before notification. On a number of occasions where names of notified persons have been submitted to tuberculosis officers from the central office, the medical practitioner concerned has been quite ready to supply all information in his power regarding the cases notified, provided no active steps were taken by the dispensary staff. The reasons given were usually one or other of the following:—

- (a) The social position of the patient.
- (b) The fact that the patient concerned was unaware of the true nature of his illness, and it was considered not advisable in his own best interests that he should be informed.
- (c) Nervous temperament of the patient.
- (d) Refusal by patient to see another doctor.
- (e) In the case of a lodger patient, where two families occupy one house, the fear of domestic trouble if the true nature of patient's illness became known.

Co-operation between the dispensary staff and the general practitioners continues to be excellent. Dr. H. E. Raeburn, Consultant Tuberculosis Officer, No. 1 Dispensary Area, writes that "although there is no doubt that several cases have been seen when in a hopelessly advanced condition, in practically every case this has been due to the patient not attending a doctor until 'extremely ill.'" Concerning the same co-operation, Dr. V. Ryan, No. 3 Dispensary Area, reports—"The term Medical Centre, which now replaces the former designation of Tuberculosis Dispensary appears to be more apt because of the wide use made of the service by the general practitioners, whose chief concern in sending patients is to make sure they have not got tuberculosis, rather than to make sure that they have. This is an excellent attitude, and one in conformity with the principles of preventive medicine."

Co-operation with school medical inspectors and child welfare centres continues to be satisfactory, and during the year children were referred to the dispensaries for examination and observation.

The service of the various X-ray centres is fully appreciated and utilised by the medical members of the various departments.

The registers of the medical officers of health have been periodically revised and brought up to date. On such occasions an exchange of essential information regarding patients has taken place between the Tuberculosis Department and the local Medical Officers of Health.

Two Assistant Tuberculosis Officers, Dr. N. J. S. Nathan, L.R.C.P., M.R.C.S., and Dr. D. S. Hayes, L.R.C.P., M.R.C.S., were appointed on the 7th December, 1936. Dr. Nathan took over the duties in the Batley Dispensary Area from Dr. J. N. Hill, who took up the duties of Senior Assistant Medical Officer at Middleton-in-Wharfedale Sanatorium, near Ilkley, on the 7th January, 1937. Dr. Hayes, additional to the establishment, took up duties in the Barnsley Dispensary Area on the 12th January, 1937.

During the year a post graduate course was held at the Royal Chest Hospital, London, when Dr. E. A. Wilson attended from the 4th to 9th May.

The County Radiographer attended the 10th Annual Congress of the British Institute of Radiology in London from the 2nd to the 4th December.

A revision course for nurses was held at the Bingley Training College from 23rd to 29th April, and 8 dispensary nurses attended.

New dispensary premises were obtained at 95, Town Street, Horsforth, on the 13th June.

It was with regret that the death of Nurses Cooper and Nock, on the 17th January and the 27th November respectively, were reported. They had performed diligent service in the County Tuberculosis Department. Nurse Cooper had been in the Rotherham Area 13 years, and Nurse Nock in the Huddersfield Area 12 years.

#### Special Treatment.

**Artificial Pneumothorax.** During the year artificial pneumothorax was induced in one case. Refills to the number of 473 were given to 47 patients and the following table shows their condition at the end of the year:—

Disease arrested	...	...	...	...	...	...	13
Disease quiescent	...	...	...	...	...	...	2
Condition improved or maintained	...	...	...	...	...	...	21
Condition worse or treatment discontinued	...	...	...	...	...	...	4
Re-admitted to sanatorium	...	...	...	...	...	...	3
Left the district	...	...	...	...	...	...	2
Died	...	...	...	...	...	...	2

**Oleoathorax.** In one case undergoing an artificial pneumothorax an oleoathorax was instituted to prevent expansion of the lung. The result of this treatment was good and the patient continues well.

**Tuberculin.** Tuberculin was administered to 110 patients comprising 20 pulmonary and 90 non-pulmonary cases. The following table indicates the various lesions treated and the results recorded at the end of the year:—

TABLE LXXXVI.

	Arrested	Quiescent	Improving	In Statu Quo	Active	Treatment suspended	Total
Pulmonary ... ..	—	5	7	1	7	—	20
Non-Pulmonary:—							
Bones ... ..	2	1	1	1	1	—	6
Abdomen ... ..	—	3	1	—	—	2	6
Eyes ... ..	—	—	4	1	1	—	6
Lupus ... ..	—	—	1	1	—	—	2
Genito-urinary ... ..	—	3	4	—	1	—	8
Glands ... ..	2	24	27	3	5	1	62
Total ... ..	4	36	45	7	15	3	110

**Gold Treatment.** 2 cases were treated with solganal B. oleosum. The results of the year's treatment show (1) an unchanged condition with sputum still positive, and (2) patient became worse and was removed to sanatorium.

**Chest Surgery.** In the reports received from the dispensaries, mention is made of 2 pulmonary cases where surgical treatment was indicated. Phrenectomy was performed in both cases at the Leeds General Infirmary; the result in one case being very satisfactory, the activity being arrested and the patient maintaining his condition. The other case ended fatally, seven months after the operation.

Three other cases were referred for the opinion of the surgeon specialist but in each case operative treatment was contra-indicated.



TABLE LXXXVII.  
Revision of Dispensary Registers. 1936.

Dispensary or Branch		Patients on Dispensary Register 1/1/26			Cases Transferred or lost sight of in 1936			Cases written off as recovered in 1936			Diagnosis of Tuberculosis not confirmed in 1936			Deaths reported in 1936			Patients on Dispensary Register 31/12/36				
		Diagnosis completed		Non-P.	Pulm.	Non-P.		Pulm.	Non-P.		Pulm.	Non-P.		Pulm.	Non-P.		Pulm.	Diagnosis completed		Non-P.	Pulm.
Area No. 1.																					
Skipton	...	...	...	...	1	10	2	9	3	...	...	...	8	...	...	111	31	7	1		
Barnoldswick	...	...	...	1	5	1	10	1	...	...	...	...	8	...	...	105	26	14	1		
Clitheroe	...	...	...	...	...	...	...	2	...	...	...	...	2	...	...	20	8	...	...		
Horsforth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	90	16	4	...		
Otley	...	...	...	2	16	3	8	2	...	...	...	...	12	...	...	108	30	9	1		
Settle	...	...	...	...	3	2	3	1	...	...	...	...	4	...	...	44	9	3	...		
Area No. 2.																					
Harrogate	...	...	...	1	10	4	7	19	...	...	...	...	22	...	...	149	80	3	1		
Garforth	...	...	...	6	9	2	12	6	...	...	...	...	11	...	...	65	57	2	...		
Ripon	...	...	...	...	1	1	2	1	...	...	...	...	1	...	...	25	12	2	2		
Selby	...	...	...	2	3	1	5	3	...	...	...	...	8	...	...	41	36	2	...		
Tadcaster	...	...	...	1	1	...	2	6	...	...	...	...	1	...	...	9	17	...	...		
Area No. 3.																					
Doncaster	...	...	...	9	38	11	35	9	...	...	...	...	36	...	...	383	169	14	8		
Goldthorpe	...	...	...	...	24	5	7	9	...	...	...	...	15	...	...	286	122	28	2		
Goole	...	...	...	2	7	3	21	11	...	...	...	...	18	...	...	162	50	15	1		
Hensworth	...	...	...	...	13	...	6	2	...	...	...	...	13	...	...	197	72	25	2		
Mexborough	...	...	...	3	144	38	97	80	...	...	...	...	35	...	...	386	213	48	4		
Pontefract	...	...	...	7	26	9	40	7	...	...	...	...	53	...	...	563	218	41	5		
South Kirkby	...	...	...	3	15	3	13	8	...	...	...	...	9	...	...	163	70	13	...		
Thorne	...	...	...	2	37	10	6	...	...	...	...	...	9	...	...	211	110	60	3		
Area No. 4.																					
Barnsley	...	...	...	10	22	8	58	34	...	...	...	...	36	...	...	428	216	32	16		
Barley	...	...	...	...	9	3	8	7	...	...	...	...	7	...	...	120	68	7	3		
Dinnington	...	...	...	1	7	2	16	11	...	...	...	...	9	...	...	185	61	13	2		
Liversedge	...	...	...	...	7	2	7	5	...	...	...	...	11	...	...	97	40	6	2		
Morley	...	...	...	2	3	2	10	6	...	...	...	...	13	...	...	114	54	20	...		
Normanton	...	...	...	2	1	2	2	4	...	...	...	...	8	...	...	105	41	6	4		
Penistone	...	...	...	1	2	1	2	4	...	...	...	...	1	...	...	33	12	10	2		
Pudsey	...	...	...	1	2	3	13	6	...	...	...	...	4	...	...	67	38	6	1		
Rotherham	...	...	...	3	81	25	22	17	...	...	...	...	27	...	...	556	224	41	7		
Rothwell	...	...	...	4	...	1	4	4	...	...	...	...	8	...	...	77	22	5	...		
Stoaksbridge	...	...	...	2	...	1	31	5	...	...	...	...	9	...	...	95	41	3	...		
Wadsley	...	...	...	1	6	1	6	11	...	...	...	...	5	...	...	114	53	4	...		
Wakefield	...	...	...	5	13	7	20	8	...	...	...	...	21	...	...	180	81	12	4		
Area No. 5.																					
Sowerby Bridge.	...	...	...	3	7	4	2	2	...	...	...	...	20	...	...	125	86	49	8		
Brighouse	...	...	...	9	3	2	3	3	...	...	...	...	10	...	...	50	29	6	...		
Huddersfield	...	...	...	2	11	7	42	32	...	...	...	...	23	...	...	188	125	17	3		
Keighley	...	...	...	2	11	4	8	8	...	...	...	...	23	...	...	81	172	31	7		
Shipley	...	...	...	9	11	1	3	4	...	...	...	...	25	...	...	132	48	14	1		
Todmorden	...	...	...	5	5	...	2	4	...	...	...	...	15	...	...	75	57	15	1		
Uppermill	...	...	...	5	1	2	12	12	...	...	...	...	3	...	...	37	16	6	...		
6682		2828		407	67	567	173	554	320	15	10	543	55	6967	2739	593	92				

**LIST OF TUBERCULOSIS DISPENSARIES, SHEWING DISPENSARY ADDRESSES  
AND TIMES OF SESSIONS (Revised April, 1937).**

*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.	Skipton U., Silsden U., Skipton R.	<b>Consultant Tuberculosis Officer:</b> H. E. Raeburn, M.D., M.B., B.S.
Whiteley Croft, Station Road, Otley, (Telephone 218).	Thursdays, 10 a.m.	Otley U., Ilkley U., Wharfedale R.	
95, Town Street, Horsforth.	Thursdays, 2 p.m.	Horsforth U., Aireborough 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.	Settle R., Sedburgh R.	
<b>AREA No. 2.</b>			
10, North Park Road, Harrogate (Telephone 5339)	Tuesdays & Thursdays 2 p.m. ;	Harrogate B., Knaresborough U., Knaresborough R., Wetherby R., Great Ouseburn 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 Thurs- day 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 p.m.	Adwick-le-Street U., Bentley U., Tick- hill U., Doncaster R. (less Denaby and Adwick)	<b>Consultant Tuberculosis Officer:</b> E. Ratner, M.D., M.B., B.Ch., D.P.H.
37, Hook Road, Goole	Mondays, 10-30 a.m.	Goole U., Goole R.	
Thorne Hall, Thorne	Fridays, 10 a.m.	Thorne R.	
The Lindens, Linden Terrace, Tanshelf, Pontefract (Telephone 88).	Tuesdays, 2 & 6-30 p.m.	Pontefract B., Featherstone U., Whit- wood U., Castleford U., Knottingley U., Rothwell U. (part), Pontefract R.	<b>Assistant Tuberculosis Officers:</b>
Exchange Buildings, Market Street, Mexborough	Wednesdays, 10 a.m.	Mexborough U., Conisborough U., Swinton U., Wath U., Denaby and Adwick Parishes.	A. Leitch, M.B., Ch.B., D.P.H.
8, Goldthorpe Road, Goldthorpe	Thursdays, 10 a.m.	Dearne U.	T. W. Rutledge, M.B., Ch.B., D.P.H.
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 802).	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., Wors- borough U., Barnsley R.	<b>Consultant Tuberculosis Officer:</b> H. A. Crowther, M.A., M.R.C.S., L.R.C.P.
Wesleyan Sunday School, Penistone	Thursdays, 2 p.m.	Penistone U., Gunthwaite U., Hoyland- swaine U., Thurstone U. Penistone R.	
5, Almshouse Lane, Wakefield.	Tuesdays and Fridays, 2 p.m.	Horbury U., Stanley U., Wakefield R., Ossett B. (part)	<b>Assistant Tuberculosis Officers:</b>
The Park Pavilion, Normanton	Tuesdays, 10 a.m.	Altofts U., 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	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, Liver- sedge	Thursdays, 10 a.m.	Spenborough U., Heckmondwike U.	
Wesley Chambers, Lidgett Hill, 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	Fridays, 10 a.m. and 2 p.m.	Kiveton Park R.	
Urban District Council Offices, Stocks- bridge	Mondays, 10 a.m.	Stocksbridge U., Wortley R. (part)	
102, Parson Cross Rd., Wadsley Bridge.	Mondays, 2 p.m.	Wortley R. (part)	
<b>AREA No. 5.</b>			
Myrtle Villa, Greenups Terrace, Sowerby Bridge (Telephone 81221).	Thursdays, 10-30 a.m.	Sowerby Bridge U., Midgley U., Queensbury and Shelf U., Ripponden U.	<b>Consultant Tuberculosis Officer:</b> S. R. Wilson, M.D., M.B., Ch. B., D.P.H.
Masonic Hall, Todmorden.	Tuesdays, 10 a.m. Thursdays, 2 p.m.	Todmorden B., Hebden Royd U., Todmorden R.	<b>Assistant Tuberculosis Officers:</b>
143, Skipton Road, Keighley	Fridays, 2 p.m.	Keighley B., Keighley R., Haworth U., Oakworth U., Oxenhope U., Den- holme U.	J. E. Gething, B.A., M.B., Ch.B.
1, Peel Street, Huddersfield (Telephone 3641—Extension 8).	Mondays, 2 p.m., and Wednesdays, 1 p.m.	Colne Valley U., Emley U., Flockton U., Thurstonsland and Farnley Tyas U., South Crosland U., Lepton U., Whitley Upper U., Kirkburton U., Kirkheaton U., Skelmanthorpe U., Mirfield U., Shelley U., Shepley U., Clayton West U., Denby and Cumber- worth U., Holme U., Honley U., Holmfirth U., New Mill U., Meltham U.	A. D. Rankin, M.B., Ch.B., D.P.H.
Court Street, Uppermill	Tuesdays, 2 p.m. Fridays, 2 p.m.	Saddleworth U.	
Mill House, Bradford Road, Brighouse	1st and 3rd Thursdays, 10 a.m.	Brighouse B., Elland U.	
Farr Royd, Otley Road, Shipley	Fridays, 10 a.m. 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, 1936.

	Kind of Treatment Granted.				Cases referred to own Medical Attendant.	Totals.
	Sanatorium.	Hospital.	Dispensary Treatment.	Dispensary Supervision.		
New Cases ... ..	834	107	38	309	116	1,404
Old Cases reconsidered ... ..	538	88	25	794	200	1,735
Totals ...	1,372	195	63	1,103	406	3,139

TABLE XC.  
Summary of Dispensary Work, 1936.

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 ... ..	769	4,641	521	3,356
Area No. 2 ... ..	569	3,741	298	2,441
Area No. 3 ... ..	2,323	13,389	821	6,727
Area No. 4 ... ..	2,404	12,809	897	9,213
Area No. 5 ... ..	731	6,401	1,090	8,581
Totals ... ..	6,796	40,981	3,627	30,318

TABLE XCI.  
Home Visitation by Dispensary Staff.

Year.	Visits by Tuberculosis Officers.	Visits by Dispensary Nurses.	Visits by Health Visitors.
1932	3232	33002	5177
1933	2989	29694	5175
1934	3686	30742	5199
1935	3818	30511	5694
1936	3627	35121	6060

#### Tuberculosis Cases in Public Assistance and other Institutions.

During the year, 262 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. It will be noted that 117 cases or 44·7% were recommended for institutional treatment.

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) ... ..	10	6	11	3	—	2 Non-tuberculous.
No. 2 (Harrogate) ... ..	20	17	20	11	1	5 Non-tuberculous.
No. 3 (Doncaster) ... ..	35	25	27	8	7	10 Non-tuberculous. 5 Died. 2 Dispensary obsn. 1 Lost sight of.
No. 4 (Barnsley) ... ..	38	17	20	25	3	3 Non-tuberculous. 1 Refused treatment. 3 Referred to other dispensaries.
No. 5 (Sowerby Bridge)	29	65	39	52	2	1 Transferred to Home in Blackpool.
TOTAL ...	132	130	117	99	13	

### X-Ray Examination.

X-Ray plants are now established at the following centres:—Barnsley, Batley, Doncaster, Pontefract, Rotherham and Sowerby Bridge. In the absence of a conveniently situated county plant in the Skipton and Clitheroe areas and the northern part of No. 2 area, cases were sent to the following private clinics for examination.

Barnoldswick and Clitheroe Dispensaries	} Skipton Hospital Dr. Thomson (Harrogate)
Keighley, Skipton, Settle and Otley Dispensaries	
Harrogate, Ripon, and Tadcaster Dispensaries	

During the year, 4,422 X-Ray examinations were made of West Riding dispensary patients, 3,952 of these being carried out at County X-Ray Centres, as follows:—

Barnsley	...	...	422	Batley	...	...	469
Doncaster	...	...	754	Pontefract	...	...	825
Rotherham	...	...	582	Sowerby Bridge	...	...	900

TABLE XCIII.

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) ...	71	246	2	8	80	4	411
Area No. 2 (Harrogate)	30	64	3	3	7	2	109
Area No. 3 (Doncaster)	230	851	8	35	214	15	1353
Area No. 4 (Barnsley) ...	184	910	33	92	331	92	1642
Area No. 5 (Sowerby Bridge) ... ..	158	378	7	38	284	42	907
	673	2449	53	176	916	155	4422

### Domiciliary Open-Air Shelters.

Applications for the provision of open-air sleeping shelters have not been so numerous as in previous years, and this has no doubt been occasioned by the provision of better housing conditions by local councils. Twelve new shelters were obtained during the year and six of the older ones were destroyed after inspection by the County Architect's department. The shelters were destroyed under the supervision of the local sanitary inspectors, who willingly assist in this and other work which they are asked to undertake in connection with the disinfection of the shelters and equipment and the approval of sites. Monthly reports upon the condition of the shelters and equipment are furnished to this department by the dispensary staff and health visitors. Ninety-seven shelters were out on loan at the end of the year.

### Provision of Clothing.

During the year 378 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	...	...	243	Crookhill Hall Receiving Home	56		
Mitchell Memorial Home	...	...	7	Cardigan Sanatorium	...	...	8
Eldwick Sanatorium	...	...	10	Other Institutions	...	...	54

### West Riding Distress Fund.

Advantage has been taken of the above fund to provide assistance in necessitous cases, and during the year, 35 blankets, 8 pillows, 3 bedsteads, 7 mattresses and 2 pillow slips have been purchased and loaned to patients.

Six pairs of spectacles were obtained and assistance has been granted towards the cost of removing a family to Papworth Village Settlement. The fund has also been used for the payment of travelling expenses, rent during the absence of the patient in sanatorium, arrears of National Health Insurance contributions and the provision of a joiner's kit of tools.

### WAR PENSIONERS FOR TUBERCULOSIS.

There was an addition of one new case of a War Pensioner for tuberculosis during the year, the total on the 31st December being 541.



The following table shows the number of War Pensioners for tuberculosis on various forms of treatment on the 31st December, 1936.

TABLE XCIV.

AREA.	Dispensary.				General Dispensary Supervision				Domiciliary.				Institutional (includes San., Hosp., and Training).				TOTALS	
	Class T.B. Minus	Class T.B. Plus			Class T.B. Minus	Class T.B. Plus			Class T.B. Minus	Class T.B. Plus			Class T.B. Minus	Class T.B. Plus				
		Group 1	Group 2	Group 3		Non-Polm.	Group 1	Group 2		Group 3	Non-Polm.	Group 1		Group 2	Group 3	Non-Polm.		Group 1
No. 1 (Skipton) ...	2	—	—	—	36	—	4	—	1	3	—	5	—	1	—	—	—	52
.. 2 (Harrogate) ...	—	—	—	—	12	—	3	—	1	3	1	3	4	1	—	—	—	29
.. 3 (Doncaster) ...	5	—	1	1	65	1	6	2	72	3	5	8	4	—	—	1	—	173
.. 4 (Barnsley) ...	4	—	1	—	87	1	1	2	3	108	—	6	1	1	—	—	—	216
.. 5 (Sowerby Bridge) ...	9	—	—	—	34	—	1	1	3	17	—	1	2	1	—	—	—	71
Totals ...	20	—	1	1	234	2	15	5	8	203	4	20	15	7	1	—	1	541

### 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 19 colonists; 5 at Preston Hall, near Maidstone, Kent; 10 at Papworth Hall, near Cambridge; 3 at East Lancashire Tuberculosis Colony, Barrowmore Hall, Gt. Barrow, Chester, and 1 at Derwen Cripples' Training College, Oswestry. Two patients have been removed from the settlement at Preston Hall, one to employment in the West Riding, one to employment in the village and two are to remove as soon as alternative employment has been found. One settler has left Derwen for employment near his home.

TABLE XCV.

Colony.	No. under training on 1.1.36.	No. admitted during 1936.	No. discharged during 1936.	No. remaining under training on 31.12.36.	
Papworth Village Settlement, near Cambridge ...	1	—	—	1	For training only. Qualifying for Village Settlement.
British Legion Village, Preston Hall, Aylesford, Kent ...	12	5	5	12	
East Lancs. Tuberculosis Colony, Gt. Barrow, Chester ...	5	—	—	5	
Burrow Hill San. Colony, Frimley, Surrey ...	1	—	1	—	Do.
Derwen Cripples' Training College, Oswestry ...	3	6	5	4	For training only.
	3	1	—	4	Do.

Of the 11 cases shewn under the heading "discharged," 2 completed courses and 9 cases did not complete courses having been prematurely discharged for various reasons.

### 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 126 patients were referred by the dispensaries for this treatment.

Clayton Hospital, Wakefield.  
Huddersfield Royal Infirmary.  
Leeds General Infirmary.  
Sheffield Royal Infirmary.  
Pontefract General Infirmary  
York County Hospital.

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 applications	Result of treatment			
				Quiescent and apparently well.	Much improved	Improved	No change
No. 1 (Skipton)	Adenitis (Cervical and Inguinal) ...	2	64	1	1	—	—
	Lupus ...	6	439	2	2	2	—
	Other Conditions ...	—	—	—	—	—	—
No. 2 (Harrogate)	Adenitis (Cervical and Inguinal) ...	—	—	—	—	—	—
	Lupus ...	11	924	2	3	4	2
	Other Conditions ...	—	—	—	—	—	—
No. 3 (Doncaster)	Adenitis (Cervical and Inguinal) ...	13	1169	5	7	1	—
	Lupus ...	33	4352	6	16	10	1
	Other Conditions ...	5	435	3	1	—	1
No. 4 (Barnsley)	Adenitis (Cervical and Inguinal) ...	15	727	1	1	10	3
	Lupus ...	23	2179	3	10	9	1
	Other Conditions ...	2	154	—	1	1	—
No. 5 (Sowerby Bridge)	Adenitis (Cervical and Inguinal) ...	9	258	4	—	3	2
	Lupus ...	6	507	—	3	1	2
	Other Conditions ...	1	10	—	—	—	1



### SURGICAL APPLIANCES.

The following Surgical Appliances were supplied to patients receiving dispensary or domiciliary treatment during the year, namely:—

Surgical Boots	...	...	...	...	...	...	...	...	14
Spinal and Abdominal Supports	...	...	...	...	...	...	...	...	10
Walking Caliper Splints	...	...	...	...	...	...	...	...	3
Crutches	...	...	...	...	...	...	...	...	2
Iron Pattens	...	...	...	...	...	...	...	...	6
Blocked Leather Ankle	...	...	...	...	...	...	...	...	1
Artificial Limbs	...	...	...	...	...	...	...	...	2
Alterations, Repairs and Renewal Parts	...	...	...	...	...	...	...	...	27

The cost of these appliances was £123 11s. 6d., of which a sum of £9 9s. 6d. was subscribed by or on behalf of six patients.

In addition to those enumerated, some 55 surgical appliances of various types representing a total cost to the County Council of £77 6s. 6d. 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 has been 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 1936, the average number of patients in receipt of extra nourishment from the County Council was 324. 588 patients undergoing dispensary or domiciliary treatment received grants in the form of eggs and milk during the year at a total cost of £2,210 4s. 2d.

### DENTAL TREATMENT.

Approval was given for the provision of dental treatment in 182 necessitous cases during the year at an estimated cost of £218 14s. 2d. Approved Societies and parents contributed £46 0s. 8d. towards the cost of treatment and the balance £165 13s. 6d. 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	87	231	9	—	3	—	2	—	—	1	1
Cardigan Sanatorium	8	47	—	—	—	2	—	—	—	—	1
Crookhill Hall Receiving Home	18	126	—	—	11	—	1	—	—	1	—
Westmorland Sanatorium	1	5	—	1	—	—	—	—	—	—	—
Berks. and Bucks. Jt. Sanatorium	8	21	2	1	—	—	—	—	—	—	—
Papworth Village Settlement	5	1	10	—	—	—	—	—	—	2	—
East Anglian Sanatorium	4	16	1	—	—	—	—	—	—	—	—
Eldwick Sanatorium	46	169	7	—	—	—	—	—	—	—	—
No. 1. Skipton Area	1	11	—	—	1	—	—	—	—	—	—
No. 4. Barnsley Area	2	40	—	—	2	—	—	—	—	—	—
No. 5. Sowerby Bridge Area	2	30	—	—	2	—	—	—	—	—	—
Totals	182	697	29	2	19	2	3	—	2	4	2



TABLE XCVIII.

**TABLE SHOWING ENVIRONMENTAL AND SOCIAL CONDITION OF PATIENTS,  
DECEMBER, 1936.**

	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	—	45	21	171	44	48	329
No. of cases where patient sleeps in separate room ... ..	17	837	239	1,092	437	436	3,058
No. of cases where patient sleeps in separate bed but not separate room ... ..	—	281	219	597	457	284	1,838
No. of cases where patient sleeps "two in a bed" ... ..	—	442	182	1,990	400	470	3,484
No. of cases where patient sleeps "more than two in a bed" ...	1	14	19	118	67	27	246

**TUBERCULOSIS CARE COMMITTEES.**

The scheme for the utilisation of voluntary organisations for the after-care of tuberculous patients has been continued during 1936. The Schedule which is given below shows the character and extent of the work carried out.

The activities of the six Committees now in operation are mainly concerned with the amelioration of circumstances and conditions which lay outside the official County Schemes, and much help has again been given to distressed families by providing for the custody of children during the absence of parents under treatment in Sanatoria; and in the boarding-out of children from infected homes. In the latter cases, there were seventeen children boarded-out during the year. The advantages of this arrangement cannot be over-estimated, for on removing young and susceptible subjects from infection, adolescent tuberculosis in contacts is being prevented.

TABLE XCIX.

Care Committee	Number of cases in which grants have been made			Total Expenditure incurred in 1936	Grants made by County Council.
	Food	Clothing	Other		
Barnsley ... ..	52	3	1	£ 63 13 10	£ 34 0 0
Castleford ... ..	20	8	8	183 16 5	97 0 0
Doncaster ... ..	73	2	4	61 5 4	32 0 0
Huddersfield ... ..	37	—	13	38 0 7	20 0 0
Aberford ... ..	17	1	—	5 9 6	3 0 0
Osgoldcross ... ..	98	9	16	217 7 2	114 0 0
				509 12 10	300 0 0

**Institutional Treatment.**

An examination of the figures relating to institutional accommodation reveals that, on the 31st December, 1936, there was available for county purposes a total of 767 beds, comprising 586 for pulmonary cases and 181 for other tuberculous conditions. The corresponding figure for the previous year was 829. This reduction of 62 beds is due chiefly to relinquishing 30 beds at the Mitchell Memorial Home and 20 beds at the Berks and Bucks Joint Sanatorium. The further decrease of 12 beds is the result of varying accommodation in miscellaneous institutions.

Early cases of pulmonary tuberculosis were admitted as follows:—

*Adults.*—Middleton, Cardigan, Meathop, and Oakwood Hall.

*Children.*—Eldwick, Oakwood Hall, East Anglian and Wensleydale.

Advanced cases were admitted to Crookhill Hall, Morton Banks and Dean Head Institutions.

Observation cases were admitted to Middleton, Cardigan, Eldwick and Oakwood Hall Institutions.



**Visits to Sanatoria.** During the year visits were paid by members of the Tuberculosis Sub-Committee to the undermentioned institutions where West Riding patients were receiving treatment:—

Shropshire Orthopaedic Hospital, Gobowen ...	...	June
East Anglian Sanatorium, Nayland ...	...	August
Leasowe Hospital, Cheshire ...	...	
Stannington Sanatorium, Northumberland ...	...	
Berks and Bucks Joint Sanatorium, Oxon ...	...	
Westmorland Sanatorium, Meathop ...	...	
Wensleydale Sanatorium, Aysgarth ...	...	
Royal National Orthopaedic Hospital, Stanmore ...	...	

**Extension to Sanatorium.** The new "E" Block and Recreation Room at Middleton Sanatorium were officially opened by the Chairman of the Sanatorium Sub-Committee.

This new pavilion of 52 beds, with operating theatre, is built on modern lines and provides for 8 single and 6 double-bedded cubicles and four wards of 8 beds. The spacious recreation room which replaced the old wooden structure has considerably added to the comfort and happiness of the patients. It is equipped for cinema entertainments and theatrical displays.

During the year a comprehensive scheme for extending and improving the sanatorium buildings at Middleton was approved. This included provision for the following:—

New Pavilion to replace "F" Block.

Additional Nurses' Home.

New Quarters for Domestic Staff.

New Treatment Block, consisting of Treatment and Plaster Room, X-Ray Room and Dark Room, Light Room, Dental Room and Massage and Electrical Room, Dispensing Room, Writing Room, and Sick Room Accommodation for staff.

Covered Corridors connecting the new Treatment Block to "A," "B" and "E" Pavilions.

New Stores, Canteen and Library Block.

New House for the Senior Medical Officer.

Improvements to Dining Room and Kitchen Blocks.

Central Heating to the Institution.

In order to effect a reduction in the working hours of the nursing and domestic staff to 54 per week, and to meet the requirements of modern methods in sanatorium treatment, the Sanatorium Sub-committee approved the appointment of the following additional staff:—

- 1 Sister Tutor.
- 1 Theatre Sister.
- 1 Masseuse.
- 1 Sister for Night Work.
- 1 Ward Sister.
- 5 Charge Nurses (fully trained).
- 2 Staff Nurses.
- 12 Probationers.
- 1 Laboratory Technician.
- 8 Wardmaids.

As the laboratory at Middleton has been improved and the work considerably increased, a Laboratory Technician was appointed in November. During the year new X-Ray plant was installed, and modern appliances added to the theatre equipment, viz., thoracoscope, bronchoscope, and diathermy and cautery apparatus.

**Future Accommodation.** A forecast was made during the year of the requirements of the County for the institutional treatment of tuberculosis in men, women and children. It was pointed out in a report that there had been a reduction in cases of all types since the introduction of the revised Dispensary Scheme in 1931. This reduction, whilst coinciding with the lowering of incidence and mortality rates since that time, may be attributed mainly to a greater accuracy and to improved methods of diagnosis, including the use of X-Ray and tuberculin tests, etc. This has resulted in a speedier discharge of cases, which under former conditions would have been retained on the registers and possibly sent to sanatoria. To avoid the uneconomic retention of empty beds, it was necessary that a readjustment of accommodation in residential institutions under the County Scheme should be made and that beds in certain other residential institutions, not under the control of the County Council to which West Riding cases were sent for treatment, should be relinquished.

It was recommended that the Mitchell Memorial Home, containing 30 beds, be discontinued for the treatment of cases of tuberculosis, and that arrangements be terminated at the following institutions:—

Dean Head Sanatorium ...	...	60 beds—women.
Morton Banks Sanatorium ...	...	53 beds—women.
Berks. and Bucks. Joint Sanatorium ...	...	20 beds—children
Sheffield Children's Hospital ...	...	3 beds—children

The number of beds will be reduced in the under-mentioned institutions as follows:—

Shropshire Orthopaedic Hospital ...	...	from 28 to 20.
King Edward VII Hospital ...	...	from 37 to 30.
The Marguerite Home, Thorparch ...	...	from 32 to 30.
Leasowe Hospital, Cheshire ...	...	from 15 to 13.

The Public Health Committee have resolved that 300 beds should be retained at Middleton and that temporarily 50 of the beds be used for purely tuberculous orthopaedic cases among men and boys. The Cardigan and Eldwick sanatoria are being retained for the present.

**New Sanatorium at Scotton Banks, near Knaresborough.** During the year schedules of staff required, of medical and surgical equipment, etc., were approved. The buildings are almost completed and it is hoped to open the Sanatorium towards the middle of 1937. The institution is designed to provide accommodation for 100 women and 100 children.



TABLE C.  
Institutional Accommodation Available for West Riding Cases—December, 1936.

	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
Cardigan Sanatorium, near Wakefield ... ..	—	50	—	—	—	—
Eldwick Sanatorium, near Bingley ... ..	—	—	39	—	—	—
Crookhill Hall Receiving Hall ... ..	40	—	—	—	—	—
<b>Not Controlled by the County Council.</b>						
Morton Banks Sanatorium, near Keighley ... ..	—	53	—	—	—	—
Dean Head Sanatorium, Horsforth ... ..	—	60	—	—	—	—
Oakwood Hall Sanatorium, Rotherham ... ..	—	15	16	—	—	—
East Anglian Sanatorium, Nayland ... ..	—	—	19	—	—	—
Wensleydale Sanatorium, Aysgarth ... ..	—	—	11	—	—	—
Westmorland Sanatorium, Meathop ... ..	—	6	—	—	—	—
Marguerite Home, Thorparch ... ..	—	—	—	—	—	28
Leasowe Hospital, Cheshire ... ..	—	—	—	—	4	7
King Edward VII Hospital, Rivelin Valley ... ..	—	—	—	—	—	39
Shropshire Orthopaedic Hospital, Oswestry ... ..	—	—	—	12	12	—
Yorkshire Children's Orthopaedic Hospital, Kirkby- moorside ... ..	—	—	—	—	—	6
Stannington Sanatorium, Northumberland ... ..	—	—	5	—	—	—
Royal National Orthopaedic Hospital, Stanmore, Middlesex ... ..	—	—	—	—	—	6
Miscellaneous Institutions ... ..	16	5	1	6	1	10
	306	189	91	43	17	121

TABLE CI.  
Institutional Treatment during 1936.

Institution	Patients in residence on 1.1.36	Admissions 1936			Total number of Admissions	Discharges 1936			Total number of Discharges	Patients in residence on 31.12.36
		Men	Women	Children		Men	Women	Children		
Pulmonary Institutions.										
Middleton-in-Wharfedale Sanatorium ... ..	289	469	—	26	495	442	—	51	493	291
Cardigan Sanatorium ... ..	48	—	108	12	120	—	116	7	123	45
Mitchell Memorial Home ... ..	12	9	—	—	9	21	—	—	21	—
Eldwick Sanatorium ... ..	37	—	—	95	95	—	—	93	93	39
Crookhill Hall Receiving Home ... ..	39	90	—	—	90	89	—	—	89	40
Dean Head Sanatorium ... ..	54	—	146	1	147	—	154	—	154	47
Morton Banks Sanatorium ... ..	48	—	104	4	108	—	105	10	115	41
Westmorland Sanatorium ... ..	6	—	10	—	10	—	13	—	13	3
Oakwood Hall Sanatorium ... ..	27	—	36	41	77	1	32	40	73	31
Stannington Sanatorium ... ..	7	—	—	10	10	—	—	12	12	5
East Anglian Sanatorium ... ..	10	—	—	21	21	—	—	12	12	19
Wensleydale Sanatorium ... ..	8	2	1	9	12	2	5	2	9	—
Berks. and Bucks. Sanatorium ... ..	20	—	—	15	15	—	—	35	35	—
Stanhope Sanatorium ... ..	5	—	—	7	7	—	—	8	8	4
St. Nicholas Hospital ... ..	2	—	—	—	—	—	—	1	1	1
Non-Pulmonary Institutions.										
Yorkshire Children's Orthopaedic Hospital ... ..	9	—	—	4	4	—	—	7	7	6
Marguerite Home ... ..	32	—	—	12	12	—	—	16	16	28
King Edward VII Hospital ... ..	37	—	—	22	22	—	—	20	20	39
Shropshire Orthopaedic Hospital ... ..	27	41	38	—	79	37	44	1	82	24
Royal National Orthopaedic Hospital ... ..	13	—	—	2	2	—	—	9	9	6
Leasowe ... ..	14	—	1	1	2	—	2	3	5	11
Sheffield Children's Hospital ... ..	3	—	—	2	2	—	—	5	5	—
St. Vincents Hospital ... ..	1	—	—	—	—	—	—	—	—	1
Alton Hospital, Hants. ... ..	2	—	—	1	1	—	—	1	1	2
St. Georges Hospital, S.W.1. ... ..	—	—	—	2	2	—	—	1	1	1
Addenbrookes Hospital, Cambs. ... ..	—	2	—	—	2	2	—	—	2	—
Leeds General Infirmary ... ..	4	30	22	24	76	29	24	24	77	3
Huddersfield Royal Infirmary ... ..	—	9	4	6	19	9	4	6	19	—
Bradford Royal Infirmary ... ..	—	1	4	2	7	1	4	2	7	—
Doncaster Royal Infirmary ... ..	—	1	—	—	1	1	—	—	1	—
Manchester Royal Infirmary ... ..	—	—	1	—	1	—	1	—	1	—
Manchester and Salford Hospital ... ..	—	—	2	—	2	—	2	—	2	—
York County Hospital ... ..	—	1	1	—	2	—	1	—	1	—
Training Centres and Village Settlements ... ..	27	5	4	3	12	9	1	3	13	26
	781	660	482	322	1464	643	508	369	1520	725

TABLE CH.  
Immediate Results of Treatment of Patients Discharged from Residential  
Institutions during the year 1936.

## (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 ...	41	17	3	31	46	29	12	15	41	6	2	9	252
	Not Quiescent ...	19	20	9	16	15	7	2	7	9	6	—	6	116
	Died in Institution	5	2	—	—	2	2	1	—	—	1	—	—	13
Class T.B. + Group I.	Quiescent ...	2	—	—	2	2	—	3	2	1	1	—	—	13
	Not Quiescent ...	1	1	—	6	6	—	1	2	—	2	1	—	20
	Died in Institution	—	—	—	—	1	—	1	—	—	1	—	—	3
Class T.B. + Group II.	Quiescent ...	4	3	—	9	16	—	14	10	—	5	4	—	65
	Not Quiescent ...	22	17	1	37	27	2	31	29	1	15	11	—	193
	Died in Institution	7	5	—	4	3	—	4	1	—	3	1	—	28
Class T.B. + Group III.	Quiescent ...	1	1	—	1	4	—	3	2	—	4	—	—	16
	Not Quiescent ...	21	12	—	16	15	—	20	11	1	16	5	—	117
	Died in Institution	18	18	—	9	6	—	7	4	1	7	2	1	73
Totals ...		141	96	13	131	143	40	99	83	54	67	26	16	909

## (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 ...	10	12	6	2	7	2	5	4	9	11	6	34	108
	Not Quiescent ...	3	6	—	3	—	1	—	2	2	—	1	6	24
	Died in Institution	1	—	—	—	—	1	1	1	1	2	1	—	8
Abdominal.	Quiescent ...	3	2	2	—	—	18	2	2	7	—	—	2	38
	Not Quiescent ...	—	3	3	—	1	2	—	—	—	—	1	1	11
	Died in Institution	1	1	2	—	—	1	1	—	—	—	—	—	6
Other organs.	Quiescent ...	2	—	—	—	1	—	—	—	2	1	—	—	6
	Not Quiescent ...	—	2	—	—	—	—	1	—	1	1	—	1	6
	Died in Institution	1	—	—	—	—	—	—	—	—	—	—	—	1
Peripheral Glands.	Quiescent ...	1	—	3	3	2	17	1	1	14	—	—	2	44
	Not Quiescent ...	1	2	—	1	—	—	—	—	1	—	—	—	5
	Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals ...		23	28	16	9	11	42	11	10	37	15	9	46	257

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 ...	3	3	6	8	—	13	—	2	2	1	1	3	12	6	24
Non-tuberculous ...	8	4	5	28	6	27	1	—	1	2	—	3	39	10	36
Doubtful ...	3	3	3	1	2	2	—	1	—	1	—	1	5	6	6
Totals ...	14	10	14	37	8	42	1	3	3	4	1	7	56	22	66



An analysis of cases admitted to sanatoria during the past 12 years showing by sputum examination whether they have been proved to be infectious or non-infectious is set out in the table below. This table includes adults and children, and it will be noted that a steady increase is taking place year by year in the number of cases proved to be sputum positive. This feature is a good indication that the tuberculosis scheme is being conducted on right lines, and it shows clearly that an intensive effort is being made to remove all doubt in the diagnosis of cases sent in for observation purposes and to ensure that so far as possible those cases that are discharged from a sanatorium in an infectious condition are known to be infectious and, therefore, are likely to be a danger to others with whom they may come in contact.

If the figure for adults alone is taken during 1936 it is found that this growing preponderance of infective cases is greater still, being 66.2% of the total admissions in comparison with 58.1% for adults and children.

Years.	Negative Sputum.	Positive Sputum.	Proportion of Positive Cases.
1925 to 1930	7,550	2,014	21.0%
1931	932	481	34.0%
1932	755	483	39.0%
1933	607	536	46.9%
1934	576	462	44.5%
1935	502	568	53.1%
1936	381	528	58.1%

During 1936, 210 patients, 116 pulmonary and 94 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 13.8.

### SANATORIUM TREATMENT—IMMEDIATE RESULTS.

#### (a) Pulmonary Cases. Adults.

During the year, 786 adults (male 438, female 348), suffering from the pulmonary form of the disease were discharged from institutional treatment. Of these, 266 (or 33.9%) belonged to the T.B. minus group, while 520 (or 66.1%) were patients with positive sputum. An analysis of the immediate results of treatment is given on page 136, but further details are given below showing the proportion of adult cases discharged with the disease quiescent and not quiescent:—

TABLE CIII.

	Total cases treated (adults)	Discharged quiescent		Discharged not quiescent		Died in Institution	
		No.	%	No.	%	No.	%
Males (T.B. -)	140	90	64.3	43	30.7	7	5.0
Females (T.B. -)	126	80	63.5	42	33.3	4	3.2
Males (T.B. +)	298	49	16.5	188	63.0	61	20.5
Females (T.B. +)	222	44	19.8	137	61.7	41	18.5

Of the 786 cases dealt with, 511 (or 65.0%) were discharged (or took their own discharge) before the completion of six months' treatment. 214 (or 41.9%) of these were in the T.B. minus group, and 297 (or 58.1%) were cases with positive sputum.

Of the deaths which occurred in the institutions, 102 (or 90.3%) were cases with positive sputum.

#### (b) Children.—Pulmonary.

The number of children suffering from pulmonary disease and discharged from institutional treatment was 123. Eight of these (6.5%) were positive cases.

#### (c) Non-Pulmonary Tuberculosis.

257 cases of the non-pulmonary form of tuberculosis were discharged from in-patient treatment during the year; adults 116, children 141.

The immediate results of treatment show a quiescent condition on discharge in the case of 67.1% of the adults, and 83.7% of the children.

### CARDIGAN SANATORIUM.

The Medical Superintendent reports:—

During the year, 108 adult female patients and 12 female children were admitted, and were classified as follows:—

Pulmonary—T.B. Minus	...	...	...	...	40
T.B. Plus—Group 1	...	...	...	...	4
Group 2	...	...	...	...	43
Group 3	...	...	...	...	14
Non-pulmonary	...	...	...	...	4
For observation and diagnosis	...	...	...	...	15
					<hr/> 120 <hr/>

The number of cases with tubercle bacilli in their sputum, found before admission or by examination whilst in the sanatorium, was 65, or 54.2% of all admissions. During the year, there were 7 deaths in the sanatorium. Of these, 6 were seriously ill when admitted. The remaining one was sent in for observation. Within a few days, she became acutely dyspnoeic. On the sixth day, and before a diagnosis could be made, she died. A post-mortem examination showed the cause of death to be miliary tuberculosis.

**Observation Cases.** Of the 15 patients admitted for observation, 5 (including the one who died) were later 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 1936. In 9 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	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.	
T.B. Mious	Quiescent ... ..	7	—	14	—	1	—	1	—	23
	Not quiescent ... ..	8	1	1	—	2	—	—	—	12
	Died ... ..	1	—	—	—	—	—	—	—	1
T.B. plus Group I.	Quiescent ... ..	—	—	1	—	1	—	—	—	2
	Not quiescent ... ..	—	—	1	—	1	—	—	—	2
	Died ... ..	—	—	—	—	—	—	—	—	—
T.B. plus Group II.	Quiescent ... ..	1	—	3	—	5	—	3	—	12
	Not quiescent ... ..	8	1	9	1	14	—	4	—	37
	Died ... ..	1	—	—	—	—	—	—	—	1
T.B. plus Group III.	Quiescent ... ..	—	—	1	—	—	—	—	—	1
	Not quiescent ... ..	3	—	2	—	4	—	1	—	10
	Died ... ..	—	—	—	—	—	1	—	—	1

**Artificial Pneumothorax Treatment.** During the year, artificial pneumothorax was induced and maintained in 16 cases. Approximately 425 refills have been given. One woman has attended as an out-patient, her refills being included in this number.

**Surgical Treatment.** During the year, 7 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 6 of the cases, phrenic avulsion (or crush) was performed, and in all of these, the immediate result was satisfactory. One patient has had a first stage thoracoplasty, and has returned to the sanatorium for the time being. She is making good progress.

**Gold Salts.** The preparations used were sanocrysin, solganal B. oleosum, and myocrysin. In all, 17 patients were given a course of one or the three of these. The results in general appeared to be satisfactory.

**Dental Treatment.** The services of a dental surgeon were again available for those patients in whom the condition of the mouth appeared to be interfering with progress. Two patients were provided with dentures and another patient had a denture repaired.

**Radiography.** The total number of X-ray examinations made during the year was 272, 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 raffiawork. 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.** Nine grants were made under the scheme for provision of clothing to patients under treatment.

### MIDDLETON SANATORIUM.

Dr. H. E. Raeburn, Medical Superintendent, reports:—

The new "E" block and operating theatre and the new recreation hall and cinema were opened by the Chairman of the Sanatorium Sub-Committee, County Alderman W. Dean, on the 19th March, 1936.

The operating theatre is splendidly equipped, containing an operating table specially adaptable for thoracic surgery, shadowless lamp and spotlight, diathermy and cautery apparatus, and all the special instruments required for thoracic and orthopaedic surgery. There is also a Magill gas-oxygen anaesthetic apparatus.



The number of cases admitted during the year was 495, classified as follows:—

**Pulmonary.**

T.B. Negative	...	...	...	...	...	...	194
T.B. Positive—Group I	...	...	...	...	...	...	16
Group II	...	...	...	...	...	...	127
Group III	...	...	...	...	...	...	34
Total Pulmonary	...	...	...	...	...	...	371

The percentage of sputum positive cases was 47.7 as compared with 36.2 in 1935.

**Non-Pulmonary.**

Bones	...	...	...	...	...	...	33
Abdomen	...	...	...	...	...	...	23
Glands	...	...	...	...	...	...	10
Skin	...	...	...	...	...	...	1
Total non-pulmonary	...	...	...	...	...	...	67
Observation	...	...	...	...	...	...	42

Of the observation cases, 15 were diagnosed as suffering from tuberculosis.

The percentage of bed patients was 67.37. The corresponding figure for 1935 was 62.55, and for 1934, 56.29.

**Immediate Results of Treatment.**

The following table shows the immediate results of treatment of patients discharged with tuberculosis in 1936. In 42 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		Over 12 months		
		M.	B.	M.	B.	M.	B.	M.	B.	
Class	Quiescent ...	27	1	25	6	10	4	5	—	78
T.B.	Not Quiescent ..	18	3	14	2	2	1	5	1	46
Minus	Died ...	4	—	—	—	1	—	1	—	6
Class	Quiescent ...	1	—	2	—	2	—	1	—	6
T.B. +	Not Quiescent ...	1	—	5	—	1	—	—	—	7
Group	Died ...	—	—	—	—	1	—	1	—	2
I.										
Class	Quiescent ...	1	—	6	—	12	—	5	—	24
T.B. +	Not Quiescent ..	18	—	31	1	26	—	11	—	87
Group	Died ...	6	—	3	—	4	—	2	—	15
II.										
Class	Quiescent ...	1	—	—	—	3	—	—	—	4
T.B. +	Not Quiescent ...	14	—	10	—	12	—	9	—	45
Group	Died ...	11	—	7	—	4	—	5	—	27
III.										
Non-										
Pulmonary	Quiescent ...	—	—	—	—	2	3	4	—	9
Bones	Not Quiescent ...	1	—	—	—	—	—	—	—	1
and	Died ...	1	—	—	1	1	—	1	—	4
Joints										
Abdomen	Quiescent ...	3	—	—	4	2	3	—	1	13
	Not Quiescent ...	—	1	—	1	—	—	—	—	2
	Died ...	1	—	—	—	1	—	—	—	2
Other	Quiescent ...	—	—	—	—	—	—	1	—	1
Organs	Not Quiescent ...	—	—	—	—	1	—	—	—	1
	Died ...	1	—	—	—	—	—	—	—	1
Peripheral	Quiescent ...	—	—	3	—	1	1	—	—	5
Glands	Not Quiescent ...	1	—	1	—	—	—	—	—	2
	Died ...	—	—	—	—	—	—	—	—	—

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 injections of gold salts.

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 frames, splints, and plasters in the orthopaedic cases, and in the renal cases by injections of tuberculin.

**Thoracoplasty.** 8 cases had a partial or complete thoracoplasty, the immediate results being:—

Improved	...	...	...	...	4
Not improved	...	...	...	...	2
Worse (died in January, 1937)	...	...	...	...	1
Died	...	...	...	...	1

**Phrenic Paralysis.** 13 cases had permanent or temporary phrenic paralysis, the results being:—

Improved	...	...	...	...	10
Not improved	...	...	...	...	3

**Artificial Pneumothorax.** Artificial pneumothorax was induced in 40 cases. It was attempted in 12 others, but failed owing to pleural adhesions. 18 cases continued treatment from 1935. The total number of refills given was 1,152.

23 cases were discharged, the results being:—

Improved	...	...	...	...	16
No change	...	...	...	...	1 (this patient refused further treatment.)
Worse or died	...	...	...	...	6

In addition, 8 out-patients attended for refills, the total number of refills given being 62. All are improving.

**Gold Therapy.** 28 cases received injections of gold salts, a total of 400 injections being given.

7 cases were discharged, of whom 4 were improved, and 3 were worse.

**Surgery.** The following operations were performed at Middleton during 1936:—

Thoracoplasty	...	...	...	8	Bronchoscopy	...	...	...	1
Rib resection and drainage	...	...	...	3	Cystoscopy	...	...	...	1
Phrenic paralysis	...	...	...	...	Supra pubic cystotomy	...	...	...	1
(a) Avulsion	...	...	...	8	Septic fingers	...	...	...	7
(b) Crush	...	...	...	5	Septic foot	...	...	...	1
Thoracoscopy and adhesiotomy	...	...	...	1	Ingrowing toe nail	...	...	...	1

In addition, 11 cases were transferred to Leeds General Infirmary, where 18 operations were performed by the Consulting Thoracic Surgeon, Mr. P. J. Moir.

**Radiography.** The number of films taken during the year was:—

In-patients	...	...	...	...	...	1,365
Out-patients	...	...	...	...	...	299
Staff	...	...	...	...	...	216

These included 16 Barium meal examinations, and 30 Lipiodol examinations.

The total number of films taken was 1,880, as compared with 1,516 in 1935.

During the year, a new X-ray plant was installed. It is much more powerful than the old one, and will do much better and more reliable work.

**Ultra-Violet Light.** Ultra-violet light was used in 75 non-pulmonary cases, as follows:—

	In-patients.	Out-patients.
Bones	...	...
Glands	...	...
Abdomen	...	...
Renal	...	...
Skin	...	...
	62	13

All were improved.

**Radiant Heat.** 15 in-patients, and 2 out-patients were treated with radiant heat. Of these, 16 were improved, and 1 not improved.

**Dental Treatment.** A local dentist attends when required. He treated 102 patients during the year.



**Occupational Therapy.** Attendance—The average number of patients attending handicrafts daily was 20. Handicrafts were also done by patients on the wards.

The work comprises carpentry, rug-making, raffia work, weaving, fancy leather work, bookbinding, pewter work, and cobbling. 580 pairs of boots have been repaired, 239 pairs for necessitous cases, and 341 pairs paid for by staff and patients. Fancy leather work is practised at home by patients after leaving the sanatorium, and advice given to them whenever they ask for it.

During the year, the children have received instruction in school subjects, craft work, and on suitable days, have been taken for walks, and nature study rambles.

**Patients' Library.** There are approximately 2,841 books in the library, and 4,904 have been borrowed during the year.

**Chapel.** Services have been held in the chapel regularly, the average attendance being:—

Church of England ... ..	26 services, attendance 22.
Methodist ... ..	22 services, attendance 21.
Roman Catholic ... ..	5 services, attendance 9.

**Entertainments.** During the winter months, talking pictures are shown weekly, and concerts are held fortnightly. These are very much appreciated by the patients.

**Village Library.** There is a supply of 200 books issued quarterly from the West Riding Central Library for the use of the staff, and 78 members make use of the facilities offered.

### ELDWICK SANATORIUM.

**Dr. Margaret Sharp, Medical Superintendent, reports:—**

During the year 86 children were admitted to this institution, classified as follows:—

Pulmonary—T.B. Minus ... ..	36
Non-pulmonary ... ..	31
Observation ... ..	19

Twenty cases admitted for diagnosis were discharged during 1936. Three of these were transferred to the isolation hospital for infectious disease soon after admission and before a diagnosis could be made. Nine were accepted for treatment as tuberculous, including one of abdominal tuberculosis and one cervical glands. The remaining eight were not considered to be suffering from tuberculosis.

Doubtful abdominal cases present great difficulties in diagnosis. In many, all symptoms disappear under the regular routine of sanatorium life and attention to the hygiene of the bowels. That this, however, may happen even in tuberculous cases is proved by some cases sent after laparotomy, where the affected glands have actually been seen.

The Mantoux Test was performed on 65 children, beginning with a 1 in 1,000 dilution of B.E. (human); then 1 in 100, and the negative cases then tested with bovine tuberculin in the same strength. Fourteen cases were negative to all tests used, eight of them being observation cases. Of the remainder, 42 re-acted to a strength of 1 in 1,000 (human), and 3 to the bovine emulsion alone. Ten cases had been tested and found positive before admission.

**X-Ray Examination.** Skiagrams had been taken in 54 cases before admission, and ten were so examined for the first time after admission. The examination was repeated at a later date in 21 cases as a test of progress; in only three of these did the picture show an increase of the disease. For this purpose skiagrams are the more useful the nearer the disease approaches to the adult type, and therefore for the most part in the older children, but there was one very marked case in a child of seven years.

**Tonsils and Adenoids.** Ten children had tonsils and adenoids removed. All of these had definitely unhealthy tonsils, and most had had more than one attack of tonsillitis. In the case of two patients, who had been in the sanatorium some time and were not doing very well, the improvement in their general condition was marked following the operation.

**Dental Treatment.** The dentist visited the institution every three months, inspected all the children and gave the necessary treatment.

**Ultra-Violet Light.** Treatment by either the carbon arc or mercury vapour lamp, was administered to 48 children. These included the majority of the gland cases, both cervical and abdominal, and also 14 pulmonary cases. Of the whole number, 15 are recorded as receiving marked benefit from this treatment, and four of these were pulmonary cases. I do not find any risk in exposing these cases to the rays provided they are afebrile and the treatment is begun with caution. For the cases of cervical glands, where definite masses of gland were present, local applications of the rays were used, as well as the general exposure, with very good results. The most striking case was a boy who came in with large masses of glands on both sides of the neck, with discharging sinuses, ulceration of both eyes and a bad general condition. In the course of eight months the glands were all reduced to small hard nodules; the eyes, though not cured, immensely improved, and the general condition was completely transformed. Only three cases had treatment stopped for ill effects; in all of these it was resumed later successfully, beginning with a smaller dose, and all were cases which ultimately benefited.

**Infectious Diseases.** There were seven cases of chicken-pox; the difficulty in stopping the epidemic being due to the extreme mildness of the cases. The first case occurred in a child who had been in the institution some time, and the source of infection was not discovered. There were also two cases of scarlet fever, 2 of measles, and one of German measles, in all of which infection had occurred before admission, and no further cases arose.

**Irregular Discharges.** Six children were removed by their parents before the completion of treatment. In one case arrangements had been made to send the child to Morecambe to stay with friends. In the other cases no definite reason was given. In no case was any complaint made.

**General Results.** When the cases discharged to the fever hospital, and those removed before completion of treatment are deducted, there remain only eight cases discharged as non-quiescent. Among these are included one case of miliary tuberculosis, who died soon after removal to Morton Banks; one case, sent as abdominal tuberculosis, found to be suffering from severe diabetes; one case, transferred to Leeds Infirmary for a further operation on the chest, who has since returned and is doing well; and one was the case of glands reported above under light treatment, who had done very well, but in whom the eyes were not yet quiescent. This leaves only four cases of definitely disappointing results, and one of these was a very acute case, very ill on admission, who was only in residence a month and died soon after leaving.

#### Immediate Results of Treatment.

The following table shows the immediate results of treatment of patients discharged with tuberculosis in 1936. In 6 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 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 T.B. Minus	Quiescent ... ..	1	14	11	—	26
	Not Quiescent ... ..	1	5	4	1	11
	Died ... ..	—	—	—	—	—
Abdomen	Quiescent ... ..	1	8	3	—	12
	Not Quiescent ... ..	—	—	—	—	—
	Died ... ..	—	—	—	—	—
Other Organs	Quiescent ... ..	—	—	—	—	—
	Not Quiescent ... ..	—	—	1	—	1
	Died ... ..	—	—	—	—	—
Peripheral Glands	Quiescent ... ..	—	8	8	1	17
	Not Quiescent ... ..	—	—	—	—	—
	Died ... ..	—	—	—	—	—
Totals ...		3	35	27	2	67



## CROOKHILL HALL RECEIVING HOME.

Dr. V. Ryan, the Medical Superintendent, reports:—

During the year, 90 adult male patients were admitted to the Home, classified as follows:—

Pulmonary—T.B. Minus	...	...	...	...	...	27
T.B. Plus—Group I	...	...	...	...	...	1
Group II	...	...	...	...	...	23
Group III	...	...	...	...	...	38
Non-pulmonary	...	...	...	...	...	1

As will be observed, there was a high proportion of advanced cases admitted, consequently there was not much scope for special treatment. Artificial pneumothorax was attempted in two cases and was successful in one, namely a boy of 19, a Group iii plus case. This patient has done very well and is awaiting admission to Papworth Hall with a view to colonisation.

Gold treatment was tried in three cases, but had to be abandoned because of ulceration in the mouth.

Apart from one other case, who was transferred to the Middleton Sanatorium for a thoracoplasty, no patients were found to be suitable for surgical treatment during the year. This may be accounted for by the admission of a large proportion of bilateral cases in men over 45 years of age where complications such as bronchitis or emphysema existed, and where the treatment could only be symptomatic.

#### Immediate Results of Treatment.

The following table shows the immediate results of treatment of patients discharged with tuberculosis in 1936. In 9 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	
Class T.B. minus	Quiescent	9	3	2	—	14
	Not quiescent	—	—	—	—	—
	Died	—	—	—	—	—
Class T.B. plus Group I.	* Quiescent	—	—	—	—	—
	Not quiescent	—	1	—	2	3
	Died	—	—	—	—	—
Class T.B. plus Group II.	Quiescent	—	1	2	—	3
	Not quiescent	1	6	5	4	16
	Died	1	1	—	1	3
Class T.B. plus Group III.	Quiescent	—	1	—	4	5
	Not quiescent	3	6	8	5	22
	Died	7	2	2	2	13
Non-Pulmonary. Other Organs	Quiescent	1	—	—	—	1
	Not quiescent	—	—	—	—	—
	Died	—	—	—	—	—
Totals		22	21	19	18	80





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COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE.

TWENTY-NINTH  
ANNUAL REPORT

OF THE  
School Medical Officer,  
ON THE  
Medical Inspection and Treatment of  
School Children,

For the Year ended 31st December, 1936.

*(Presented to the Child  
Welfare Sub-Committee  
May 5th - 1937)*





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## SUMMARY OF WORK.

### A.—Medical Officers at Schools.

Routine Inspections at Elementary Schools	...	...	...	...	...	57,410
Routine Inspections at Secondary Schools	...	...	...	...	...	6,445
Special Inspections at Elementary Schools	...	...	...	...	...	8,428
Special Inspections at Secondary Schools	...	...	...	...	...	421
Re-inspections at Elementary Schools	...	...	...	...	...	20,979
Re-inspections at Secondary Schools	...	...	...	...	...	1,058

### B.—Medical Officers at Clinics.

Inspections at Clinics (including Specialist Clinics)	...	...	...	...	22,789
Inspections under Employment of Children Bye-laws	...	...	...	...	947

### C.—Dental Officers.

Routine Inspections at Elementary Schools	...	...	...	...	...	89,811
do. do. Secondary Schools	...	...	...	...	...	4,943
Special Inspections at Elementary Schools	...	...	...	...	...	5,542
do. do. Secondary Schools	...	...	...	...	...	—
Attendances for Treatment at Clinics—Elementary	...	...	...	...	...	59,407
do. do. do. —Secondary	...	...	...	...	...	5,188

### D.—School Nurses and Health Visitors.

Visits to Schools	...	...	...	...	...	7,479
Examinations (including Cleanliness Inspections in Schools)	...	...	...	...	...	413,588
Visits to Homes	...	...	...	...	...	32,141

### E.—School Clinics.

Number of Minor Ailments Treated	...	...	...	...	...	49,381
Total Number of Attendances	...	...	...	...	...	116,167

## WEST RIDING EDUCATION COMMITTEE.

---

The Chairman of the County Council.

The Vice-Chairman of the County Council.

The Chairman of the Finance Committee.

### ALDERMEN.

Armistead, J. H.  
Bambridge, H. J.  
Brigg, J. J., M.A., LL.M.  
Dewhurst, I. J.  
Dunn, E., M.P.

Eddy, H.  
Foulstone, T. H.  
Grylls, R. M.  
Jackson, Sir Percy, LL.D.  
(Chairman.)  
Lane, J. W.

Schofield, G.  
Smith, Lady Mabel  
Tomlinson, T.  
Turner, W. H.  
Unwin, Miss Hermione

### COUNCILLORS.

Allan, J. T.  
Archer, Rev. F.  
Barber, A.  
Bevan, S. G.  
Bowker, S.  
Brocklehurst, W. H.  
Brooks, T. J., M.B.E.

Clough, W.  
Crossley, Major J. H.  
Dyson, W. E.  
Everatt, W. T.  
Flavell, A.  
Hirst, F.  
Hyman, W. M. (Vice-Chairman)

Jones, W. E.  
Page, A. J.  
Paling, W. T.  
Shaw, Rev. G. M.  
Spence, T. F.  
Taylor, E.  
Wragg, Mrs. E., M.B.E.

### ADDED MEMBERS.

Baillie, Sir James B.  
Glazier-Foster, F.  
Hazelip, Mrs. E.

Hinchliffe, Miss Mabel  
Morris, Miss G.  
Pickard-Cambridge, Dr. A.W.

Singleton, Mrs. M.  
Smithies, Mrs. C. A.  
Spivey, T. W.

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## CHILD WELFARE SUB-COMMITTEE.

---

### Representatives of West Riding Education Committee.

County Aldermen J. W. Lane, G. Schofield and Miss H. Unwin (Vice-Chairman).  
County Councillors T. J. Brooks, M.B.E., W. E. Dyson, W. T. Everatt.  
Added Members: Miss M. Hinchliffe, Miss G. Morris, Mrs. M. Singleton and  
Mr. F. Glazier-Foster.

### Representatives of West Riding Public Health and Housing Committee.

County Aldermen G. Probert (Chairman) and T. Tomlinson.  
County Councillors J. T. Allan, Mrs. E. M. E. Atkinson, Mrs. H. Beverley, W. T. Blewitt,  
A. Fletcher, A. Fouchard, N. Goodall, Mrs. M. Heald, J. W. Simpson  
and Mrs. E. Wragg.



## 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, L.R.C.P., M.R.C.S
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.

## Dental Staff.

BERNARD R. TOWNEND, L.D.S., Senior Dental Officer.

Cyril Baines, L.D.S. ... ..	Aloysius M. Moorhead, L.D.S.
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.
Stanley E. Clarke, L.D.S. ... ..	Kevern Batten, L.D.S.
Percy D. Copeland, B.D.S. ... ..	James M. Macdonald, L.D.S.
Marion M. Thom, L.D.S. ... ..	John Mackay, L.D.S.
Henry F. Jones, L.D.S. ... ..	Joseph Jackson, L.D.S.
Dorothy M. Phillips, L.D.S. ... ..	Rachel Sclare, L.D.S.
Eric Thornton, L.D.S. ... ..	Jas. R. Wishart, L.D.S.
John H. N. Macdonald, L.D.S. ... ..	Dorothy E. Smithson, L.D.S.
Donald D. Allan, L.D.S. ... ..	William Rodger, L.D.S.
Fred W. Sturgess, L.D.S. ... ..	James Todd, L.D.S.
Fred Brabington-Perry, L.D.S. ... ..	Mary M. Gibson, L.D.S.
Arthur Topping, L.D.S.	

School Nurses who assist School Dentists (Whole time) ... ..	10
Dental Attendants (whole-time) ... ..	19
School Nurses only (whole-time) ... ..	6
School Nurses and Health Visitors (whole time) ... ..	112
School Nurses and Health Visitors employed by District Nursing Authorities ... ..	69
Clerical Staff, School Medical Inspection Section ... ..	8

# REPORT of the SCHOOL MEDICAL OFFICER. for the Year ended 31st December, 1936.

## 1. Area, Population, Staff.

The population of the Administrative County of the West Riding of Yorkshire in 1936, was 1,525,410 and 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 1,240,390

### (2) FOR SECONDARY EDUCATION.

The whole of the Administrative County containing a population of 1,525,410

The area in (1) above includes 833 elementary schools, with 1,164 departments and on the 31st December, 1936, there were 175,885 children on the registers.

The area in (2) includes 50 secondary schools and on the 1st October, 1936, there were 17,337 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 is included in the above figure of 17,337.

For educational purposes the County Education area is mapped out into 114 districts, in each of which there is a district sub-committee, and these again are grouped into 23 divisions, each with a Divisional Clerk as local representative of the Education Authority.

## STAFF.

The following is a summary of the medical, dental and nursing staffs employed in connection with School Medical Inspection during 1936:—

### (a) MEDICAL.

School Medical Inspectors	(whole-time)	...	...	...	...	...	16
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)	...	...	...	...	...	112
School Nurses and Health Visitors employed by District Nursing Associations and Local Authorities	...	...	...	...	...	...	69
Dental Nurses	...	...	...	...	...	...	10
Dental Attendants	...	...	...	...	...	...	20

The following changes in the staff took place during 1936:—

### (a) MEDICAL.

Nil.

### (c) NURSING.

#### (i) Appointments.

Dental Attendants—Miss N. Tanner  
Miss J. Gloyne.  
Miss M. L. Peel.  
Miss B. Price.  
Miss B. Middlebrook.  
Miss B. Ullathorne.  
Miss D. Rawnsley.  
Miss J. Hitchen.

### (b) DENTAL.

#### (i) Appointments.

Dorothy E. Smithson, L.D.S.  
William Rodger, L.D.S.  
Donald D. Allan, L.D.S.  
Fred Brabington-Perry, L.D.S.  
Mary M. Gibson, L.D.S.  
James Todd, L.D.S.  
Fred W. Sturgess, L.D.S.  
Arthur Topping, L.D.S.

#### (ii) Resignations.

E. W. Greenwood—Dental Nurse.



## 2.—Co-ordination.

### (a) MEDICAL SERVICES.

As in previous years every effort is made to achieve full co-operation between the various branches of the County Medical Services and improvements are constantly being made as and when experience dictates.

### (b) NURSING.

Co-operation from the standpoint of the nursing staff is ensured by the fact that the school nurses are, with six exceptions, 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 1936 the number of health visitors undertaking school nursing duties was 112, and the time given by them to school nursing work was equivalent to that of 44 whole-time school nurses.

### (c) CO-OPERATION WITH CHILD WELFARE CENTRES.

Increased attention is being devoted to the transmission of clinical records of children who have attended child welfare centres to the 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, and this information should prove of value at the school medical inspections.

### (d) GENERAL HOSPITALS.

The general hospitals in the County Area continue to provide certain services for the school children which, though not coming within any defined county scheme, are of value to the children. This work has again 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 by the School Medical Inspectors with 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 of any defects are forwarded to me 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.

In a few schools complaints are received that the w.c.'s are not flushed sufficiently and this is sometimes found to be due to lack of attention, and appropriate action is then taken through the school caretaker in order to deal with the matter.

Improvements in school premises are continuous, especially in the direction of better lighting, better facilities for washing and improvements in the playground surfaces. Probably the most noticeable change is a bold display of bright colours upon the walls in place of the shy timid neutral tints which used to prevail. These have entirely justified themselves in giving the schools and classrooms a warmer and more cheerful tone.

As mentioned in previous years, there is still a considerable amount of useless material, maps, charts and old books kept in the schools which harbour dust and render effective cleaning of the school premises difficult. It is hoped that some steps can be taken for this material to be transferred to other schools where it can be used, or alternatively disposed of as and when the opportunity occurs.

## 4.—Medical Inspection.

The statistical tables on pages 33-39 provide an account of the number of children examined, and the results of the examinations. The total examined during 1936 was 86,817, made up of 19,917 "entrants," 20,528 "intermediates" and 16,965 "leavers"; other inspections were 8,428 "specials and 20,979 "re-inspections." The figures in each group giving the defects found have varied very little from year to year, and although it is disappointing to have to record no diminution, it is pleasing to think of the value of bringing to notice defects which might otherwise have passed unnoticed.



## 5.—Findings of School Medical Inspection.

**CLEANLINESS.** A greater degree of cleanliness is noticeable among school children. This opinion is generally held by the medical and teaching staff. If it be urged that, in anticipation of a medical examination, the children are bathed the night before and appear spick and span before the doctor, there is on the other hand the testimony of nurses who make unannounced inspections for cleanliness, and of the medical staff who make nutrition surveys without notice. The teachers who are in daily contact with them know the standard of cleanliness which is maintained. They are all unanimous in thinking that the average is rising. The opinion is hazarded that the result is to some extent attributed to the building of new houses with baths and a supply of hot water. This statement in no way overlooks the existence of many excellent mothers, who, without these facilities, have invariably sent their children to school faultlessly clean, but it seems just to mention the parallelism of the growth of modern houses with the improvement of children's cleanliness. In another way it is important as an index of a change of attitude to child life.

**CLOTHING.** Generally it is found that children are clad in a reasonable amount of clothing and girls clothing especially affords little ground for criticism. There are comparatively few children who are underclothed, but in previous reports reference has been made to children who are overclad.

Overclothing is usually the result of excessive solicitude for the child because the child is susceptible to colds. One of the school medical inspectors reports that as a result of explaining the most suitable forms of clothing to some mothers in her district a considerable reduction has been effected in the number of children who are overclad, with great advantage to the health of the children concerned.

**FOOTGEAR** is noted at nutrition surveys. It is improving and is much better than it was some ten years ago. An improvement was noticed some five years ago when there was money available from the Lord Mayor's Fund to buy boots, and in 1935, Jubilee Year, there was a further sum of money available. However, boots bought in 1935 would not last long enough to create a favourable impression in 1936, and yet in spite of the number of children pitifully shod in "plimsolls" the general impression is that footwear is improving.

### Nutrition.

The considerable activity of the medical inspection staff in making Nutrition Surveys is shown by the results given in condensed form below.

No. 1. A school population consisting of rural children whose parents are farm workers or small-holders and an urban group whose fathers work in a coal pit.

	No. examined.	A.	B.	C.	D.
Rural Children ... ..	86	6 (6.95%)	76 (88.4%)	4 (4.65%)	—
Urban Children ... ..	249	21 (8.43%)	196 (78.71%)	30 (12.04%)	2 (0.82%)

All the children in Classes C and D were recommended for milk and cod liver oil.

No. 2.

A second group consists of children in a mining area. Unfortunately they are not classified according to the plan suggested in the Board's Administrative Memorandum of Statistical Returns, as the School Medical Inspectors making the survey only reported in detail on those children in the lower end of the scale. The following figures relate to one large school of three departments and a second school with junior and infant's departments.

No. examined.	A.	B.	C.	D.
1,424	974 (68.4%)		450 (31.6%)	

In the C and D classes 262 were already having free milk at the time of inspection, and to these 80 names were added. In addition there were 108 (by no means all showing signs of malnutrition) but sufficiently unsatisfactory to justify the recommendation for meals. Lest this paragraph suggests a gloomy picture it may be mentioned that this large school is the one referred to (but not by name) in a previous report where the malnourished children are balanced by the number of excellent children and the photographs of the school football and cricket teams could not, without letterpress, be distinguished from similar representatives of the same age in public and secondary schools.



On completing the inspection of this district the School Medical Inspector's comment was "There are very few children who can be graded as "D" according to the Board of Education ruling, "but there are many who are persistently in the "C" class . . . and that many children here would "be considerably improved if mid-day meals were supplied."

Average Attendance.	A.	B.	C.	D.
1,415			160+	

It should be noted that the 160 recommended for meals are not confined to the "D" class, but include many in the "C" (subnormal) group, i.e., the recommendation is now not made for malnourished children only, but includes a group of children who do not attain the optimum in nutrition.

No. 3. This district includes two large schools in a mining district and two small country schools.

No. Examined.	A.	B.	C.	D.
1,718	85 (4.95%)	1,530 (89.06%)	103 (5.99%)	—

No recommendation was made for the provision of meals, but it was recommended that the issue of milk should be doubled.

No. 4. This survey was undertaken because there was a "strike" in progress. The preliminary examination of the children of the unemployed showed that the children in need of milk were already receiving it. The teacher had the power to give a second ration of milk where the children were prepared to take it.

No. Examined.	A.	B.	C.	D.
2,367	—	1,828 (77.22%)	532 (22.48%)	7 (0.29%)

On the day of inspection 648 of the children were already receiving milk and cod liver oil.

No. 5.

No. Examined.	A.	B.	C.	D.
1,848	353 (19.1%)	780 (42.2%)	656 (35.5%)	59 (3.19%)

No. 6.

No. Examined.	A.	B.	C.	D.
3,027	169 (3.60%)	2,242 (74.05%)	667 (22.05%)	9 (0.30%)

No. 7.

No. Examined.	A.	B.	C.	D.
1,560	38 (2.46%)	1,085 (69.54%)	425 (27.24%)	12 (0.76%)

No. 8.

No. Examined.	A.	B.	C.	D.
2,211	—	1,660 (75.07%)	543 (24.57%)	8 (0.36%)

No. 9.

No. Examined.	A.	B.	C.	D.
871	160 (18.38%)	448 (51.44%)	244 (28.0%)	19 (2.18%)

## No. 10.

No. Examined.	A.	B.	C.	D.
2,519	328 (13.02%)	1,243 (49.33%)	904 (35.89%)	44 (1.76%)

## No. 11.

No. Examined.	A.	B.	C.	D.
1,394	199 (14.28%)	611 (43.83%)	537 (38.52%)	47 (3.37%)

## No. 12.

No. Examined.	A.	B.	C.	D.
680	143 (21.04%)	249 (36.62%)	266 (39.10%)	22 (3.24%)

## GENERAL COMMENTS.

Certain variations are noticeable but as a rule a single standard is aimed at and achieved with some success. For this purpose the examiners have met and together inspected groups of children to fix afresh their standards.

From Table IV, page 18, of "The Health of the School Child, 1935" the following figures are extracted:—

Area or Authority.	No. of children examined.	A. and B. %	C. Slightly sub-normal. %	D. Bad. %
West Riding C.C. ... ..	60,933	81.68	17.48	0.84
Sheffield C.B. ... ..	22,476	85.9	13.7	0.4
Leeds C.B. ... ..	19,983	84.5	15.0	0.5
Lancashire C.C. ... ..	36,477	89.3	10.1	0.5
Derbyshire C.C. ... ..	22,343	86.6	12.5	0.9
Durham C.C. ... ..	40,476	77.4	19.8	2.7

As an indication that the new classification has been uniformly interpreted throughout the country, the same report points to the fact that in contiguous areas, *e.g.*, London County and Middlesex, the findings are very similar and there is, as might be expected, a wide difference between the findings in some southern counties such as Surrey and a northern county such as Durham.

Of other means of assessing nutrition, that of estimating the hæmoglobin of the blood has been suggested but is not likely to be of service till a datum line of the average has been established and the range of variation from the normal in children who are beyond the suspicion of being malnourished.

Some similarity is shown between the findings in the West Riding County, in Leeds County Borough, and in Sheffield County Borough.

## OBSERVATIONS OF SCHOOL MEDICAL INSPECTORS.

On the subject of nutrition the staff again emphasise its complexity as a problem and re-state their contention that poor nutrition is not necessarily identical with insufficient food.

From a school medical inspector in the northern part of the West Riding comes an interesting commentary on the scheme of subsidiary nourishment. His remarks are as follows: "Systematic nutrition surveys have been carried out with the result that I find the general standard of nutrition is good and compares favourably with nutrition surveys of previous years."

"There are still differences of opinion among the head teachers regarding the wholesale distribution of milk to children. While some state that it tends to the making of a better school attendance, brighter and healthier children, others have a reverse opinion. I cannot see that there is much difference excepting in those cases of necessity for which the scheme was originally intended. Children in schools where there is no milk scheme in operation compare favourably with those in other schools receiving a supply of milk, which would go to show that a healthy development of the child is not solely dependent on food, but rather on a combination of factors. There are types of children in schools, who, no matter what quantity of food was given them, would show no improvement. By this I mean those who lack a sufficiency of rest, fresh air, sunshine and the environment of a happy home."



"One head teacher in my area made two selections of children of similar ages. The first selection were those children in receipt of subsidiary nourishment (milk) whilst the second were having nothing other than their home diet; the second group formed a control for the first, and it was interesting to note that a series of monthly weighings showed that the control group made the greater increase in weight."

My own comment on this experiment is that it is very gratifying to know that teachers are taking a close interest in this matter and my criticism is that the numbers under observation must necessarily have been small and that a selection had already been made before the conclusions were made, instead of which, the sampling should have been of two unselected groups.

Dr. Newlands reporting upon an area in South Yorkshire does not think that the Nutrition Surveys are as satisfactory in the assessment of physical condition as are the routine examinations. I myself think that both are valuable and as an adjunct to examinations of individuals a bird's eye view of the school population of a locality has considerable value.

DR. NEWLANDS continues "Since the 'C' group of children is made up, on the express recommendation of the Board of Education, of those showing any symptom of malnutrition 'how-ever slight' it covers quite a wide range of selection and includes cases in whom lack of food is by no means the chief factor causing them to be classified as subnormal. In a series of 344 children classified in 'C' group, from routine inspection I found that in 81 cases, or 23.5%, the probability of lack of food was extremely unlikely, but that other factors played an important part. These cases were grouped under such headings as 'small, or slight physique,' 'tall and thin,' 'all members of family of small physique,' 'one of twins,' or 'suffering from physical defect.' The information enabling me to group these children thus was supplied by the mothers or by the teachers or school nurse. The factor of family physique plus the one of small physique accounted for 52 of the 81 cases."

Some criticism has been offered to the opinion of medical inspectors as to the importance of other factors than feeding in the production of malnutrition. The following passage from DR. LINDSAY'S report might have been specially directed to proving "parental apathy" though he nowhere uses the words.

"The general feeling of the Head Teachers in the area is that the milk is doing good. Unfortunately full advantage of the scheme is not being taken and there are a larger number of scholars in grades 'C' and 'D' who are not having milk, the reason being that they may have been certified to have milk, but their parents having an income above the scale are required to pay the  $\frac{1}{2}$ d. per day and refuse."

"It is not very satisfactory to see so many children of 'A' and 'B' groups taking the milk . . . . . when we have so many in 'C' and 'D' groups not having it. It is also found that a high percentage of these children refuse dental treatment and their parents are very indifferent regarding obtaining treatment for tonsils and adenoids, defective vision, etc."

"The following figures obtained recently from three schools (where two bottles of milk per day have been recommended for over four years now) give emphasis to the foregoing remarks:—

School.	Certified to pay.	Refused.	Percentage certified to pay not having milk.
Brinsworth Council Mixed ... ..	82	62	75%
Brinsworth Council Infants ... ..	40	33	82%
Catcliffe Mixed ... ..	46	33	71%
Fence Mixed ... ..	39	31	79%

The Education Committee made arrangements during 1936 for the provision of meals at 19 centres and below is given a summary of the number of meals supplied.

#### MEALS.

	Certified Issues		Total
	Free	For payment	
Dinners ... ..	204,225	2,993	207,218

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 ... ..	7,945,948	716,537	12,365,322	21,027,807
Cod liver oil ... ..	3,916,891	81,571	192,358	4,190,820
Total ... ..	11,862,839	798,108	12,557,680	25,218,627

Subsidiary nourishment was supplied at 756 Centres (1,082 Depts.).

Assuming that comparable standards of medical examination are being adopted by the medical staff of the larger education authorities in the country it will be observed by reference to the table on page 11 that the percentage of children whose nutrition was found to be either slightly sub-normal (C) or bad (D) in the West Riding was distinctly higher than the average percentage of certain other large industrial cities and counties.

In view of this higher incidence renewed efforts were made during the year to make the ascertainment of all sub-normal children as complete as possible, and with this object, early in the current year (1937) the scheme was extended after consultation with Mr. A. L. Binns, the Education Officer, by introducing the County Council's tuberculosis medical officers to assist the school medical inspectors in carrying out periodic nutritional surveys as recommended by Circular 1443 of the Board of Education.

#### INSTRUCTIONS TO MEDICAL AND NURSING STAFF RELATING TO NUTRITION OF SCHOOL CHILDREN.

The following correspondence with school medical inspectors, tuberculosis medical officers, health visitors and school nurses is reproduced in this report as it is considered that by doing so a clear indication is given to District Education Sub-Committees, teaching, medical and nursing staffs of what is the declared policy of the Board of Education and the West Riding Education Committee in this matter.

Incidentally, I believe the introduction of the tuberculosis medical officer directly into the schools in the manner described is a method of co-ordination of medical services which has not previously been tried out anywhere else in the country. This innovation will be closely watched not only by your own medical staff, but also by the Board of Education and Ministry of Health, both of which authorities have expressed their approval of the new arrangement.

#### CIRCULAR LETTER TO SCHOOL MEDICAL INSPECTORS.

(dated 18th Nov., 1936).

In reference to our conference concerning issues of milk or meals to school children, the Senior Medical Officer of the Board of Education (Dr. Glover) and I, along with four school medical inspectors, visited a number of schools in the County and inspected certain children, more particularly those classified in groups "C" and "D." We were agreed upon the classification of the nutrition children according to the Board of Education's standards. Subsequently a conference between Dr. Glover, the school medical inspectors and myself took place and the advisability of giving meals in preference to milk to children classified in the D. group and a number of those classified in the C. group was discussed.

You will remember that at the conference of school medical inspectors the opinion was expressed that much of the malnutrition, both in groups "C" and "D" was considered to be due to bad environmental conditions, the failure of parents to take necessary action to have diseased conditions, *e.g.*, tonsils and adenoids, defective teeth, attended to. Dr. Glover and I are in complete agreement with this expression of opinion so far as it goes but he confirms the suggestion which I made to school medical inspectors at the conference that it is impossible to be dogmatic in every case and to say that because a child is living under unsatisfactory home conditions or is not receiving adequate medical attention the malnutrition is therefore due to these conditions exclusively and not in part to the lack of good food.

Again, it is conceivable that the lowered vitality produced by unsatisfactory home surroundings, overcrowding, badly balanced diet, diseased tonsils and adenoids or decayed teeth would be counteracted to some extent by giving a child a well prepared meal.

Another point arising out of our discussion on this matter was the relative value of milk compared with a solid meal, and it must be admitted that there is a limit to the extent to which a liquid food can be taken in building up tissues of the growing child and maintaining resistance to infection, and that a solid meal given either alone or to supplement the milk ration, may be more beneficial in certain cases than milk alone.

In view of these considerations and having regard to the fairly clear indications contained in Circular No. 1443 issued by the Board of Education, I shall be glad if you will examine each case carefully that falls into categories "C" and "D," more particularly the latter, in order to ensure



that despite adverse home surroundings, etc., which may be the primary cause of individual cases of malnutrition, the child is given the benefits of any doubt and is accordingly recommended for a meal if it appears to you that an improvement in its nutritional state might result from so doing.

It is very unsatisfactory to find such a large number of parents refusing medical or dental attention recommended for their children. This matter was mentioned by school medical inspectors at the Conference, and I am bringing this anomalous position to the notice of the Canteen Sub-Committee.

18th Nov., 1936.

T. N. V. POTTS.

CIRCULAR LETTER TO SCHOOL MEDICAL INSPECTORS, TUBERCULOSIS  
MEDICAL OFFICERS, HEALTH VISITORS AND SCHOOL NURSES.

(Dated 17th Feb., 1937).

As the result of Annual Reports of the Chief Medical Officer of the Board of Education and Ministry of Health, and reports received from time to time from West Riding school medical inspectors relating to the health of school children, Committees of the County Council have been directing special attention to this matter.

I enclose:—

- (a) Copy of the Board of Education Circular 1443 and
- (b) Copy of my Circular to School Medical Inspectors dated 18th November, 1936.

These two communications explain themselves but my object in writing this letter is to inform you that it has been found quite impossible with the present number of medical staff to hold periodic nutritional surveys at which all children not receiving meals can be passed under review as is suggested by Paragraph 7, of Circular 1443.

The ascertainment of sub-normal nutrition and the necessity for the provision of meals is not a matter which is exclusively associated with school medical inspection; it will be obvious that the scheme for the prevention and treatment of tuberculosis (in particular the direct interest and co-operation of tuberculosis medical officers) is of valuable assistance in securing and maintaining the nutrition of children at as high a level as is possible.

After consulting with the Chief Tuberculosis Officer and the Chief Assistant School Medical Officer, I have come to the conclusion that periodic nutritional surveys as suggested by the Board of Education can be carried out best by the pooling of resources of the medical and nursing staffs of both child welfare and tuberculosis sections. In a certain number of cases the necessity for the provision of meals is quite as obvious to the school teacher as to the medical officer or nurse, and in addition the school teacher may have the advantage that he or she knows the environmental circumstances of the child's family. In this connection I have consulted with the West Riding Education Officer and he is issuing a circular to school teachers asking them to co-operate by recommending milk or meals in cases in which this action may appear necessary.

The procedure that I am suggesting is that in each area or district of an Education Sub-Committee a nurse should be assigned a number of schools at which she would conduct a survey once per month. To a number of these groups of schools would be attached a tuberculosis medical officer or school medical inspector, who would make a periodic nutritional survey once every three months.

The survey of school children should not as a rule involve more than a general inspection in the classrooms; children would be asked to stand up in their places and the medical officer or nurse would in a number of cases be able to decide from outward physical signs, together with information of the circumstances of the family, that a child should be provided with meals. In other cases no doubt stripping to the waist and physical examination would be essential.

Children recommended by teachers for meals or for special consideration should, of course, be examined with particular care and due weight should be given, in these cases, to the information furnished by teachers or enquiry officers.

It should be clearly understood that these surveys are not intended to replace the customary routine or special medical inspections which will be undertaken as heretofore.

In writing this letter I have been mindful of the fact that nearly 50% of the schools have been closed recently on account of influenza; this has meant that approximately half of the children attending these schools, together with a high proportion of children attending schools which have not been closed, are likely to be suffering from the effects of this disease for many weeks to come.

To the assistant tuberculosis officers who are undertaking school medical work for the first time I am enclosing a copy of "The Health of the School Child (1935)" and would refer them to the chapter on "Nutrition and School Feeding" at pages 10 to 42.



A list of the schools, allotted for nutritional survey purposes, and other information will be sent to tuberculosis officers at an early date.

17th February, 1937.

T. N. V. POTTS.

CIRCULAR LETTER TO SCHOOL MEDICAL INSPECTORS, TUBERCULOSIS  
MEDICAL OFFICERS, HEALTH VISITORS AND SCHOOL NURSES.

(Dated 8th April, 1937).

Education Act, 1921.—Nutrition of Children and Provision of Meals.

For your information I set out below a copy of Section 84 of the Education Act, 1921, which is the authority under which Education Committees are permitted to provide meals for school children:—

"Where the local education authority resolve that any of the children attending an elementary school within their area are unable by reason of lack of food to take full advantage of the education provided for them, and have ascertained that funds other than public funds are not available or are insufficient in amount to defray the cost of food furnished in meals under this Act, they may spend out of the rates such sum as will meet the cost of the provision of such food."

Hitherto comparatively little attention has been directed to the subject of *physical* education, but as the result of recent activity in this matter by the Board of Education and Ministry of Health, it is anticipated that physical training methods in schools will be increased considerably and, therefore, it should be remembered when interpreting Section 84 of the Education Act, the words "Education provided for them" must be taken to include physical education as well as mental studies; it will be necessary, in fact, to consider in the case of poor children more particularly, **whether they are unable to take full advantage of these exercises by reason of lack of a suitable quantity or quality of food.** Obviously a child that is carrying out physical exercises is using up a greater number of calories and, therefore, I fully anticipate, in view of this *new* interpretation to be placed on Section 84 of the Act, that in most districts of the County there will be a pronounced increase in the number of children that are recommended for milk, cod liver oil, and meals.

In previous circular letters I have pointed out that there is a limit to the extent to which a child can take liquid food, and I suggest again that it is impossible in the majority of cases to state definitely that a child classified in the "C" Group (slightly sub-normal) is likely to show as much improvement in his physical condition by giving it milk and cod liver oil only as by giving solid meals.

In a number of cases the school medical inspectors have classified children in the "C" Group and have stated that the reason for this slight sub-normality has been due to obvious conditions such as diseased tonsils and adenoids, septic teeth, etc., and I have no doubt that this explanation of the sub-normal nutrition has been quite correct. It should be borne in mind, however, that even in these cases where the cause is known and although parents may have refused to have such causal conditions removed, provision of subsidiary nourishment, including solid meals, is likely to assist the child in its natural resistance against infection or other adverse environmental circumstances.

I shall be glad if you will give full consideration to the foregoing remarks when making your periodic surveys of children in connection with their nutritional state.

8th April, 1937.

T. N. V. POTTS.

Dental Inspection and Treatment.

The year 1936 has witnessed the completion of the programme which was agreed upon by the Education Committee on the 10th October, 1934, for the increase of the dental staff to one Senior Dental Officer and twenty-nine Assistant Dental Officers. Certain alterations in the methods of recording the work done has involved a considerable amount of "spade work" which will automatically diminish as the scheme becomes established, but it is considered that with these new methods a better assessment may be made of the value of the scheme and some of the detailed results of these records will be found later in this report.

The twenty-nine areas have been so arranged that each dental surgeon has an average of about 5,000 elementary and 600 secondary school children under his care, but the individual figure for each officer varies according to the type of area in which he or she is working. In the scattered and largely rural districts of the North and East of the Riding it was considered expedient, on account of the number of small schools with long distances intervening between them, to allocate a smaller school population to the officer stationed there than in the more thickly populated southern and western districts where the schools are larger and less time is spent in moving from one clinic to another.



The amount of treatment carried out by the West Riding dental staff compares very favourably with the figures for England and Wales. This comparison is shown in the following table:—

	Fillings per 100 children treated.		Extractions per 100 children treated.	
	Temporary.	Permanent.	Temporary.	Permanent.
England and Wales, 1936 ... ..	6.8	69.7	157.4	33.8
West Riding County Council ... ..	2.1	73.2	188.7	42.1

These figures indicate that we are carrying out more work per child treated than the average for the rest of the country.

The figure for permanent extractions is high. This is partly due to the inclusion of secondary school pupils into the dental scheme. Many of these children have not received dental treatment for several years and as a result some of their permanent teeth are too badly decayed to be conserved. 3,192 secondary school pupils have been treated and 2,931 permanent teeth have been extracted—almost one per child. It is reasonable to surmise that as the scheme progresses and treatment is available at more frequent intervals, the necessity for extracting many of these permanent teeth will diminish. It should also be realised that a proportion of these permanent teeth are removed not because they are decayed and septic, but for the following reasons: (a) in the elementary schools 8.7% and in the secondary schools 3.9% of these have been extracted to make room for the other permanent teeth; (b) 7.8% in the elementary schools and 6.4% in the secondary schools because under certain conditions it is advisable to remove a sound, or at any rate a saveable tooth, for reasons of symmetry so that the jaws may develop evenly.

The figures for fillings which have been shown in the past have afforded little evidence of the amount of work done. A dental surgeon may insert several fillings in one tooth and each counts as one filling. Very often there is a temptation to do this when output is based upon the number of fillings alone, when the correct procedure is to join up the several cavities and make one filling. In other words a conscientious officer does not receive as much credit as one who takes the easiest way. The number of teeth conserved is a much more valuable criterion on which to assess the merit of the work done.

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 ... ..	22,078	1,692
No. of other teeth conserved ... ..	5,247	2,555
Total ... ..	27,325	4,247
Cement fillings ... ..	1,047	237
Amalgam fillings ... ..	18,815	2,101
Compound cement and amalgam fillings ... ..	9,192	1,543
Porcelain fillings ... ..	2,333	1,048
Total ... ..	31,387	4,929
Dressings ... ..	1,177	234
Silver nitrate treatments ... ..	545	24
Scalings and polishings ... ..	2,932	520

It will be seen from the foregoing figures that in the elementary schools 80.8% and in the secondary schools 39.8% of the teeth conserved are six-year molars.

During the past twelve months, the dental nurses and attendants have carried out home visits in cases where dental treatment has been refused. This procedure has been in the nature of an experiment and has only been possible during school closures and at such times that the services of the nurse or attendant have not been required by the dental surgeon. The results may be taken as a fair sample and are very gratifying. They are an indication that many parents who refuse dental treatment can be persuaded to accept if a little tactful pressure is brought to bear. Inertia is the most salient characteristic of the human mind and any educative effort which will tend to overcome that inertia is valuable. 4,626 visits were made and 1,772 refusals were converted into acceptances (38.3%). In 890 cases the parents undertook to provide private treatment, but experience in the past has shown that this is rarely done. In 1,924 cases the result was unsatisfactory. In 423 cases the reason given for non-acceptance of treatment was that the parents could not afford the fee of one shilling. The fact that this fee need not stand in the way of treatment being given is made as clear as possible on the consent form. One can only conclude that a considerable number of parents either do not read this form, or are not sufficiently interested in their children's health.



It has been observed frequently that many refusals of treatment have their origin in objections made by the child itself, due to lack of parental control. This is one of the regrettable features of the "spirit of the times," and it becomes acute among the older children who have begun to develop a will of their own which is an admirable quality if directed wisely along the right lines.

MR. BUZZA (Harrogate) sums up the matter in one crisp sentence, "How deplorable it is that when children get to the age of eleven and upwards they should be the ones to say whether or not they should have dental treatment."

MR. JONES (Doncaster) reports—"I have found the acceptances are better from 5 to 9 years of age than from 9 to 14, the senior school average being decidedly poor." MR. JONES suggests that propaganda is urgently needed among these older children, and has found the use of the films issued by the Dental Board of the United Kingdom very helpful. He also comments on the success he has obtained from the use of the pamphlet "The Story of a Tooth." In departments where this pamphlet has been used, the acceptance rate has risen by 15%.

MISS SCLARE (Leeds) says—"The last word as to whether a child will accept dental treatment, remains with the child in the majority of cases. I believe that dental propaganda should be concentrated on the children themselves, rather than the parents."

MR. ALLAN (Castleford) after only seven months experience in school dentistry is of the opinion that the low rate of acceptance in Castleford is accounted for by the fact that the child decides whether treatment shall be accepted or not. He goes on to say—"Generally the family is large and the parents seem quite indifferent about treatment so long as the child in question is not actually suffering from toothache."

MR. LONG (Skipton) speaking from an extensive experience of the industrial districts in his area says—"In many cases both father and mother work in the mill and the children have to fend for themselves. Many of the parents who receive a consent form ask the children if they wish to have treatment and the children 'fend for themselves' by refusing."

MISS GIBSON (Pontefract) reiterates the fact that many children will not allow their parents to sign the consent form and points out the importance of educating parents not merely in the necessity for treatment, but that it must be regular and as frequent as the dental surgeon thinks fit. Miss Gibson stresses the difficulty in gaining acceptance for treatment where the parents cannot actually see a hole in the tooth.

All the foregoing comments indicate the vital necessity for changing by any educative means the general opinion that dentistry is a service merely for the relief of pain and for purely cosmetic purposes. Dentistry is more than such a service, and the concept that it is a genuine health service should never be lost sight of. Dental disease must be controlled early in its incidence, or even before it appears and should be kept under control by regular and frequent inspection and treatment.

MR. RODGER (Goole) in commenting on the general attitude of many parents towards dental treatment says very truly that it is a common belief that dental treatment every two or three years is quite sufficient.

Until public opinion can be swayed from these prejudices and erroneous beliefs concerning dentistry, the attainment of an ideal service will be impossible.

#### DENTAL TREATMENT IN SECONDARY SCHOOLS.

The extension of the scheme to secondary schools has brought with it its own special problems and points of interest. The method of inspection has been varied somewhat from the procedure in the elementary schools. Before inspection a form has been sent out to the parents of all pupils, asking them whether they wished their children to be inspected by the School Dental Officer and offering two alternatives if treatment was found to be necessary.

- (a) Treatment by the West Riding Dental Officer.
- (b) The parents make their own arrangements for the private treatment of the child.

In secondary schools 4,943 pupils have been inspected, 4,223 have been found to require treatment and 3,288 of these have elected to have the treatment undertaken by the West Riding Dental Officer. Of these, 3,192 have received treatment. It has been found, as would be expected, that a great deal more treatment per child is required for these older children than is the case with the elementary school population, and the type of treatment necessary differs widely between the two groups.



The contrast between the two types of work is shown in the following table:—

COMPARATIVE TABLE OF TREATMENT CARRIED OUT IN ELEMENTARY AND SECONDARY SCHOOLS.

	Elementary.	Secondary.
Average number of children treated per session ... ..	5.84	3.37
Average number of attendances per session... ..	7.45	5.48
Average number of extractions per session ... ..	13.94	4.01
Average number of fillings per session ... ..	4.09	5.82

The figure for fillings accounts largely for the greater expenditure of time which has to be spent on the secondary school population. Not only is the number of fillings done greater, but many of the conservations required in the older children are larger than in the younger age groups, and more time is required to carry out the necessary restoration. The large figure for extractions in the elementary group is accounted for by the numerous extractions of deciduous teeth which are necessary in the younger age groups in order to remove sepsis from the mouths of these young children and also by the removal of many of these teeth which have been retained longer than their allotted span and which as a result of this retention are likely to cause irregularities of the permanent dentition.

The dental treatment of secondary school pupils has aroused arguments from several of the dental officers engaged in this work, which are worthy of note.

MR. BATTEN (Leeds) who has treated the children in three secondary schools says:—

"Treatment among the secondary school children tends to point strongly how uneconomical our dental scheme has been. Very many of these children have in the past received fairly regular dental attention in certain elementary schools up to the age of ten years. They entered the secondary school at that age and most of them have received no dental attention since. The results are illuminating. Extensive dental decay, often oral sepsis, with remnants of past conservative work presenting rather a sad appearance among it, are prevalent among these children, and is only cleared up by extracting many teeth on which work and money has been previously expended. Also extensive filling treatment has to be started all over again."

"We seem to be building, and, instead of keeping in repair, have to keep rebuilding completely after many periods of absolute neglect."

MR. SLEIGHT (Otley) comments upon the same problem from another angle and says:—

"Requests for fillings where it has been too late to hope for success have been frequent. Many of these children have been persistent refusers at elementary schools and have now decided to accept treatment. Their change of mind is encouraging, but the problem of dealing with the results of past neglect is often very difficult . . . . The majority do not appear to have had any treatment since leaving the elementary schools two to five years ago, even if they had treatment then."

MR. WOOD (Selby) suggests that a requirement that a child's mouth should be put into a healthy condition might be a condition of admittance to secondary schools as it is to public schools.

## 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 ... ..	17	13	—	3	—
Influenza and Colds ... ..	5	3	—	—	—
Mumps ... ..	5	2	—	1	—
Chicken Pox ... ..	6	3	—	—	—
Scarlet Fever ... ..	1	1	—	—	—
Whooping Cough ... ..	11	2	1	1	—
Diphtheria ... ..	4	—	—	—	—
Impetigo ... ..	1	—	—	—	—

### (b) DIPHTHERIA IMMUNISATION.

During the year 1936 more than 2,000 cases of diphtheria were notified in the West Riding Administrative County Area, and, as a result, the demand for diphtheria immunisation continued, over 14,000 children receiving the protective treatment.

The work has been carried out at schools and centres in the following districts:—

Urban District.	No. of children receiving the protective treatment.	Urban District.	No. of children receiving the protective treatment.
Adwick-le-Street	162	Otley	118
Altofts	33	Pontefract B.	99
Ardsley, E. and W.	131	Pudsey B.	56
Barkisland	1	Rawmarsh	363
Barnoldswick	306	Ripon City	119
Batley B.	240	Rishworth	12
Bentley-w-Arksey	185	Royston	41
Bingley	168	Saddleworth	110
Birstal	300	Selby	85
Bolton-upon-Deane	76	Shelf	8
Brighouse B.	833	Shepley	1
Calverley	4	Shipley	1,012
Castleford	194	Skelmanthorpe	52
Conisbrough	243	Skipton	114
Cudworth	112	Slaithwaite	213
Darfield	56	Southowram	23
Denholme	13	Sowerby	14
Dodworth	2	Soyland	11
Drighlington	35	Spenborough	19
Earby	69	Springhead	2
Elland	89	Stainland	1
Emley	16	Stanley	34
Featherstone	14	Stocksbridge	2
Flockton	9	Swinton	493
Garforth	30	Thurnscoe	156
Gildersome	12	Tickhill	13
Golcar	237	Todmorden B.	109
Goole	175	Wath-upon-Deane	108
Guiseley	30	Whitwood	49
Harrogate B.	43	Worsborough	105
Haworth	5	Yeadon	63
Hebden Bridge	11		
Heckmondwike	223	RURAL DISTRICT.	
Hemsworth	4	Bishopthorpe	8
Hipperholme	73	Bowland	124
Holmfirth	92	Doncaster	266
Honley	4	Goole	66
Horsforth	70	Gt. Ouseburn	450
Hoyland Nether	61	Halifax	10
Ilkley	1	Hemsworth	925
Keighley B.	318	Keighley	52
Kirkburton	30	Kiveton Park	4
Kirkheaton	18	Knaresborough	290
Knaresborough	82	Pateley Bridge	104
Knottingley	93	Penistone	83
Linthwaite	66	Pontefract	196
Luddenden Foot	32	Ripon	21
Maltby	117	Rotherham	392
Marsden	159	Sedburgh	28
Meltham	31	Selby	87
Methley	146	Settle	463
Mexborough	9	Skipton	100
Midgley	15	Tadcaster	139
Mirfield	86	Thorne	498
Morley B.	20	Wakefield	26
Mytholmroyd	64	Wetherby	140
Normanton	9	Wharfedale N.	6
Ossett B.	84	"    S.	
		Wortley	249

## 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, 112 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, or has been carried out; that spectacles are worn regularly or are in need of repair, 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 uncleanliness, 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	...	...	...	...	...	7,479
(2) Total number of examinations of children	...	...	...	...	...	413,588
(3) Total number of individual children found unclean	...	...	...	...	...	2,497
(4) Total number of visits paid to homes	...	...	...	...	...	32,141

DR. PEAKER comments on the improvement in the cleanliness of children's heads being partly due to the efforts of the school nurses in interviewing the mothers.

## 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 1936 was 2,098, made up as follows:—

Tonsils and Adenoids	...	1,883
Squint	...	85
Middle Ear Disease	...	130
Total	...	2,098

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 714 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, F.R.C.S. (AURAL SURGEON).

As will be seen from the table below, 437 cases were examined at the clinic. Operations were advised in 142 cases and the necessary A.P.H.T. (Advice to Parent re Hospital Treatment) Forms were given to attend at the Doncaster Royal Infirmary.

Owing to the very extensive waiting list at the hospital there has been considerable delay in the admission of the cases—as much as ten months—and I would commend the consideration of a special operative clinic.

I have not been able to give the figures relating to the final results of treatment but from the reports of the various school nurses concerned they are very satisfactory.

The parents appear to be taking more interest in the welfare of their children and more notice of the work done. They are generally very willing to give permission for the children to be brought to the clinic.

I place on record the enthusiasm of the school nurses in carrying out the routine treatments.

History cards have just been delivered and will be of great assistance.

I would stress the importance of arranging clinics for at least one month ahead so as to facilitate the school nurse's arrangements for visiting the parents and obtaining their permission and a detailed history of the case.

Schools.	Boys				GIRLS.				Total cases examined
	Suppurative Otitis Media	Non-suppurative Otitis Media	Miscellaneous	Operations Advised	Suppurative Otitis Media	Non-suppurative Otitis Media	Miscellaneous	Operations Advised	
Woodlands and Highfields	11	8	1	4	11	11	3	11	45
Dunscoft	8	1	—	3	5	1	—	1	15
Skellow	1	—	—	—	4	4	1	2	9
Carcroft	3	1	—	—	4	5	1	2	13
Stainforth	8	—	—	1	3	2	—	3	13
Arksey	1	1	—	1	3	—	—	2	5
Rossington	13	7	1	4	16	14	3	10	54
Moorends	9	9	—	7	20	8	3	9	49
Askern	5	—	—	2	1	1	—	1	7
Bentley	11	3	1	2	5	5	—	1	25
Denaby	21	14	1	9	15	8	1	12	60
Thorne and Hatfield	5	3	—	2	3	3	—	2	14
Conisboro'	12	8	—	8	9	5	1	5	35
Edlington	9	2	—	6	4	1	2	4	18
Conanby	4	2	—	1	4	1	—	1	11
Tickhill and Wadworth	1	4	—	1	5	3	—	4	13
Upton	2	1	1	2	5	1	—	1	10
Armthorpe	5	4	4	7	7	9	9	10	38
Hemsworth	2	—	—	1	—	—	—	—	2
Fitzwilliam	—	—	—	—	1	—	—	—	1
Total	131	68	10	61	125	82	24	81	

## ULTRA-VIOLET RAY TREATMENT.

The clinics which have been established by the County Council are at Hemsworth, Denaby, 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.

Towards the end of the year a Kromayer Lamp was installed in the County Public Health Department at Wakefield. Local applications of ultra-violet light have been used in the treatment of diphtheria carriers, but as yet the number of cases treated is too small to allow any conclusions to be drawn. In the short time the lamp has been in use six children have also attended for treatment of otorrhoea. Improvement has been noted in all cases after a period of treatment.

The reports of the Medical Officers in charge of the clinics are given in the following pages:—

## WOMBWELL.

During the year 1936, one hundred and thirty-three school children have received treatment at the Wombwell Ultra-Violet Ray Clinic—sixty-one boys and seventy-two girls.

Most of the children were sent for treatment on account of "anæmia" or "debility" or "enlarged glands" and a few were sent on account of "bronchitis."

The average length of treatment of each batch of children sent to the clinic was eight weeks.

Nearly all the children showed definite gains in weight as a result of the treatment.

Eight of the children showed some loss of weight, and a few other children were not present on the last day of treatment when the final weights were taken.



As in previous years the cases of "debility" and "anæmia" following acute illnesses formed the biggest batch of those attending, and these were the ones in whom the most marked benefit was noticed—the treatment providing a powerful stimulant to the metabolism, causing increase of appetite and muscular tone.

In those cases of "debility" and "anæmia" not following acute illnesses, the results were less noticeable.

Ultra-violet light therapy being but part of the treatment of cases of nutrition disturbance, it is proposed to advise all the mothers (where they are not already doing so) to give their children cod liver oil during the treatment.

Speaking generally, after seeing these cases during the year, one cannot help being impressed with the tonic effects of the treatment. The enthusiasm of the parents, who often accompany the children at great inconvenience to themselves, is most encouraging.

#### BINGLEY.

The attendances and treatments at the above clinic are still on the increase, showing a general appreciation of this work. The total attendances were 3,255, by 126 children for 3,475 treatments, in some cases both light and massage being given. The West Riding County Council sent 57 scholars, and other school-children attended upon the recommendation of private doctors; a number of babies from the Infant Clinic were also treated.

No additions have been made to the equipment of the light room during the year. The multiple carbon arc lamp has proved a satisfactory medium of artificial light for long wave treatment, and a mercury vapour lamp (Percy Hall pattern) effectively supplies ultra-violet light for short wave treatment.

Rheumatism was relieved by general body baths, and the results were encouraging.

That artificial light prevents and cures rickets and other forms of debility in children has now been proved by the results of 1936. Improvements in appetite, sleep, activity, colour and muscular tone have been noted.

The duration of treatment was three months or longer. General irradiations were tri-weekly, increasing by two minutes per session.

Experience continues to show the peculiarly curative quality of radiation from the carbon arc lamp for long wave treatment, which lends itself in a special degree to general constitutional restoration, which is proved by the beneficial influence upon the growth and development of children.

#### HEMSWORTH.

During the year 124 clinics were held, the doctor being present on 44 occasions. 206 cases came for treatment, of which 76 were still on the roll at the year end. Therefore 130 cases were discharged, of these, 10 left of their own accord, so that results can be assessed in 120.

Below is a resumé of the types of case and result of treatment.

Disease.	No. of cases.	Results.
Sub-acute Rheumatism	13 cases	6 very greatly improved. 3 improved 4 poor results
Stomatitis	1 case	Cured
Furunculosis	1 case	Cured
Recurrent Styes	2 cases	Both cured
Hysteria	1 case	Cured
Impetigo	4 cases	4 cured
Loss of Appetite	2 cases	Both improved
Rickets	5 cases	2 cured 3 improved
Recurrent Bronchitis	1 case	No improvement
Tabes Mesenterica	1 case	Improved
Warts	1 case	Cured
Cervical Adenitis (non-tubercular)	4 cases	4 cured
Tuberculous Adenitis	3 cases	1 cured 2 healed well
Chorea	7 cases	4 cured 2 improved 1 no result
Delayed Resolution of Pneumonia	1 case	Cured
"Pink" Disease	2 cases	2 cured
Alopecia	1 case	Cured
Debility	70 cases	43 cured 23 improved 4 no result

## DENABY.

During the year 138 clinics were held, the doctor being present on 42 occasions. 85 cases came for treatment of which 31 were still attending at the year end. Therefore 54 cases were discharged. Of these, 7 left of their own accord so that the results can be assessed in 47 cases.

Below is a resumé of the types of cases and results of treatment:—

Disease.	No. of Cases.	Result.
Alopecia	1 case	Very much better
Recurrent Bronchitis	1 case	Improved
Ricketty Deformities	3 cases	1 improved 2 unchanged
Sub-acute Rheumatism	3 cases	2 very much better 1 slightly improved
Tubercular Adenitis	1 case	Improved
Chorea	13 cases	9 cured 4 slight improvement
Debility	25 cases	14 cured or vastly improved 6 improved 5 little or no result

## 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	31
Airedale, Holy Cross Hut	Monday, Friday	62
Armthorpe, Miners' Welfare Institute	Monday, Thursday	24
Allerton Bywater, Miners' Welfare Institute	Monday, Thursday	22
Ardsley East, Primitive Methodist Chapel	Tuesday	5
Ardsley, West, No. 1, Syke Lane, West Ardsley	Monday	4
Askern, Baptist Chapel, Sutton Road	Tuesday	26
Baildon, Methodist Sunday School.	Wednesday	17
Bentley, Welfare Pavilion	Wednesday, Friday	30
Bramley, Miners' Welfare Hall	Wednesday	19
Birkenshaw, Methodist Free Church	Tuesday	4
Birstall, St. John's School, Chapel Lane	Monday, Wednesday	3
Birdwell, United Methodist Church, Chapel Street	Wednesday	7
Chapelton, Miners' Welfare Pavilion	Wednesday, Friday	4
Carcroft, Presbyterian Sunday School	Thursday	41
Conisbrough, Army Hut, Balby Street Council School	Mon., Tues., Wed. (Afternoons) Thurs., Fri. (Mornings)	69
Conisborough Upper, Miners' Welfare Institute	Monday	11
Crofton, Council School	Monday	17
Cudworth Wesley Hall	Wednesday, Friday	26
Dalton, Primitive Methodist Chapel	Wednesday, Friday	25
Darfield, Methodist Sunday School, Barnsley Road	Wednesday, Friday	12
Darton (Staincross) Wesleyan Sunday School, Barnsley Road, Mapplewell	Thursday	22
Darton (Gawber) Adult School	Tuesday	33
Dinnington, Wesleyan Sunday School	Tuesday, Friday	12
Dodworth, Mechanics' Institute, High Street	Tuesday, Thursday	23
Drighlington, Wesleyan Sunday School, King Street	Monday, Friday	9
Dunscroft, Church Hall	Tuesday, Friday	33
Elland, Drill Hall, Jepson Lane	Wednesday	22
Edlington, United Methodist Chapel	Tuesday	18
Earby, Old Grammar School	Wednesday	5
Farsley, United Methodist Church	Tuesday, Friday	11
Ferrybridge, Wesleyan Chapel	Thursday	12
Garforth, St. Mary's Hall	Monday	17
Guiseley, Baptist Church, Oxford Road	Thursday	9
Glasshoughton, St. Paul's Institute	Monday, Wednesday, Friday	21
Golcar, Council Offices	Wednesday	18
Greetland, Clay House	Tuesday, Thursday	13
Haworth, Hall Green Baptist School	Tuesday, Friday	16
Hebden Bridge, Old Secondary School	Wednesday, Friday	18
Hemsworth, Army Hut, West End Council School	Every morning	7
Hemsworth (Fitzwilliam) Church Hut	Monday, Wednesday	65



## SCHOOL CLINICS.—continued.

Name and Address	Day of meeting	Average Attendance
Horbury, Wesleyan Sunday School	Monday, Friday	10
Hoyland, Miners Welfare Institute	Tuesday, Friday	18
Hoyland Common, Wesleyan Chapel	Thursday	11
Holmfirth, Town Hall	Thursday	4
Horsforth, St. Margaret's Hall	Wednesday	11
Hipperholme, Wesleyan Sunday School	Monday	12
Kippax, Trinity Methodist Chapel	Tuesday (Thursday, alternate)	26
Kirkburton, Council School	Tuesday	10
Knaresborough, Fysche Hall Cottage, Isles Lane	Monday, Thursday	14
Knottingley, Secondary School, Chapel Street	Monday, Wednesday, Friday	21
Lepton, Liberal Club	Tuesday, Thursday	12
Slaithwaite, United Methodist Sunday School, Carr Lane	Wednesday Friday	18
Maltby, Congregational Chapel, Carlyle Road	Monday, Thursday	46
Meltham, Baptist Church	Tuesday	8
Mirfield, Ings Grove	Monday, Friday	14
Marsden, Conservative Club	Thursday	6
Milnsbridge, Bungalow, 93, Manchester Road	Tuesday	29
Normanton, Park Pavilion	Monday, Wednesday	14
	Thursday, Friday	
Otley, Primitive Methodist Chapel, Station Road	Thursday	13
Oulton, Village Institute	Tuesday, Friday	9
Outwood, Church Institute	Monday, Wednesday, Friday	15
Penistone, Shrewsbury Methodist Chapel	Monday	16
Queensbury, Cricket Pavilion	Tuesday, Friday	6
Rawmarsh Spiritual Temple, Ashwood Road, Parkgate	Monday, Tuesday	49
	Wednesday, Friday	
Ripon City, Alma House	Monday, Thursday	27
Royston, Wesleyan Sunday School	Wednesday, Friday	14
Rossington, United Methodist Church	Tuesday, Thursday	41
Saddleworth, Mechanics' Institute, Uppermill	Wednesday	3
Selby, Museum Hall, Park Street	Tuesday, Friday	28
Sharlston, St. Luke's Hall	Tuesday, Friday	19
Stainforth, Wesleyan Sunday School, Church Road	Tuesday, Friday	55
Silsden, Ambulance Station, Kirkgate	Tuesday	15
Skipton, Wesleyan Methodist Sunday School, Water Street	Wednesday, Friday	8
Stocksbridge, Mozart House, Manchester Road, Deepcar	Tuesday, Friday	26
Sowerby Bridge, Allan House	Tuesday, Thursday	7
Stannington, Underbank Chapel	Wednesday	9
Swinton, Rock House	Monday, Thursday, Friday	20
Stanley, Zion Congregational Chapel	Monday	15
Tadcaster, Shann House.	Tuesday, Friday	5
Thorne, Temperance Institute	Monday, Wednesday	46
Thorne (Moorends) Wesleyan Chapel	Tuesday, Thursday	28
Thurcroft, Miners' Welfare Institute	Monday, Thursday	15
Thurnscoe, Central Hall	Monday,	21
Wath-on-Deerne, Dunford House	Monday, Wednesday	
	Thursday,	20
	Tuesday	15
Whitwood, Memorial Hall	Monday, Wednesday	16
Wath-on-Deerne, West Melton, Wesleyan Chapel	Tuesday, Thursday	19
Worsborough, Wesleyan Sunday School (Dale)	Friday	18
Yeadon, Town Hall	Monday, Friday	19
*Bingley, Morningside Road Council School	Tuesday, Wednesday	16
*Bolton-on-Deerne, Council Offices	Every morning	69
*Castleford, Wesley Street	Every morning and Thursday afternoon	23
*Featherstone, Tradesmen's Club	Monday, Wednesday, Friday	51
	Every morning	16
	Every afternoon	33
*Mexborough, New Evening School	Friday afternoon	10
*Robin Hood, Infants' Council School	Friday morning	12
*Rothwell, New School Clinic	Tuesday, Friday	25
*South Elmsall, Miners' Institute, Moorthorpe	Wednesday, p.m.	20
*Stourton, Council School	Monday p.m., Tuesday a.m., Wednesday p.m.	31
*Wombwell, Free Library	Thursday a.m. Friday p.m.	26
*Wombwell, Jump Council School		

\*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, 1936.
<b>DELICATE CHILDREN.</b>	
Mitchell Memorial Home, Rawdon (W.R.C.C. School)	22
West Kirby Convalescent Home, Nr. Liverpool	18
Oak Bank Open Air School, Sevenoaks	39
Brighthouse Open Air School	3
Wombwell Open Air School (W.R.C.C. School)	60
Leasowe Children's Hospital	1
York Fulford Road Special School	1
	144
<b>MENTALLY DEFECTIVE CHILDREN.</b>	
Pield Heath House, Middlesex	1
Leeds, Armley Park Special School	1
Northamptonshire Home for Girls	1
Knotty Ash Horticultural Special School, Nr. Liverpool	3
Allerton Priory R. C. Special School, Liverpool	1
Oldham, Gower Street Special School	1
Bradford, Margaret McMillan Special School	2
York Fulford Road Special School	1
Halifax, Quarry House Special School	1
Leeds, East Leeds Special School	3
Clapham Park School, London, S.W.4.	1
	16
<b>BLIND AND PARTIALLY BLIND CHILDREN.</b>	
Leeds, Blenheim Walk Home	39
Henshaw's Institution for the Blind, Manchester	3
Royal Blind School, Sheffield	16
Fulwood Homes for the Blind, Preston	5
Bradford, Daisy Hill Myopic School	2
Southport Sunshine Home for Blind Babies	1
Oldham, Gower Street	2
Court Grange Special School, Abbotskerswell, Devon	3
	71
<b>DEAF CHILDREN.</b>	
Yorkshire Institution for the Deaf, Doncaster	88
Leeds Blenheim Walk Home for the Deaf	23
Royal Schools for the Deaf, Manchester	14
St. John's Institution for the Deaf, Boston Spa	5
Oldham, Gower Street Special School	2
	132
<b>CRIPPLED CHILDREN.</b>	
Bethesda Home, Manchester	1
Leasowe Children's Hospital	18
Heritage Craft Schools, Chailey	27
St. Michael's Orthopaedic Hospital, Clacton-on-Sea	1
Heswall Hospital, Liverpool	8
Heatherwood Hospital, Ascot	1
Marguerite Home, Thorp Arch	4
Children's Rest, Sefton Park, Liverpool	5
St. Vincent's Orthopaedic Hospital, Pinner, Middlesex	1
St. Roses R. C. Special School, Stroud	2
Halliwick Cripples Home, Winchmore Hill, London	4
Yorkshire Children's Hospital, Kirby Moorside	1
Lister Lane, School for Cripples, Bradford	1
W. J. Sanderson Home, Garforth	4
Ethel Hedley Hospital, Windermere	1
	79
<b>EPILEPTIC CHILDREN.</b>	
Maghull Home for Epileptics	3
Lingfield Epileptic Colony, Surrey	5
St. Elizabeth's Home, Much Hadham	1
	9



## 9.—Open-Air Education.

### MITCHELL MEMORIAL HOME, RAWDON.

During 1936 the County Council opened a residential open air school for boys at the Mitchell Memorial Home, Rawdon, and this was immediately filled by the transfer of 22 patients from the East Anglian Sanatorium, near Colchester.

This home was formerly used as a sanatorium for ex-service men and as the number of patients had fallen considerably it was transferred from the Public Health and Housing Committee to the Education Committee.

### WOMBWELL OPEN-AIR SCHOOL.

The Wombwell Day Open-air School continues its useful work and appended is a copy of the report by DR. J. V. KIRKWOOD, School Medical Inspector, who acts as Medical Officer of the School.

The school has accommodation for sixty children and both boys and girls are admitted. The children are mostly drawn from the neighbouring area owing to the difficulties of transport. At present there are a few children attending from outside the area. The ages range from 7 to 14 years. The children start work at 9 a.m. and at 10-30 a.m. they have a bottle of milk and a ration of cod liver oil. They stop work at 11-40 a.m., have an interval for play and then get 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. Some of the parents have objected to this saying that they catch cold afterwards, but as they are supposed to follow the hot shower with a cold one there should be no danger.

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.

The children are frequently inspected by the School Medical Inspector, the School Dentist and the School Nurse, so that any defects receive immediate attention.

There has not been a great deal of serious illness during the year. One girl was absent for 8 weeks with keratitis but has now returned. Another who was absent for a long time with nephritis eventually died from pneumonia.

There was one case of scarlet fever.

The physical training is the same as in ordinary schools. Only three children were not able to take part owing to their poor state of health.

Three children left the school during the year on attaining the age of 14 years.

1. Girl gained 27-lbs. in 2 years—debility and anaemia improved.
2. Girl gained 17½-lbs. in one year 9 months—debility improved.
3. Boy gained 21½-lbs. in 2 years 4 months—debility improved.

Average length of stay 2 years.

Average gain in weight 22½-lbs.

Six children left the school during the year.

1. Girl gained 15½-lbs. in 2 years 6 months—debility and anaemia improved.
2. Girl gained 20½-lbs. in 3 years 8 months—debility improved.
3. Girl gained ¾-lb. in 7 months—anaemia and debility not much change.
4. Boy gained 21½-lbs. in 2 years 8 months—debility improved.
5. Boy gained 11-lbs. 1-oz. in 2 years 2 months—asthma cured.
6. Boy gained 13½-lbs. in 3 years 9 months—debility and anaemia improved—blepharitis cured.

Average length of stay 2 years 6 months.

Average gain in weight 13-lbs. 11-ozs.

One child left as cured.

Boy gained 12-lbs. in 2 years 6 months—enlarged glands cured.

One girl admitted May 1935 for debility and anaemia, died 22/11/36 from pneumonia and kidney trouble.

Girl admitted September 1932 was discharged on 21/7/33, her enlarged glands cured. Had gained 5½-lbs. in 8 months.

She was re-admitted 31/9/36 suffering from debility.

NUMBERS AT SCHOOL DECEMBER 1936. Boys 27. Girls 33.

Progress of children who have been at the school since 1932 (*i.e.*, 4 years 7 months).

Boys 5.

Between 18 and 19 lbs. one.  
 " 19 and 20 lbs. one.  
 " 28 and 29 lbs. one.  
 " 29 and 30 lbs. one.  
 " 38 and 39 lbs. one.  
 Average gain in weight 26½-lbs.

GIRLS 5.

Between 32 and 33 lbs. one.  
 " 34 and 35 lbs. one.  
 " 35 and 36 lbs. one.  
 " 39 and 40 lbs. one.  
 " 48 and 49 lbs. one.  
 Average gain in weight 38-lbs.

Children admitted 1933 (*i.e.*, 3 years 11 months).

Boys 3.

Between 24 and 25 lbs. one.  
 " 27 and 28 lbs. one.  
 " 28 and 29 lbs. one.  
 Average gain in weight 26½-lbs.

GIRLS 1.

Between 32 and 33 lbs. one.  
 Average gain in weight 32½-lbs.

Children admitted 1934 (*i.e.*, 2 years 10 months).

Boys 8.

Between 8 and 9 lbs. one.  
 " 13 and 14 lbs. one.  
 " 14 and 15 lbs. two.  
 " 15 and 16 lbs. one.  
 " 16 and 17 lbs. one.  
 " 17 and 18 lbs. one.  
 " 21 and 22 lbs. one.  
 Average gain in weight 15½-lbs.

GIRLS 13.

Between 8 and 9 lbs. one.  
 " 9 and 10 lbs. one.  
 " 12 and 13 lbs. one.  
 " 15 and 16 lbs. two.  
 " 16 and 17 lbs. two.  
 " 17 and 18 lbs. two.  
 " 19 and 20 lbs. one.  
 " 21 and 22 lbs. one.  
 " 36 and 37 lbs. one.  
 " 38 and 39 lbs. one.  
 Average gain in weight 18 5/6-lbs.

Children admitted 1935.

Boys 3.

Between 8 and 9 lbs. one.  
 " 9 and 10 lbs. one.  
 " 10 and 11 lbs. one.  
 Average length of stay 1 year 4 months.  
 Average gain in weight 9½-lbs.

GIRLS 8.

Between 2 and 3 lbs. one.  
 " 6 and 7 lbs. two.  
 " 7 and 8 lbs. one.  
 " 8 and 9 lbs. one.  
 " 9 and 10 lbs. one.  
 " 13 and 14 lbs. one.  
 " 16 and 17 lbs. one.  
 Average length of stay 1 year 4 months.  
 Average gain in weight 8½-lbs.

Children admitted in 1936.

Boys 8.

Between 3 and 4 lbs. one.  
 " 9 and 10 lbs. one.  
 6 admitted November 1936.  
 Average length of stay 8 months.  
 Average gain in weight 6-lbs.

GIRLS 6.

Between 3 and 4 lbs. one.  
 " 5 and 6 lbs. one.  
 1 admitted September 1936.  
 2 admitted November 1936.  
 1 admitted February 1936, absent since May with corneal ulcer.  
 Average length of stay 9½ months.  
 Average gain in weight 4½-lbs.

Defects for which children were admitted were:—

Debility	...	...	...	...	...	...	...	...	...	23
Debility and anæmia	...	...	...	...	...	...	...	...	...	12
Anæmia	...	...	...	...	...	...	...	...	...	4
Bronchitis	...	...	...	...	...	...	...	...	...	4
Enlarged glands	...	...	...	...	...	...	...	...	...	2
Anæmia and enlarged glands	...	...	...	...	...	...	...	...	...	5
Debility, anæmia and glands	...	...	...	...	...	...	...	...	...	1
Debility and glands	...	...	...	...	...	...	...	...	...	2
Anæmia, debility and bronchitis	...	...	...	...	...	...	...	...	...	1
Debility and bronchitis	...	...	...	...	...	...	...	...	...	2
Old tuberculous spine	...	...	...	...	...	...	...	...	...	1
Old tuberculous hip	...	...	...	...	...	...	...	...	...	1
Nervous debility	...	...	...	...	...	...	...	...	...	1

Total 60



Co-existing physical defects were:—

Enlarged tonsils	11	One operated on—3 require operation and refuse.
Tonsils and adenoids	2	
Defective vision	8	All wearing glasses or have had glasses ordered.
Otorrhœa	3	Under treatment.
Heart disease	2	
Nephritis	1	Died.
Teeth	1	Refuses treatment.
Blepharitis and rheumatism	1	
Impetigo	1	
Ringworm	1	
Slight chorea	1	
Corneal ulcer	1	Absent last 8 months but may return soon.
Epilepsy	2	
Scabies	1	
Pleurisy	1	

## 10.—Physical Education.

SELECTED AND ADAPTED FROM THE REPORT OF THE SENIOR ORGANISER OF PHYSICAL TRAINING FOR THE YEAR ENDED 31ST DECEMBER, 1936.

**ELEMENTARY SCHOOLS.** The year ending December 1936 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 STAFF consists of a Senior Organiser, three whole-time men, two whole-time women, and a part-time man organiser.

There are now 88 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, Thurnsoe, 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. Three types of shoes were supplied to ten senior schools and the head teachers reported in favour of one type which has now been supplied to half the senior schools in the Riding. During the year, 4,530 pairs were supplied to 45 departments at a cost of £350 0s. 0d. The remaining schools will be supplied during the next financial year.

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	...	...	...	...	11

The expenditure in the last year was £971 12s. 1d. toward which £322 10s. 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 Moorends, Thurnsoe 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, Ardsley, Baildon, Burley-in-Wharfedale, Drighlington, 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 (Guiseley, Lightcliffe) have fields of their own.

**SWIMMING INSTRUCTION IN ELEMENTARY SCHOOLS.** During the season instruction has been given at 44 Centres as against 42 Centres during the season 1935. 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 1936 and 1935.

	Total No. of children who have received instruction.			Total No. of attendances made		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
1936 ... ..	12,890	12,387	25,277	137,139	125,688	262,827
1935 ... ..	11,946	11,350	23,296	126,262	114,623	240,885
COUNTY COUNCIL CERTIFICATES OBTAINED.						
	25 yards.			75 yards.		
1936 ... ..	1,607	1,471	3,078	1,418	1,211	2,629
1935 ... ..	—	—	—	1,862	1,378	3,240

This year the Education Committee has made an award of a 25 yard certificate in addition to the certificate for swimming 75 yards, and this has been a great incentive to increased effort.

The West Riding Education Committee possesses one swimming bath (Milnsbridge) and also makes use of baths provided by County Boroughs, Non-County Boroughs, Urban District Councils, Miners' Welfare Organizations, 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—GYMNASIUMS.** Of the 53 West Riding secondary schools, 43 have a fully equipped gymnasium and two (Harrogate Grammar School and Mexborough Secondary School) have two gymnasiums. The others have a hall equipped with apparatus. The apparatus both fixed and moveable in the gymnasiums is tested and examined every year by the County Supplies Department.

**PLAYING FIELDS.** All secondary schools have playing fields either adjoining the school or some distance away. Each year additions are being made to the playing fields accommodation of the West Riding secondary schools. Many of the schools have excellent playing fields such as Harrogate, Otley, Ripon and Thorne Grammar Schools, and Pontefract King's School. One of the best laid out fields is at Goole where the Grammar School has 12 hard tennis courts, cricket square, rugby, association football and hockey pitches in addition to the space for net ball, rounders and other games.

**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, 1936, 428 classes were established, of which 210 were for men and boys and 218 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 1936, 32 samples of swimming bath waters, from 11 different baths were examined bacteriologically at the request of the Education Officer or the Local Sanitary Authority. Of these, 19 proved satisfactory and 13 unsatisfactory. Of the unsatisfactory samples, 8 later proved satisfactory. In respect of the remaining 5, advice was given about chlorination, but no further samples have been taken.



## 12.—Co-operation of Parents.

The parents appear to be taking a greater interest in the health of the children as witnessed by the demand for lectures by Parent-Teachers Associations. Such lectures have been given in the evenings by the Assistant School Medical Officer and the Senior Dental Officer, and the Dentists have often prefaced their course of treatment in a school by a lecture to the parents and children.

In some instances parents make enquiries as to when the next visit of the doctor or dentist is to take place.

## 13.—Co-operation of Teachers.

This is a matter upon which a large measure of the success of school medical inspection and treatment depends. The teachers can and do follow up a number of cases in which the parents are apathetic; no one but the teachers or the parents can ensure children wearing the spectacles provided.

A School Medical Inspector mentions one improvement which would be of great benefit, *viz.*: the teachers should see that a scholar's medical and dental cards should be transferred with the child when removing to another school so that any instructions about sight, hearing or physical training could be carried out.

## 14.—Co-operation of School Inquiry Officers.

This is an essential part of the work, particularly in connection with medical certificates for exclusion issued by School Medical Inspectors.

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 1936, 45 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 will make periodic visits of inspection, and the School Nurse is holding a weekly clinic on the school premises.

In addition to this school there are 26 nursery classes in operation in schools and 13 more in the course of formation.

## 18.—Secondary Schools.

Medical inspection is carried out in all the secondary schools and also 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 to 11, is so small that a considerable amount of travelling is involved.

## 19.—Continuation Schools.

Three Junior Instruction Centres were opened 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.

It is hoped to commence dental treatment during 1937.

## 20.—Employment of Children and Young Persons.

During 1936 the School Medical Inspectors examined 947 children who desired to be employed out of school hours in the delivery of newspapers or milk, and of these, 36 were rejected as being unsuitable for such work.



## 21.—Special Report.

### OPEN-AIR SCHOOLS.

DR. J. WOOD WILSON has prepared the following special report:—

As open-air schools are becoming more numerous it is perhaps opportune to consider the results of the attendance of school children at these institutions not only in respect of immediate benefit but also of maintained improvement after discharge.

School children from the West Riding administrative area may now be sent to one of seven open-air schools, four of which are residential and the remainder of the "day" character.

For the purpose of this investigation it was decided to follow up the delicate children discharged from residential open-air schools during the years 1934, 1935 and 1936. The inquiry was also limited by excluding from it children suffering from any rheumatic affection or with any orthopædic defect who may have had a period of residence in an open-air school.

The reason for the admission of the children was therefore in the majority of cases debility, often following such illnesses as bronchitis, diphtheria, scarlet fever, and appendicitis.

The information required regarding these children was reduced to as simple requirements as possible, the criterion of continued benefit following discharge being judged by regularity of attendance at school, or work, as many had attained the age of fourteen years.

In all, information was obtained of 179 children discharged during the three years and the accompanying table gives a summary of the findings.

The figures relating to immediate benefit are very much to be expected, showing that 161 or 90 per cent. are improved in health on discharge from open-air school.

Taking next the figures for those showing continued improvement after discharge it is found that the number has dropped from 161 to 103, or 57 per cent. of the total discharges. This figure agrees very closely with the number judged to be maintaining improvement by their regularity of attendance at school or work.

An interesting point arises, although the numbers are small, when the percentage of "regular attenders" is taken for each year as shown in the following table.

Year.	"Regular Attenders" to total number discharged per cent.
1934	52
1935	57
1936	60

The conclusion to be drawn from the above table is that as each year passes after discharge fewer children maintain the improvement first shown.

This is not absolutely true, however, as the longer children have been discharged the more chance there is of their condition not being ascertained.

As a result of this investigation it would appear that in the great majority of delicate children admitted to open air schools, improvement is shown on discharge and that there is then a steady fall in the number showing maintained improvement varying with the number of years after discharge.

### DELICATE CHILDREN.

#### INVESTIGATION OF 179 SCHOOL CHILDREN DISCHARGED DURING THE YEARS 1934, 1935 AND 1936 FROM OPEN-AIR SCHOOLS.

Year of discharge.	Total No.	Immediate Benefit.			Subsequent History.				Attendance at School or Work.			
		Yes	No.	Doubtful	Continued Improvement.	Deterioration.	Condition Stationary.	Not known.	Regular.	Irregular.	Unable to attend.	Not known.
1934 ... ..	25	20	—	5	12	4	2	7	13	2	2	8
1935 ... ..	71	67	2	2	40	10	13	8	41	16	3	11
1936 ... ..	83	74	8	1	51	10	19	3	50	20	5	8
Totals ... ..	179	161	10	8	103	24	34	18	104	38	10	27



## 22.—Miscellaneous.

### CLINICAL PATHOLOGY.

The following specimens were taken by the school medical staff and submitted to the County Laboratory for examination:—

Throat Swabs	...	...	...	...	...	...	...	...	146
Hairs and Scales for Ringworm	...	...	...	...	...	...	...	...	132
Miscellaneous Specimens	...	...	...	...	...	...	...	...	97
									<hr/> 675 <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	1,502
(b) Teachers, Bursars, etc.	21
(c) Children for Licences for Entertainments	35
	<hr/> 1,558 <hr/>

The School Oculists examined 714 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 80 applicants for admission to Bingley Training College.

### BINGLEY TRAINING COLLEGE.

Special visits were made to the college in May to examine 75 students who were about to complete their second year of training.

The candidates, after examination, were classified as follows:—

A1, 49; A.2, 20; B.1, 2; B.2, 1; and 3 uncertificated teachers.

In October, DR. ALLAN again visited the college to examine 78 newly admitted students. These were classified as under:—

A.1, 57; A.2, 20; B.2, 1.

COUNTY HALL,  
WAKEFIELD,  
April, 1937.

T. N. V. POTTS,  
County and School Medical Officer.

**TABLE I.**  
**Return of Medical Inspections (Elementary).**

<b>A. ROUTINE MEDICAL INSPECTIONS.</b>									
Entrants	...	...	...	...	...	...	...	...	19,917
Intermediates	...	...	...	...	...	...	...	...	20,528
Leavers	...	...	...	...	...	...	...	...	16,965
									<hr/>
Total	...	...	...	...	...	...	...	...	57,410
Number of other Routine Inspections	...	...	...	...	...	...	...	...	—
									<hr/>
Grand Total	...	...	...	...	...	...	...	...	57,410
									<hr/>
<b>B. OTHER INSPECTIONS.</b>									
Number of Special Inspections	...	...	...	...	...	...	...	...	8,428
Number of Re-inspections	...	...	...	...	...	...	...	...	20,979
									<hr/>
Total	...	...	...	...	...	...	...	...	29,407
									<hr/>

**C.—Number of individual Children found at Routine Medical Inspection to Require Treatment (excluding Uncleanliness and Dental Diseases.)**

Code Groups—									
Entrants	...	...	...	...	...	...	...	...	4,605
Intermediates	...	...	...	...	...	...	...	...	5,606
Leavers	...	...	...	...	...	...	...	...	4,342
									<hr/>
Total (code groups)	...	...	...	...	...	...	...	...	14,553
Other routine inspections	...	...	...	...	...	...	...	...	—
									<hr/>
Grand Total	...	...	...	...	...	...	...	...	14,553
									<hr/>

**TABLE I. (a).**  
**Return of Medical Inspections (Secondary).**

<b>A. ROUTINE MEDICAL INSPECTIONS.</b>									
Entrants	...	...	...	...	...	...	...	...	4,053
Age Group 15	...	...	...	...	...	...	...	...	2,392
									<hr/>
Total	...	...	...	...	...	...	...	...	6,445
									<hr/>
<b>B. OTHER INSPECTIONS.</b>									
Number of Special Inspections	...	...	...	...	...	...	...	...	421
Number of Re-inspections	...	...	...	...	...	...	...	...	1,058
									<hr/>
Total	...	...	...	...	...	...	...	...	1,479
									<hr/>

**C.—Number of individual Children found at Routine Medical Inspection to Require Treatment (excluding Uncleanliness and Dental Diseases.)**

Code Groups—									
Entrants	...	...	...	...	...	...	...	...	898
Age Group 15	...	...	...	...	...	...	...	...	588
									<hr/>
Total (code groups)	...	...	...	...	...	...	...	...	1,486
Other routine inspections	...	...	...	...	...	...	...	...	—
									<hr/>
Grand Total	...	...	...	...	...	...	...	...	1,486
									<hr/>



TABLE II. (A)

Return of Defects found in the course of Medical Inspection of  
Elementary School Children in 1936.

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	50	1	27	3
		Body	...	2	32	—	7	1
	Scabies	...	...	3	69	1	38	2
	Impetigo	...	...	4	266	2	110	2
	Other Diseases (Non-Tubercular)	...	...	5	521	114	114	30
Total (Heads 1 to 5)					938	118	296	38
Eyes	Blepharitis	...	...	6	555	64	187	31
	Conjunctivitis	...	...	7	76	3	25	1
	Keratitis	...	...	8	6	1	—	1
	Corneal Opacities	...	...	9	28	27	17	6
	Other Conditions (excluding defective vision and squint)	...	...	10	129	36	29	18
Total (Heads 6 to 10)					794	131	258	57
Ears	Defective Vision (excluding squint)	...	...	11	4,363	1,414	2,674	807
	Squint	...	...	12	657	247	182	62
	Defective Hearing	...	...	13	156	108	71	31
	Otitis Media	...	...	14	383	41	120	23
	Other Ear Diseases	...	...	15	110	14	37	18
Nose and Throat.	Enlarged Tonsils	...	...	16	1,538	7,020	515	828
	Adenoids	...	...	17	147	127	46	19
	Enlarged Tonsils and Adenoids	...	...	18	1,078	359	428	84
	Other Conditions	...	...	19	375	217	54	80
	Enlarged Cervical Glands (Non-Tubercular)	...	...	20	99	2,785	46	174
Heart and Circulation	Defective Speech	...	...	21	93	170	30	42
	Heart Disease (Organic)	...	...	22	213	382	78	147
	Heart Disease (Functional)	...	...	23	45	375	11	65
	Anaemia	...	...	24	1,313	312	555	70
	Bronchitis	...	...	25	785	261	51	17
Lungs	Other Non-Tubercular Diseases	...	...	26	110	495	10	45
	Pulmonary (Definite)	...	...	27	24	9	1	4
	Pulmonary (Suspected)	...	...	28	64	60	31	12
	Glands	...	...	29	47	74	12	29
	Bones and Joints	...	...	30	11	16	1	4
Tuberculosis	Non-Pulmonary (Skin)	...	...	31	4	2	—	1
	Non-Pulmonary (Other Forms)	...	...	32	5	11	—	9
	Total (Heads 29 to 32)	...	...	...	67	103	13	43
Nervous System	Epilepsy	...	...	33	6	31	2	13
	Chorea	...	...	34	46	40	27	15
	Other Conditions	...	...	35	49	307	17	123
	Rickets	...	...	36	61	213	6	17
	Spinal Curvature	...	...	37	161	432	45	138
Deformities	Other Forms	...	...	38	210	251	69	63
	Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)	...	...	39	978	2,956	354	1,691
TOTAL					14,863	18,978	6,027	4,726

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	...	19,917	2792	14.02	14351	72.05	2678	13.45	96	0.48
Intermediates	...	20,528	2356	11.48	14711	71.66	3364	16.39	97	0.47
Leavers	...	16,965	2576	15.18	11940	70.38	2381	14.04	68	0.40
Other routine inspections	...	—	—	—	—	—	—	—	—	—
TOTAL		57,410	7724	13.46	41002	71.42	8423	14.67	261	0.45

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 1936.

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	...	5	—	1	—
		Body	...	2	...	—	—	—	—
	Scabies	...	...	3	...	—	—	1	—
	Impetigo	...	...	4	...	—	—	1	—
	Other Diseases (Non-Tubercular)	...	...	5	...	82	34	6	—
Total (Heads 1 to 5)					...	87	34	9	—
Eyes	Blepharitis	...	...	6	...	19	2	6	—
	Conjunctivitis	...	...	7	...	—	—	—	—
	Keratitis	...	...	8	...	1	—	—	—
	Corneal Opacities	...	...	9	...	1	3	—	—
	Other Conditions (excluding defective vision and squint)	...	...	10	...	14	3	2	—
	Total (Heads 6 to 10)	...	...	...	...	35	8	8	—
Ears	Defective Vision (excluding squint)	...	...	11	...	679	452	152	71
	Squint	...	...	12	...	19	19	—	—
	Defective Hearing	...	...	13	...	13	9	3	—
	Otitis Media	...	...	14	...	10	2	2	1
	Other Ear Diseases	...	...	15	...	10	4	5	—
Nose and Throat.	Enlarged Tonsils	...	...	16	...	76	392	14	3
	Adenoids	...	...	17	...	5	1	1	2
Enlarged Cervical Glands (Non-Tubercular)	Enlarged Tonsils and Adenoids	...	...	18	...	52	8	9	2
	Other Conditions	...	...	19	...	28	17	1	1
Defective Speech	...	...	...	20	...	17	84	1	1
	...	...	...	21	...	11	16	1	—
Heart and Circulation	Heart Disease	Organic	...	22	...	17	50	12	20
		Functional	...	23	...	13	54	7	7
	Anæmia	...	...	24	...	199	21	40	8
Lungs	Bronchitis	...	...	25	...	16	10	—	3
	Other Non-Tubercular Diseases	...	...	26	...	4	12	—	1
Tuberculosis	Pulmonary	Definite	...	27	...	—	—	—	—
		Suspected	...	28	...	2	3	1	—
		Glands	...	29	...	—	3	1	—
		Bones and Joints	...	30	...	1	1	—	—
	Non-Pulmonary	Skin	...	31	...	—	—	—	—
		Other Forms	...	32	...	—	1	—	—
Total (Heads 29 to 32)					...	1	5	1	—
Nervous System	Epilepsy	...	...	33	...	2	—	—	—
	Chorea	...	...	34	...	—	3	1	—
	Other Conditions	...	...	35	...	6	10	1	4
	Rickets	...	...	36	...	3	5	—	—
Deformities	Spinal Curvature	...	...	37	...	49	64	14	5
	Other Forms	...	...	38	...	213	129	21	10
Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)					...	107	150	33	30
TOTAL					...	1,674	1,562	337	169

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	...	...	...	4,053		675	16.66	3061	75.53	313	7.72	4	0.09
Age-group 15	...	...	...	2,392		530	22.16	1751	73.20	111	4.64	—	—
TOTAL				6,445		1205	18.70	4812	74.66	424	6.58	4	0.06



TABLE III.

Return of all Exceptional Children in the West Riding,  
31st December, 1936.

<b>BLIND CHILDREN</b>		
At Certified Schools for the Blind	41	
At Public Elementary Schools	3	
At Other Institutions	—	
At no School or Institution	8	
	52	
<b>PARTIALLY BLIND CHILDREN</b>		
At Certified Schools for the Blind	28	
At Certified Schools for the Partially Blind	2	
At Public Elementary Schools	73	
At Other Institutions	—	
At no School or Institution	12	
	115	
<b>DEAF CHILDREN</b>		
At Certified Schools for the Deaf	108	
At Public Elementary Schools	3	
At other Institutions	—	
At no School or Institution	12	
	123	
<b>PARTIALLY DEAF CHILDREN</b>		
At Certified Schools for the Deaf	24	
At Certified Schools for the Partially Deaf	—	
At Public Elementary Schools	2	
At other Institutions	—	
At no School or Institution	1	
	27	
<b>MENTALLY DEFECTIVE CHILDREN</b>		
(Feeble-minded Children)		
At Certified Schools for Mentally Defective Children	16	
At Public Elementary Schools	283	
At Other Institutions	7	
At no School or Institution	214	
	520	
<b>EPILEPTIC CHILDREN</b>		
(Children suffering from Severe Epilepsy)		
At Certified Special Schools	9	
At Public Elementary Schools	21	
At other Institutions	1	
At no School or Institution	34	
	65	
<b>PHYSICALLY DEFECTIVE CHILDREN</b>		
(Children Suffering from Pulmonary Tuberculosis—including Pleura and Intra-Thoracic Glands)		
At Certified Special Schools	90	
At Public Elementary Schools	338	
At other Institutions	31	
At no School or Institution	60	
	519	
(Children suffering from Non-Pulmonary Tuberculosis)		
At Certified Special Schools	94	
At Public Elementary Schools	674	
At other Institutions	91	
At no School or Institution	108	
	967	
(Delicate Children)		
At Certified Special Schools	144	
At Public Elementary Schools	233	
At other Institutions	3	
At no School or Institution	117	
	497	
(Crippled Children)		
At Certified Special Schools	67	
At Public Elementary Schools	113	
At other Institutions	—	
At no School or Institution	95	
	275	
(Children with Heart Disease)		
At Certified Special Schools	12	
At Public Elementary Schools	23	
At other Institutions	—	
At no School or Institution	60	
	95	

## 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	15	18
Feeble Minded and Blind ...	—	—	—	2	2
Feeble Minded and Heart Disease ...	—	1	—	1	2
Epileptic and Cripple ...	—	—	—	2	2
Feeble Minded and Deaf ...	1	—	—	1	2
Feeble Minded, Cripple and Epileptic ...	—	1	—	—	1
TOTAL ...	1	8	1	34	44

TABLE IV.

Return of Defects Treated during the year ended 31st December, 1936.

## 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	18	23	41
(2) Other Treatment	234	39	273
Ringworm—Body	255	13	268
Scabies	445	56	501
Impetigo	11,444	286	11,730
Other skin diseases	4,053	189	4,242
<b>Minor Eye Defects</b> (External and other, but excluding cases falling in Group II).	2,239	211	2,450
<b>Minor Ear Defects</b>	3,423	162	3,585
<b>Miscellaneous</b> (e.g., minor injuries, bruises, sores, chilblains, etc.).	27,270	1,124	28,394
<b>TOTAL</b>	<b>49,381</b>	<b>2,103</b>	<b>51,484</b>

## 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.
<b>Errors of Refraction (including Squint)</b> (Operations for Squint are recorded separately in the body of the Report)	7,156	26	7,182
<b>Other Defect or Disease of the eyes (excluding those recorded in Group I)</b>	—	—	—
<b>TOTAL</b>	<b>7,156</b>	<b>26</b>	<b>7,182</b>
<b>Number of children for whom spectacles were</b>			
(a) Prescribed	5,332	26	5,358
(b) Obtained	4,009	26	4,035



**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)
392	92	1038	47	153	49	555	55	545	141	1593	102	144	2525

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and adenoids. (iv) Other defects of the nose and throat.

**Group IV.—Orthopaedic and Postural Defects.**

	Under the Authority's Scheme. (1)			Otherwise. (2)			Total number treated
	Residential treatment with education (i)	Residential treatment without education (ii)	Non-residential treatment at an orthopaedic clinic (iii)	Residential treatment with education (i)	Residential treatment without education (ii)	Non-residential treatment at an orthopaedic clinic (iii)	
	(i)	(ii)	(iii)	(i)	(ii)	(iii)	
Number of children treated	49	—	—	—	42	75	166

**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	10635	12517	12545	12890	12796	9972	6902	5464	5021	1069	89811

(b) Specials ... .. 5,542

(c) TOTAL (Routine and Specials) ... .. 95,353

(2) Number found to require treatment ... .. 72,793

(3) Number actually treated ... .. 46,407

(4) Attendances made by children for treatment ... .. 59,407

(5) Half-days devoted to:—

Inspection	...	...	1,146
Treatment	...	...	7,975
TOTAL	...	...	9,121

(7) Extractions:—

Permanent Teeth	17,906
Temporary Teeth	92,839
TOTAL	110,745

(8) Administrations of general anæsthetics for extractions —

(6) Fillings:—

Permanent Teeth	...	31,387
Temporary Teeth	...	1,040
TOTAL	...	32,427

(9) Other Operations:—

Permanent Teeth	4,654
Temporary Teeth	416
TOTAL	5,070

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	17	29	208	651	934	922	838	747	410	131	56	4943
(b) Specials ... ..												—
(c) TOTAL (Routine and Specials)												4,943
(2) Number found to require treatment ...												4,223
(3) Number actually treated ... ..												3,192
(4) Attendances made by children for treatment												5,188
<hr/>												
(5) Half-days devoted to:—												
Inspection ... ..				70								
Treatment ... ..				856								
TOTAL ... ..				926								
(7) Extractions:—												
Permanent Teeth												2,981
Temporary Teeth												771
TOTAL ... ..												3,752
(8) Administrations of general anæsthetics for extractions												—
(6) Fillings:—												
Permanent Teeth ... ..				4,929								
Temporary Teeth ... ..				9								
TOTAL ... ..				4,938								
(9) Other Operations:—												
Permanent Teeth												931
Temporary Teeth												19
TOTAL ... ..												950

Table VI.—Uncleanliness and Verminous Conditions.

(1) Average number of visits per School made during the year by the School Nurses ... ..	8.7
(2) Total number of examinations of children in the Schools by School Nurses ... ..	413,588
(3) Number of individual children found unclean ... ..	2,497
(4) Number of children cleansed under arrangements made by the Local Education Authority ... ..	370
(5) Number of cases in which legal proceedings were taken—	
(a) Under the Education Act, 1921 ... ..	—
(b) Under School Attendance Bye-laws ... ..	—



