

**[Report 1935] / Medical Officer of Health, County Council of the Palatine of Chester / Cheshire County Council.**

**Contributors**

Cheshire (England). County Council.

**Publication/Creation**

1935

**Persistent URL**

<https://wellcomecollection.org/works/c2gqwm9a>

**License and attribution**

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

# REPORT

OF THE

## Medical Officer of Health

For the Year ending December 31st, 1935.

---

*To the Public Health and Housing Committee of the  
County Council of the County Palatine of Chester  
and to the Members of the County Council.*

# INDEX.

	PAGE
Ante-Natal Clinics ...	66
Ambulances ...	31
Area and Population ...	20
Artificial Sunlight ...	70
Births and Deaths ...	23
Blind, Welfare of the ...	95
Centres, Welfare ...	64, 69
Census, 1931 ...	21
Clatterbridge (County) Hospital ...	100
Cleansing, Public ...	134
Deaths ...	23
Dental Treatment ...	64
Food and Drugs (Adulteration) Act ...	92
Health Visitors ...	6, 56
Housing ...	139
Illegitimate Children ...	63
Infant Life Protection ...	66
Infantile Mortality ...	25, 61
Infectious Diseases ...	30
Isolation Hospitals ...	30
Laboratory, County ...	49
Maternity and Child Welfare ...	50
Maternity Hospitals ...	65
Maternal Mortality ...	25, 64
Mental Deficiency ...	93
Midwives ...	52
Milk and Dairies (Consolidation) Act, 1915 ...	85
Milk (Free Supply) ...	65
Ministry of Health Enquiries ...	121
Nursing Homes ...	56
Ophthalmia Neonatorum ...	63
Orthopædic Scheme... ..	47, 70
Poor Law Medical Officers ...	15
Population ...	20
Public Assistance Institutions... ..	98
Puerperal Fever and Pyrexia ...	55
Sewerage and Sewage Disposal ...	123
Statistics, Tables of ...	143
Still-births ...	23, 61
Staff of Public Health Department ...	5
Tuberculosis ...	35
Vaccination Officers ...	9
Vaccinators, Public ...	9
Veterinary Service, County ...	71
Venereal Diseases ...	33
Water Supply ...	112
Zymotic Deaths ...	24



## INTRODUCTION.

---

*To the Chairman and Members of the  
Public Health Committee of the  
Cheshire County Council.*

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present to you my report on the health and sanitary circumstances of the County for the year 1935.

The vital statistics for the year can be regarded as generally satisfactory.

The Maternal Mortality rate, although again showing a slight drop on previous years, is still too high. I would draw particular attention to the Maternity and Child Welfare Section, on page 50, where a resumé of the service for over twenty years is given. It will be seen how every effort has been and is being made to reduce the high maternal mortality rate which has remained more or less stationary for a considerable number of years.

During the latter part of the year a special Committee of Practitioners, with Dr. J. R. Shaw and myself in attendance, has been meeting regularly with a view to investigating every means possible to reduce this death rate.

A new and interesting feature is the report on Clatterbridge Hospital, page 100, which has now completed its first year as a County General Hospital.

This year has shewn considerable progressive development and extension of public health services, but in some parts of the County schemes of water supply, sewerage and sewage



disposal and also the provision of working-class houses have been held in abeyance, owing to the disturbance of various areas by the Review of County Districts.

Now that the re-arrangement of the districts is practically complete, there is no reason why these schemes should not be carried out without any further delay.

The County Veterinary service has been extended, and a full report of its many activities is incorporated in the Report.

Your obedient Servant,  
IAN C. MACKAY, M.B., Ch.B., D.P.H.,  
*County Medical Officer.*

26th June, 1936.

## Staff of the Public Health Department.

County Medical Officer of Health and ...	Ian Campbell Mackay, M.B., Ch.B.,	
Chief School Medical Officer		D.P.H.
Lady Assistant Medical Officer	... Jean R. Shaw, M.B., Ch.B.,	D.P.H.
District Tuberculosis Officers ...	... A. Fleming, M.B., Ch.B., D.P.H.	
	L. I. Henzell, M.D., B.Sc., D.P.H.	
	D. W. Tough, M.B., Ch.B., D.P.H.	
Assistant School Medical Officers	... M. A. Mackenzie, M.B., Ch.B., D.P.H.	
	W. J. McIvor, M.B., Ch.B., D.P.H.	
	Mary A. Thomas, M.B., Ch.B., D.P.H.	
	Robert J. Clarke, M.B., Ch.B., D.P.H.	
	Gladys Wilkinson, M.R.C.S., L.R.C.P.	
County Analyst	... S. Ernest Melling, F.I.C.	
School Dental Surgeons	... H. R. Parry, L.D.S. (Senior Dentist).	
	S. O. Stewart, L.D.S.	
	R. H. Hamlyn, L.D.S.	
	A. F. Hely, L.D.S.	
	F. Jones, L.D.S.	
	H. Jackson, L.D.S.	
	Fred L. Jones, L.D.S.	
	E. S. Poulter, L.D.S.	
	E. Johnson Taylor, L.D.S.	
School Oculists (Part-time)	... W. Dunlop Hamilton, M.B., B.Ch.,	
		D.O.M.S.
	C. Jacobs, M.D., M.B., B.S.	
County Sanitary Officer	... F. Humphries, A.R.S.I.	
County Veterinary Officer—		
	A. B. Kerr, M.R.C.V.S., D.V.S.M.	... Tel. Mollington 74.
District Veterinary Officers—		
	B. Brown, M.R.C.V.S.	Tel. Sandbach 221
	E. A. Comer, M.R.C.V.S., D.V.S.M.	„ Chester 1578.
	J. B. Garside, M.R.C.V.S.	... „ Wilmslow 68.
	T. D. Lloyd-Jones, M.R.C.V.S., D.V.S.M.	„ Willaston 7158.
	J. Lyon, M.R.C.V.S.	„ Crewe 2358.
	J. D. Macbeth, M.R.C.V.S.	... „ Tattenhall 10.
	A. L. F. Muilen, M.R.C.V.S., D.V.S.M.	... „ Altrincham 1112.
	J. H. Patterson, M.R.C.V.S.	... „ Winsford 2345.
	E. A. Pearce, M.R.C.V.S., D.V.S.M.	... „ Frodsham 229.
	C. A. Stewart, M.R.C.V.S.	... „ Kelsall 51
CONSULTANTS FOR PUERPERAL CASES.		
CHESTER	... J. Gardiner Wigley, F.R.C.S., 40, King Street, Chester.	(Tel. Chester 938).
MANCHESTER	... C. Philip Brentnall, M.D., 14, St. John Street, Manchester.	(Tel. Blackfriars 9984); and “Riversdale,” Fielden Park, West Didsbury. (Tel. Didsbury 3762).
	Gordon Fitzgerald, M.D., Northern Assurance Buildings, Albert Square, Manchester.	(Tel. Blackfriars 6458-9).
	F. H. Lacey, M.D., 16, St. John Street, Manchester.	(Tels. Blackfriars 1500 and Didsbury 3092).
	J. W. A. Hunter, M.D., 12, St. John Street, Manchester.	(Tels. Blackfriars 3287 and Rusholme 2020).
LIVERPOOL	... Percy Malpas, F.R.C.S., 31, Rodney Street, Liverpool, and 2, Menlove Gardens, Wavertree.	(Tel. Royal 4670. After 6 p.m., Wavertree 27).
	A. Leyland Robinson, F.R.C.S., 57, Rodney Street, Liverpool.	(Tel. Royal 61).
STOKE	... T. H. Richmond, F.R.C.S., 3, The Villas, off London Road, Stoke-on-Trent.	(Tel. Hanley 48341).



## Health Visitors (39)

For districts in italics, M. & C.W. work is not done; for districts in small capitals, M. & C.W. and School Medical work is not done; for districts in italic capitals, School Medical work is not done.

<i>Name.</i>	<i>Approximate District.</i>	<i>Centres, etc.</i>
Barker, G.	... Mottram, Broadbottom, Tintwistle	Hollingworth Centre.
Bell, M.	... Wilmslow, Alderley Edge, Mobberley, Woodford, Mottram, Styal, Warford	Wilmslow Centre.
Billings, M.	... Hazel Grove, Bramhall, Handforth, Pownall Green	Hazel Grove Centre.
Bird, B.	... Runcorn, Weston Point	... Runcorn Centre. Dispensary and School Clinic.
Bradley, C.	.. Bredbury, Woodley, HYDE	... Bredbury Centre. Hyde Dispensary.
Carr, K. E.	... <i>Bebington, Bromborough, New Ferry Thornton Hough, Willaston, Burton, Neston, Woodhey, Storeton</i>	Neston Centre. Birkenhead Dispensary.
Charnley, J.	... Runcorn, Halton	Runcorn Dispensary Runcorn Centre Runcorn School Clinic.
Commins, C.	... Poynton, Bollington, Rainow, Prestbury, Sutton, Winle, Adlington, Macclesfield Forest, Kettleshulme	Bollington Centre.
Dickson, S.	... Marple, Disley, Ludworth, Mellor	Marple Centre. Disley Centre.
Dobie, A.	... Guilden Sutton, Barrow, Ashton, Tarvin, Kelsall, Duddon, Utkinton, Tarporley, Tiverton, Tilston, Mouldsworth, Manley	Utkinton Centre. Tarporley Centre.
Edwards, Ellen	... Altrincham, Rostherne, Ashley, Bowdon, Ringway	Altrincham Dispensary and School Clinic. Bowdon Centre.
Finger, G. F.	... <i>CONGLETON, Buglawton, Astbury Odd Rode, Church Lawton, Moreton, Scholar Green</i>	Congleton Centre, Dispensary and Ante-Natal Clinic. Mow Cop Centre.
Fox, M. E.	... Middlewich, Cranage, Byley, Wimboldsley, Tetton, Holmes Chapel	Middlewich Centre and School Clinic.
Johnson, G. W.	... Winsford... ..	Winsford Centre and Clinic.
Kidd, W.	... Winnington, Marston, Acton, Crowton, Barnton, Little Leigh, Weaverham	Northwich Dispensary and School Clinic Barnton School Clinic. Owley Wood Centre.
Kidd, E.	... Knutsford, Mere, Tabley, Lostock, Rudheath, Pickmere, Gt. Budworth, Aston, Wincham	Northwich School Clinic & Centre. Knutsford School Clinic.
Lea, D.	... Nantwich, Calveley, Worleston, Church Minshull, Wettenhall, Warmingham, Acton, Wardle	Nantwich Centre. Nantwich School Clinic.
Lunt, M.	... <i>Ellesmere Port, Eastham, Childer Thornton, Great Sutton, Little Sutton, Saughall, Backford, Shotwick</i>	Ellesmere Port Dispensary and School Clinic.
Marston, H.	... Hoole, Christleton, Waverton, Capenhurst, Backford, Mickle Trafford, Huxley, Hargrave	Chester Dispensary. Hoole Centre, Ante-Natal Clinic and School Clinic.



HEALTH VISITORS—*Continued.*

<i>Name.</i>	<i>Approximate District.</i>	<i>Centres, etc.</i>
Meadows, R.	... Lymm, Warburton, Partington, Thelwall, High Legh, Dunham	Lymm Centre and School Clinic. Partington Centre.
Merry, A.	... Willaston, Wistaston, Stapeley, Hatherton, Hankelow, Buerton, Wrenbury, Bickerton, Bunbury, Sound	
Middlehurst, E.	... Northwich ... ..	Northwich Centre.
Ollerenshaw, E.	... DUKINFIELD	Dukinfield Centre.
Owen, Esme	... Sandbach, Wheelock, Hassall, Betchton, Smallwood, Brereton, Rode Heath	Sandbach Centre.
Owen, Elizabeth	... Hoylake, West Kirby, Meols, Greasby, Caldy, Thurstaston, Heswall, Barnston, Pensby	Hoylake Centre and School Clinic. West Kirby Dispensary. Heswall Centre.
Percival, P.	... Haslington, Alsager, Weston, Barthomley, Wybunbury, Dodding-ton, Checkley, Blakenhall, Shav-ington, CREWE, COPPENHALL	Crewe Dispensary. Alsager Centre.
Ramsey, F. M.	... Northwich ... ..	Northwich Centre.
Rimmer, A. A.	... Runcorn, Clifton ... ..	Runcorn Centre, Ante-Natal Clinic, Dispensary and School Clinic.
Ross, M.	... Ashton-on-Mersey, Sale, Carrington	Sale Centre, School Clinic and Ante-Natal Clinic.
Rushton, S.	... DUKINFIELD ... ..	Dukinfield Centre
Smith, A.	... Eccleston, Dodleston, Saughton, Rowton, Aldford, Coddington, Farndon, Pulford, Churton, Clutton, Hatton	
Spencer, M.	... Chelford, Henbury, Siddington, Gawsworth, Marton, North Rode, Swettenham, Goostrey, Ollerton, L. Withington, Eaton, Peover, MACCLESFIELD	Macclesfield Dispensary.
Taylor, E. S.	... Stockton Heath, Grappenhall, Moore, Daresbury, Appleton, Stretton, Preston Brook, Dutton, Whitley, Crowley, Antrobus	Stockton Heath Centre. Grappenhall Centre.
Toft, D.	... Norley, Kingsley, Shocklach, Malpas, Tilston, Bickley, Cudd-ington, Wirswall, Marbury, Barton, Broxton, Tattenhall, Harthill, Burwardsley, Farndon	Malpas Centre
Turcan, C.	... Ince, Thornton, Dunham, Alvanley, Frodsham	New Ferry Clinic. Frodsham Clinic
Ward, S.	... Cheadle, Gatley, Cheadle Hulme	Cheadle Centre and School Clinic Cheadle Hulme Centre and School Clinic.
Wells, G.	... Darnhall, Over, Hartford, Davenham, Moulton, Cudd-ington, Delamere, Little Budworth	Northwich Dispensary and School Clinic.
Wilkinson, M.	... Romiley, Compstall, STALYBRIDGE	Romiley Centre. Stockport Dispensary. Compstall Centre.
Wingfield, H.	... Sale ... ..	Sale Centre.

## Dental Nurses.

Babington, D.  
Howarth, M.  
Jones, S.  
Rees, G.  
Smith, J.

Thompson, D.  
Toft, Ethel  
Watts, G. M.  
Winnell, M.

---

Superintendent Clerk

... ..

Vincent O'Connor.

---

Offices—24, Nicholas Street, Chester.

Telephone Nos. 2305 & 2306.



## List of Public Vaccinators and Vaccination Officers

(Districts served at 1/4/36 are in brackets).

### No. 1 (BUCKLOW) AREA.

#### *Public Vaccinators—*

- DR. BOWRING, Knutsford (Bexton, Knutsford, Marthall, Mere, Mobberley, Ollerton, Peover Inferior, Peover Superior, Pickmere, Plumbley, Rostherne, Tabley Inferior, Tabley Superior, Tatton, Toft).
- DR. R. BENNETT, Wilmslow (Alderley Edge, Bollinfee, Styal, Wilmslow).
- DR. COOPER, Altrincham (Altrincham, Ashley, Bowdon, Dunham Massey, Hale, Ringway, Timperley).
- DR. NICHOLSON, Sale (Ashton-upon-Mersey, Carrington, Sale).
- DR. WRAITH, Lymm (Agden, Aston-by-Budworth, Bollington, High Legh, Lymm, Millington, Partington, Warburton).

#### *Vaccination Officers—*

- HAROLD T. MERCER, 10, Springfield Road, Sale (Ashton-upon-Mersey, Baguley, Carrington, Sale).
- THOMAS H. PETERS, Moor Lane, Wilmslow (Alderley Edge, Bollinfee, Styal, Wilmslow).
- THOS. PRITCHARD, 5, Springfield Road, Altrincham (Altrincham, Ashley, Bowdon, Dunham Massey, Hale, Ringway, Timperley).
- MRS. SHAW, 23, St. John's Avenue, Knutsford (Bexton, Knutsford, Marthall, Mere, Mobberley, Ollerton, Peover Inferior, Peover Superior, Pickmere, Plumbley, Rostherne, Tabley Inferior, Tabley Superior, Tatton, Toft).
- FRANK WILSON, 24, Claremont Road, Sale (Agden, Ashton-by-Budworth, Bollington, High Legh, Lymm, Millington, Partington, Warburton).

### No. 2 (MACCLESFIELD AND CONGLETON) AREA.

#### *Public Vaccinators—*

- DR. ALLAN, Whaley Bridge (Disley, Kettleshulme).
- DR. HENDERSON, Sandbach (Alsager, Arclid, Betchton, Bradwall, Church Lawton, Elton, Hassall, Moston, Odd Rode, Sandbach, Smallwood, Tetton, Wheelock).
- DR. COOPE, Bollington (Bollington, Butley, Fallibroome, Mottram St. Andrew, Newton, Prestbury, Lyme Handley, Pott Shrigley, Tytherington, Upton).
- DR. DAVIDSON, Congleton (Bosley, Eaton, Marton, North Rode).
- DR. FELLOWS, Poynton (Adlington, Poynton, Woodford).
- DR. FERN, Congleton (Congleton, Buglawton, Hulme Walfield, Moreton, Newbold Astbury, Somerford, Somerford Booths).
- DR. CLEGG, Macclesfield (Macclesfield Borough).



- DR. PICTON, Holmes Chapel (Blackden, Brereton, Church Hulme, Cotton, Cranage, Davenport, Goostrey, Kermincham, Leese, Swettenham, Twemlow).
- DR. GILLIES, Macclesfield (Gawsworth, Hurdsfield, Macclesfield Forest, Rainow, Sutton, Wildboarclough, Wincle).
- DR. A. H. SHEPARD, Chelford (Birtles, Capesthorpe, Chelford, Chorley, Great Warford, Henbury, Lower Withington, Nether Alderley, Old Withington, Siddington, Snelson).

*Vaccination Officers—*

- MAJOR A. BEVAN, 8, Park View, Congleton (Congleton, Buglawton, Hulme Walfield, Moreton, Newbold Astbury, Somerford, Somerford Booths).
- MRS. JONES, Cumberland Street, Macclesfield (Bosley, Eaton, Gawsworth, Henbury, Macclesfield Forest, Marton, North Rode, Siddington, Sutton, Wildboarclough, Wincle).
- ARTHUR MILLWARD, 84, Prestbury Road, Macclesfield (Macclesfield Borough (part)).
- JAMES REDFERN, 98, Congleton Road, Sandbach (Alsager, Arclid, Betchton, Bradwall, Church Lawton, Elton, Hassall, Moston, Odd Rode, Sandbach, Smallwood, Tetton, Wheelock).
- PERCY RICHARDSON, 44, Middlewich Road, Holmes Chapel (Blackden, Brereton, Church Hulme, Cotton, Cranage, Davenport, Goostrey, Kermincham, Leese, Swettenham, Twemlow).
- G. B. STURLEY, 84, Prestbury Road, Macclesfield (Adlington, Birtles, Bollington, Butley, Capesthorpe, Chelford, Chorley, Disley, Fallibroome, Great Warford, Hurdsfield, Kettleshulme, Lower Withington, Lyme Handley, Macclesfield Borough (part), Mottram St. Andrew, Nether Alderley, Newton, Old Withington, Over Alderley, Pott Shrigley, Poynton, Prestbury, Rainow, Snelson, Tytherington, Upton, Woodford).

No. 3 (NANTWICH) AREA.

*Public Vaccinators—*

- DR. FITZGERALD ARTHUR, Tarporley (Alraham, Bickerton, Bulkeley, Bunbury, Calveley, Egerton, Haughton, Peckforton, Ridley, Spurstow, Wardle, Wettenhall).
- DR. W. L. ENGLISH, High Street, Haslington, Crewe (Barthomley, Basford, Crewe Rural, Haslington, Weston).
- DR. LEIGH, Malpas (Agden, Bickley, Bradley, Chidlow, Chorlton, Cuddington, Duckington, Edge, Hampton, Larkton, Macefen, Malpas, Newton, Oldcastle, Overton, Stockton, Threapwood, Tushingham, Wigland, Wychough).
- DR. LONEY, Wrenbury (Baddiley, Broomhall, Cholmondeley, Chorley, Dodcot-cum-Wilkesley (part), Marbury, Newhall (part), Norbury, Sound, Wirswall, Woodcott, Wrenbury).
- DR. JOHNSTONE, Nantwich (Acton, Aston-juxta-Mondrum, Badlington, Batherton, Brindley, Burland, Cholmondeston, Edleston, Faddiley, Henhull, Hurleston, Nantwich, Poole, Stoke, Willaston, Worleston).



- DR. U. G. MURRAY, Nantwich Road, Crewe (Crewe M.B. (part), Rope, Shavington, Wistaston).
- DR. G. C. THORNTON, Audlem (Audlem, Buerton, Coole Pilate, Dodcot-cum-Wilkesley (part), Hankelow, Newhall (part)).
- DR. O. H. BLACKLAY, Nantwich (Austerson, Blakenhall, Bridgemere, Checkley-cum-Wrinehill, Chorlton, Doddington, Hatherton, Hough, Hunsterson, Lea, Stapeley, Walgherton, Wybunbury).
- DR. MILES PARKES, Crewe (Church Coppenhall, Church Minshull, Crewe M.B. (part), Leighton, Minshull Vernon, Warmingham, Woolstanwood).

*Vaccination Officers—*

- F. E. DAVENPORT, 58, The Crofts, Nantwich (Agden, Alpraham, Audlem, Bickerton, Bickley, Bradley, Broomhall, Buerton, Bulkeley, Bunbury, Calveley, Chidlow, Coole Pilate, Cholmondeley, Chorley, Chorlton, Dodcot-cum-Wilkesley, Duckington, Edge, Egerton, Hampton, Hankelow, Haughton, Larkton, Macefen, Malpas, Marbury, Newhall, Newton, Norbury, Oldcastle, Overton, Peckforton, Ridley, Sound, Spurstow, Stockton, Threapwood, Tushingham, Wardle, Wettenhall, Wigland, Wirswall, Woodcott, Wrenbury-cum-Frith, Wychough).
- A. W. DAVIES, 21, Pillory Street, Nantwich (Acton, Aston-juxta-Mondrum, Austerson, Baddiley, Baddington, Batherton, Blakenhall, Bridgemere, Brindley, Burland, Checkley-cum-Wrinehill, Cholmondeston, Chorlton, Church Minshull, Doddington, Edleston, Faddiley, Hatherton, Henhull, Hough, Hunsterson, Hurleston, Lea, Nantwich U.D., Poole, Rope, Stapeley, Willaston, Stoke, Walgherton, Worleston, Wybunbury).
- CHARLES GRIFFITHS, 256, Nantwich Road, Crewe (Barthomley, Basford, Church Coppenhall, Leighton, Haslington, Minshull Vernon, Shavington-cum-Gresty, Warmingham, Weston, Wistaston, Woolstanwood).
- R. H. LEWIS, Victoria Chambers, Heath Street, Crewe (Crewe M.B.)

No. 4 (NORTHWICH AND RUNCORN) AREA.

*Public Vaccinators—*

- DR. C. BOWER, Stretton (Acton Grange, Antrobus, Appleton, Bartington, Budworth, Crowley, Daresbury, Dutton, Grapenhall, Hatton, Keckwick, Latchford Without, Moore, Newton-by-Daresbury, Preston-o'th'-Hill, Seven Oaks, Stockton Heath, Stretton, Thelwall, Walton Inferior, Walton Superior, Whitley Inferior, Whitley Superior).
- DR. J. W. CRAW, Northwich (Allostock, Davenham, Leftwich, Lostock Gralam, Nether Peover, Northwich (part), Winnington).
- DR. J. MURPHY, Runcorn (Aston, Aston Grange, Clifton, Halton, Norton, Runcorn U.D., Stockham, Sutton, Weston).
- DR. J. B. FULTON, Northwich (Anderton, Cogshall, Comberbach, Marbury, Marston, Northwich (part), Wincham).
- DR. JAMES, The Knoll, Frodsham (Alvanley, Frodsham, Frodsham Lordship, Helsby, Kingsley, Kingswood, Manley, Newton-by-Frodsham, Norley).



DR. W. N. LEAK, Winsford (Clive, Darnhall, Eaton, Little Budworth, Moulton, Marton, Over, Wharton).

DR. J. MURPHY, Middlewich (Bostock, Byley, Kinderton, Lach Dennis, Middlewich, Rudheath, Sproston, Stanthorne, Whatcroft, Wimboldsley).

DR. W. G. SHAW, Weaverham (Cuddington, Delamere, Eddisbury, Hartford, Little Leigh, Northwich (part), Oakmere, Weaverham).

*Vaccination Officers—*

J. CARTER, Middlewich (Bostock, Byley, Davenham, Kinderton, Lach Dennis, Middlewich, Rudheath, Sproston, Stanthorne, Whatcroft, Wimboldsley).

JOHN HOLLAND, Main Street, Frodsham (Alvanley, Frodsham, Frodsham Lordship, Helsby, Kingsley, Kingswood, Manley, Newton-by-Frodsham, Norley).

A. J. MASSEY, 33, Fairfield Road, Stockton Heath (Acton Grange, Antrobus, Appleton, Bartington, Budworth, Crowley, Daresbury, Dutton, Grappenhall, Hatton, Keckwick, Latchford Without, Moore, Newton-by-Daresbury, Preston-o'th'-Hill, Seven Oaks, Stockton Heath, Stretton, Thelwall, Walton Inferior, Walton Superior, Whitley Inferior, Whitley Superior).

FRED MOORE, Grange Lane, Winsford (Clive, Darnhall, Eaton, Little Budworth, Marton, Moulton, Over, Wharton).

F. T. MORGAN, Cuddington, Northwich (Acton, Barnton, Crowton, Cuddington, Delamere, Eddisbury, Hartford, Little Leigh, Northwich (part), Oakmere, Weaverham).

JAS. PEARSON, County Council Offices, Waterloo Road, Runcorn (Aston, Aston Grange, Clifton, Halton, Norton, Runcorn U.D., Stockham, Sutton, Weston).

STANLEY S. TREVOR, Winnington Hill, Northwich (Allostock, Anderton, Cogshall, Comberbach, Leftwich, Lostock Gralam, Marbury, Marston, Nether Peover, Northwich (part), Wincham, Winnington).

No. 5 (CHESTER AND TARVIN) AREA.

*Public Vaccinators—*

DR. CAMPBELL, Tarporley (Beeston, Eaton, Rushton, Tarporley, Tilstone Fearnall, Tiverton, Utkinton).

DR. PATTON, Tattenhall, Chester (Aldersey, Broxton, Burwardsley, Chowley, Clutton, Golborne Bellow, Golborne David, Handley, Harthill, Hatton, Newton-by-Tattenhall, Tattenhall).

DR. J. FIELDING, Hill House, Kelsall (Ashton, Barrow, Bruen Stapleford, Burton, Cotton Abbots, Cotton Edmunds, Clotton Hoofield, Duddon, Foulk Stapleford, Guilden Sutton, Hockenhull, Horton-cum-Peel, Huntington, Huxley, Iddenshall, Kelsall, Mouldsworth, Pryors Hayes, Rowton, Saughton, Waverton, Willington).

DR. W. PARKER, Farndon, nr. Chester (Aldford, Barton, Buer-ton, Caldecott, Carden, Churton-by-Aldford, Churton-by-Farndon, Churton Heath, Coddington, Crewe-by-Farndon, Edgerley, Farndon, Grafton, Horton-by-Malpas, King's Marsh, Lea Newbold, Shocklach (Church), Shocklach Oviatt, Stretton, Tilston).



DR. W. J. RUSSELL, Hoole (Bache, Backford, Bridge Trafford, Capenhurst, Caughall, Chester Castle, Chorlton-by-Backford, Christleton, Claverton, Croughton, Dodleston, Dunham Hill, Eaton, Eccleston, Elton, Great Boughton, Great Saughall, Hapsford, Hoole, Hoole Village, Lea-by-Backford, Ledsham, Littleton, Little Saughall, Little Stanney, Lower Kinnerton, Marlston-cum-Lache, Mickle Trafford, Mollington, Moston, Picton, Poulton, Pulford, Shotwick, Shotwick Park, Stoke, Thornton-le-Moors, Upton-by-Chester, Wervin, Wimbolds Trafford, Woodbank).

*Vaccination Officers—*

- R. E. BLYTHE, "Oakdene," Tattenhall, near Chester (Aldersey, Aldford, Ashton, Barrow, Barton, Beeston, Broxton, Bruen Stapleford, Buerton, Burton, Burwardsley, Caldecott, Carden, Chowley, Churton Heath, Churton-by-Aldford, Churton-by-Farndon, Clotton Hoofield, Clutton, Coddington, Cotton Abbots, Cotton Edmunds, Crewe-by-Farndon, Duddon, Eaton, Edgerley, Farndon, Foulk Stapleford, Golborne Bellow, Golborne David, Guilden Sutton, Grafton, Handley, Harthill, Hatton, Hockenhull, Horton-cum-Peel, Horton-by-Malpas, Huntington, Huxley, Iddenshall, Kelsall, King's Marsh, Lea Newbold, Mouldsworth, Newton-by-Tattenhall, Pryor's Hayes, Rowton, Rushton, Saughton, Shocklach (Church), Shocklach Oviatt, Stretton, Tarporley, Tarvin, Tattenhall, Tilston, Tilstone Fearnall, Tiverton, Utkinton, Waverton, Willington).
- A. WIGGLESWORTH, 11, Pickering Street, Hoole, Chester (Bache, Backford, Bridge Trafford, Capenhurst, Caughall, Chester Castle, Christleton, Chorlton-by-Backford, Claverton, Croughton, Dodleston, Dunham Hill, Eaton, Eccleston, Elton, Great Boughton, Great Saughall, Hapsford, Hoole, Hoole Village, Lea-by-Backford, Ledsham, Littleton, Little Saughall, Little Stanney, Lower Kinnerton, Marlston-cum-Lache, Mickle Trafford, Mollington, Moston, Picton, Poulton, Pulford, Shotwick, Shotwick Park, Stoke, Thornton-le-Moors, Upton-by-Chester, Wervin, Wimbolds Trafford, Woodbank).

No. 6 (WIRRAL) AREA.

*Public Vaccinators—*

- DR. BROWN, West Kirby (Hoyle Urban District).  
 DR. J. W. COWEN, Bebington (Bebington Urban District).  
 DR. GUNN, Neston (Neston and Wirral Urban Districts).  
 DR. GERRARD, Ellesmere Port (Ellesmere Port Urban District).

*Vaccination Officers—*

- J. R. BIRD, 40, Trinity Road, Hoyle (Caldy, Frankby, Grange, Greasby, Hoyle, Irby, Thurstaston).
- A. CLOUGH, Bradley's Central Buildings, Station Road, Ellesmere Port (Childer Thornton, Eastham, Ellesmere Port, Great Sutton, Hooton, Ledsham, Little Sutton).
- W. ROBERTS, Hinderton Road, Neston (Barnston, Burton, Gayton, Heswall, Ness, Neston, Pensby, Puddington, Raby, Thornton Hough).

G. TOMLINSON, 9, Rocklands Avenue, Bebington (Bebington, Bromborough, Brimstage, Spital, Storeton).

#### NO. 7 (STALYBRIDGE AND DUKINFIELD) AREA.

##### *Public Vaccinators—*

DR. MACFIE, Dukinfield (Dukinfield).

DR. TALBOT, Mottram (Hattersley, Hollingworth, Mottram, Tintwistle).

DR. W. E. C. THOMAS, Stalybridge (Stalybridge, Matley).

##### *Vaccination Officers—*

JOHN BRODRICK, Fern Cottages, Mottram (Hattersley, Hollingworth, Mottram, Tintwistle).

GEORGE FLINT, Town Hall, Stalybridge (Stalybridge, Matley).

MRS. A. HEWITT, Town Hall, Dukinfield (Dukinfield).

#### NO. 8 (HYDE AND CHEADLE) AREA.

##### *Public Vaccinators—*

DR. P. CANT, Woodley (Bredbury, Compstall, Romiley).

DR. HANLIN, Cheadle (Cheadle, Handforth).

DR. W. JACKSON, Marple (Marple, Mellor).

DR. M. SHANAHAN, Hazel Grove (Hazel Grove and Bramhall).

DR. PATERSON, Hyde (Hyde).

DR. A. G. HASTINGS, Marple (Ludworth).

##### *Vaccination Officers—*

F. ARDERN, Council Offices, Hazel Grove (Hazel Grove and Bramhall).

W. H. BROWN, 113, Bennett Street, Newton, Hyde (Hyde—former Parishes of Godley and Newton).

J. H. JOHNSON, Midland Bank Chambers, Cheadle, near Stockport (Cheadle, Handforth).

H. MORTON, Tan-y-craig, Lyme Grove, Marple (Marple).

H. WHALLEY, Public Assistance Offices, Shaw Heath, Stockport (Bredbury, Compstall, Hyde (excluding former Parishes of Godley and Newton), Romiley).

#### POOR LAW INSTITUTIONS.

##### *Public Vaccinators—*

**Bucklow :** DR. H. BOWRING, Knutsford.

**Congleton :** DR. HENDERSON, Sandbach.

**Macclesfield :** DR. CLEGG, Macclesfield.

**Nantwich :** DR. JOHNSTONE, Nantwich.

**Northwich :** DR. J. W. CRAW, Northwich.

**Runcorn :** DR. C. BOWER, Stretton.

**Tarvin :** DR. H. L. W. WOODROFFE, Chester.



## Poor Law Medical Out-Relief.

(1931 populations of districts served at 1/4/36 are in brackets).

### No. 1 (BUCKLOW) AREA.

District No. 1 (Altrincham)—Altrincham (21356), Bowdon (3285), Dunham Massey (1694), Hale (10667), Timperley (7080).

Medical Officer—Arthur Torkington Blease, of Altrincham.

District No. 2 (Knutsford South)—Bexton (132), Marthall (626), Ollerton (274), Peover Inferior (100), Peover Superior (617), Plumbly (459), Toft (214).

Medical Officer—Harold Bowring, of Knutsford.

District No. 3 (Knutsford North)—Agden (85), Aston-by-Budworth (364), Bollington (174), High Legh (688), Knutsford (5415), Mere (379), Pickmere (341), Rostherne (284), Tabley Inferior (110), Tabley Superior (469), Tatton (61), Millington (258).

Medical Officer—Harold Bowring, of Knutsford.

District No. 4 (Lymm)—Lymm (5639), Partington (816), Warburton (354).

Medical Officer—Frederick Wraith, of Lymm.

District No. 5 (Sale)—Carrington (504), Sale (28071).

Medical Officer—William Nicholson, of Sale.

District No. 6 (Wilmslow)—Ashley (359), Ringway (602), Styal (1336), Wilmslow (9760), Alderley Edge (3145), Mobberley (1735).

Medical Officer—Randle Bennett, of Wilmslow.

### No. 2 (MACCLESFIELD AND CONGLETON) AREA.

District No. 1 (Macclesfield)—Macclesfield Municipal Borough (34905).

Medical Officer—Sidney Fletcher Clegg, of Macclesfield.

District No. 2 (Sutton and Rainow)—Sutton (1426), Rainow (1109), Wildboardclough (162), Wincle (208), Macclesfield Forest (125), Hurdsfield (441), Gawsworth (709).

Medical Officer—Alexander Campbell Gillies, of Macclesfield.

District No. 3 (Alderley)—Alderley Over (333), Alderley Nether (757), Capesthorpe (97), Chelford (341), Birtles (50), Chorley (401), Henbury (352), Warford, Great (900), Withington, Old (125), Withington, Lower (531), Snelson (200), Siddington (344).

Medical Officer—Arthur Harold Shepard, of Chelford, near Crewe.

District No. 4 (Bollington)—Bollington (5027), Butley (554), Fallibroome (72), Mottram St. Andrew (444), Newton (82), Prestbury (487), Lyme Handley (211), Pott Shrigley (441), Tytherington (318), Upton (278).

Medical Officer—Geoffrey Coope, of Bollington, near Macclesfield.

District No. 5 (Eaton and Marton)—Bosley (359), Eaton (325), Marton (249), North Rode (268).

Medical Officer—Richard Baring Davidson, of Congleton.

District No. 6 (Poynton)—Adlington (689), Poynton (3944), Woodford (801).

Medical Officer—Fredk. McFarlane Fellows, of Poynton, near Stockport.

District No. 7 Kettleshulme (349), Disley (3212).

Medical Officer—Fred Garnet Allan of Whaley Bridge, *via* Stockport.



District No. 8 (Congleton)—Buglawton (1651), Congleton (12885), Hulme Walfield (80), Moreton (130), Newbold Astbury (571), Somerford (102), Somerford Booths (162).

Medical Officer—Alfred James Pirie, of Congleton.

District No. 9 (Sandbach)—Arclid (306), Betchton (614), Bradwall (1307), Elton (448), Hassall (318), Moston (134), Sandbach (6411), Smallwood (615), Tetton (141), Wheelock (756).

Medical Officer—Andrew Henderson, of Sandbach.

District No. 10 (Alsager)—Alsager (2852), Church Lawton (874), Odd Rode (3307).

Medical Officer—Matthew James Hazlett Sayers, of Alsager.

District No. 11 (Church Hulme)—Blackden (121), Brereton (469), Church Hulme (1143), Cotton (33), Cranage (399), Davenport (81), Goostrey (508), Kermincham (129), Leese (119), Swettenham (150), Twemlow (107).

Medical Officer—Lionel James Picton, of Holmes Chapel.

### No. 3 (NANTWICH) AREA.

District No. 1 (Audlem)—Audlem (1346), Buerton (421), Coole Pilate (52), Dodcote-cum-Wilkesley (part) (450), Hankelow (175), Newhall (part) (200).

Medical Officer—Gifford Campion Thornton, of Audlem, Crewe.

District No. 2 (Bunbury)—Alraham (436), Bickerton (259), Bulkeley (120), Bunbury (882), Calveley (270), Egerton (101), Haughton (150), Peckforton (161), Ridley (160), Spurstow (333), Wardle (140), Wettenhall (186).

Medical Officer—Maurice Marshall Fitzgerald Arthur, of Bunbury, Tarporley.

District No. 3 (Crewe N.)—Church Coppenhall (996), Leighton (141), Minshull Vernon (324), Warmingham (215), Woolstanwood (137), Crewe M. B. (part) (25569).

Medical Officer—Miles Parkes, of Crewe.

District No. 4 (Crewe S.)—Rope (92), Shavington (2303), Wistaston (1504), Crewe M. B. (part) (20500).

Medical Officer—William George Murray, of Crewe.

District No. 5 (Haslington)—Barthomley (257), Basford (177), Crewe (Rural) (363), Haslington (2633), Weston (490).

Medical Officer—Wm. Larmour English, of Crewe.

District No. 6 (Nantwich)—Acton (206), Aston-juxta-Mondrum (139), Baddington (112), Batherton (53), Brindley (187), Burland (595), Cholmondeston (158), Edleston (60), Faddiley (211), Henhull (123), Hurleston (110), Nantwich U.D. (7133), Poole (114), Stoke (213), Willaston (2834), Worleston (548), Church Minshull (265).

Medical Officer—Stewart Johnstone, of Nantwich.

District No. 7 (Wrenbury)—Baddiley (219), Broomhall (184), Chorley (162), Cholmondeley (278), Dodcote-cum-Wilkesley (part) (97), Marbury (282), Norbury (271), Wirswall (158), Newhall (part) (445), Sound (243), Woodcott (18), Wrenbury (589).

Medical Officer—Ralph Edward Loney, of Wrenbury, Nantwich.



District No. 8 (Wybunbury)—Austerson (50), Blakenhall (178), Bridgemere (149), Checkley-cum-Wrinehill (235), Chorlton (76), Doddington (66), Hatherton (287), Hough (299), Hunsterson (175), Lea (37), Stapeley (634), Walgherton (159), Wybunbury (644).

Medical Officer—Oliver Blacklay, of Nantwich.

District No. 9 (Malpas)—Agden (75), Bickley (302), Bradley (136), Chidlow (13), Chorlton (90), Cuddington (236), Duckington (65), Edge (238), Hampton (366), Larkton (37), Macefen (65), Malpas (1101), Newton (13), Oldcastle (84), Overton (98), Stockton (20), Threapwood (279), Tushingham (234), Wigland (104), Wychough (16).

Medical Officer—Albert Leigh, of Malpas.

#### No. 4 (NORTHWICH AND RUNCORN) AREA.

District No. 1 (Northwich)—Anderton (329), Cogshall (93), Comberbach (388), Marbury (37), Marston (530), Northwich (part) (10285), Wincham (1003).

Medical Officer—James Boyd Fulton, of Northwich.

District No. 2 (Northwich)—Allostock (436), Davenham (644), Leftwich (1021), Lostock Gralam (1928), Nether Peover (200), Northwich (part) (5729), Winnington (1268).

Medical Officer—John Woodruff Craw, of Northwich.

District No. 3 (Winsford)—Clive (178), Eaton (75), Moulton (1220), Winsford U. D. (part) (6495).

Medical Officer—Walter Norman Leak, of Winsford.

District No. 4 (Over)—Darnhall (210), Little Budworth (568), Marton (597), Winsford U. D. (part) (4503).

Medical Officer—Robert Okell, of Winsford.

District No. 5 (Weaverham)—Acton (516), Barnton (3198), Crowton (474), Cuddington (698), Delamere (713), Eddisbury (402), Hartford (1420), Little Leigh (422), Northwich U. D. (part) (2718), Oakmere (425), Weaverham (3179).

Medical Officer—William Geoffrey Shaw, of Northwich.

District No. 6 (Middlewich)—Bostock (139), Byley (146), Kinderton (432), Lach Dennis (155), Middlewich (5458), Rudheath (2733), Sproston (167), Stanthorne (290), Whatcroft (119), Wimboldsley (145).

Medical Officer—James Murphy, of Middlewich.

District No. 7 (Runcorn)—Aston (220), Aston Grange (36), Clifton (178), Halton (1694), Norton (part) (184), Stockham (21), Sutton (453), Weston (3783), Runcorn (Urban District) (18127).

Medical Officer (temporary)—Jerome B. Murphy, of Runcorn.

District No. 8 (Budworth)—Acton Grange (part) (110), Antrobus (380), Appleton (1196), Bartington (64), Budworth (447), Crowley (139), Daresbury (86), Dutton (454), Grappenhall (part) (2236), Hatton (297), Keckwick (54), Latchford Without (1266), Moore (part) (475), Newton-by-Daresbury (179), Preston-o'th'-Hill (355), Seven Oaks (163), Stockton Heath (part) (4844), Stretton (371), Thelwall (part) (509), Walton Inferior (1027), Walton Superior (175), Whitley Inferior (171), Whitley Superior (339), Woolston-with-Martinscroft (part of).

Medical Officer—Charles E. W. Bower, of Stretton, near Warrington.



District No. 9 (Frodsham)—Alvanley (309), Frodsham (3140), Frodsham Lordship (1563), Helsby (1960), Kingsley (1011), Kingswood (557), Manley (358), Newton by Frodsham (421), Norley (820).

Medical Officer—Harold Blades Ellison, of Frodsham.

#### No. 5 (TARVIN) AREA.

District No. 1 (Hoole)—Bache (62), Hoole (5889), Hoole Village (226), Upton (2667), Moston (81), Chorlton (82), Backford (124), Croughton (21), Little Stanney (170), Thornton (part) (158), Elton (252), Hapsford (112), Picton (97), Wimbolds Trafford (73), Bridge Trafford (50), Mickle Trafford (263), Caughall (13), Stoke (101), Dunham (316), Huntington (144), Rowton (168), Waverton (479), Cotton Abbots (11), Cotton Edmunds (65), Barrow (910), Guilden Sutton (404), Great Boughton (2690), Littleton (336), Christleton (997), Wervin (103).

Medical Officer—William James Alexander Russell, of Hoole.

District No. 2 (Chester Rural)—Shotwick (73), Shotwick Park (26), Woodbank (88), Great Saughall (865), Little Saughall (304), Kinnerton (113), Dodleston (247), Pulford (261), Poulton (119), Marlston (101), Claverton (nil), Eccleston (291), Eaton (143), Chester Castle (228), Capenhurst (157), Mollington (336), Lea (165), Ledsham (139), Little Sutton (part), Burton (part), Puddington (part) (312), Willaston (part) (20).

Medical Officer—Reginald Rutherford Smith, of Chester.

District No. 3 (Tarvin)—Ashton (430), Burton-by-Tarvin (41), Bruen Stapleford (114), Clotton Hoofield (382), Duddon (194), Foulk Stapleford (205), Hockenhull (21), Horton-cum-Peel (37), Huxley (253), Iddenshall (14), Kelsall (874), Mouldsworth (194), Pryors Hayes (11), Tarvin (1251), Willington (167).

Medical Officer—Charles Roberts Fielding, of Kelsall.

District No. 4 (Tattenhall)—Aldersey (92), Broxton (507), Burwardsley (298), Chowley (61), Handley (250), Harthill (95), Hatton (132), Newton-by-Tattenhall (198), Tattenhall (1008), Clutton (56), Golborne Bellow (103), Golborne David (84), Saighton (347).

Medical Officer—Alexander Patton, of Tattenhall.

District No. 5 (Farndon)—Aldford (347), Barton (103), Buerton (61), Caldecott (42), Carden (151), Churton-by-Aldford (191), Churton-by-Farndon (145), Churton Heath (15), Coddington (95), Crewe-by-Farndon (47), Edgerley (11), Farndon (560), Grafton (13), Horton-by-Malpas (120), King's Marsh (63), Lea Newbold (39), Stretton (79), Tilston (347), Church Shocklach (162), Shocklach Oviatt (149).

Medical Officer—William Parker, of Farndon.

District No. 6 (Tarporey)—Beeston (268), Tarporey (2452), Tilston Fearnall (146), Tiverton (525).

Medical Officer—Cecil Mackenzie Hewer, of Tarporey.

#### No. 6 (WIRRAL) AREA.

District No. 1 (Bebington)—Urban District of Bebington (32034).

Medical Officer—John William Cowen, of Rock Ferry.

District No. 2 (Neston and Wirral)—Urban Districts of Neston (7934), and Wirral (9580).

Medical Officer—John Brown Yeoman, of Neston.

District No. 3 (Hoylake)—Urban District of Hoylake (19764).

Medical Officer—Gordon H. Brown, of Hoylake.



District No. 4 (Ellesmere Port)—Urban District of Ellesmere Port (22930).

Medical Officer—Robert Francis Gerrard, of Ellesmere Port.

No. 7 (STALYBRIDGE AND DUKINFIELD) AREA.

District No. 1 (Stalybridge)—Stalybridge (24831) (part of).

Medical Officer—Edward Trevor Hale, of Stalybridge.

District No. 2 (Stalybridge)—Stalybridge (24831) (part of).

Medical Officer—William Ewart Chambers Thomas, of Stalybridge.

District No. 3 (Dukinfield)—Dukinfield (19311).

Medical Officer—John Macfie, of Dukinfield.

District No. 4 (Hattersley)—Hattersley (280), Matley (348), Hollingworth (2299), Mottram (2636), Tintwistle (1392).

Medical Officer—Ernest Talbot, of Mottram.

No. 8 (HYDE AND CHEADLE) AREA.

District No. 1 (Hyde)—Hyde (32075).

Medical Officer—Matthew Wallace Paterson, of Hyde.

District No. 2 (Cheadle)—Cheadle and Gatley U. D. (18473), Handforth (1031).

Medical Officer—Tom Shaffleton Hanlin, of Cheadle.

District No. 3 (Hazel Grove)—Hazel Grove and Bramhall U. D. (13300).

Medical Officer—Thomas Moore, of Hazel Grove.

District No. 4 (Bredbury)—Bredbury and Romiley (10876), Compstall (865).

Medical Officer—Philip Vaudrey Cant, of Woodley.

District No. 5 (Marple)—Marple (7389), Mellor (1712).

Medical Officer—William Arthur Jackson, of Marple.

District No. 6 (Ludworth)—Ludworth (1926).

Medical Officer—Alexander Gordon Hastings, of Marple.



# REPORT OF THE Medical Officer of Health

For the Year ended December 31st, 1935.

---

## Section I.-Area and Population.

---

### Area.

The acreage of the County at the end of 1935 was 623,757 acres.

### Population.

The population of the Administrative County, as enumerated at the Census of 1931, was 671,958. The estimate of the Registrar-General for 1935 is:—

7 Municipal Boroughs ... ..	200,030
32 Other Urban Districts ... ..	312,070
11 Rural Districts ... ..	190,100
	<hr/>
	702,200
	<hr/>

The Registrar-General in a Memorandum published in May, 1936, states:—

The annual distribution of his returns of births and deaths for the past year affords the Registrar-General an opportunity of directing the attention of Medical Officers of Health and others using the returns to some points upon which experience has shown that misunderstandings arise.

1. The numbers of live births, stillbirths and deaths are those registered (but excluding re-registrations) during the calendar year (i.e., 1st January—31st December, inclusive) and are corrected for inward and outward transfers. They will differ, therefore, from uncorrected figures compiled locally either for the calendar year or for a period of fifty-two weeks.
2. The deaths are classified under the headings given in the Abridged List of Causes, as used in England and Wales and Northern Ireland (see page XXIV of the Manual of the International List of Causes of Death—1931). The attention of Medical Officers is drawn to the revised "Rules for the selection of one from two or more jointly stated causes of death" which appear on page XXVIII of the Manual. The classification of some deaths is modified in the light of fuller information obtained from the certifying practitioner in response to special inquiries, the principal subjects of these enquiries being indicated in a table published in the annual reports of the Registrar-General. This possible source of discrepancy between the returns of the Registrar-General and those compiled locally should be borne in mind particularly in regard to the causes of death dealt with in that table.

The Registrar-General's estimate of the resident population in each district is given herewith:—

Municipal Boroughs. (7)			Population at Census, 1931.	Population supplied by Registrar- General, 1935.	Area in Acres.
Congleton	...	...	12885	13200	2572
Crewe	...	...	46069	44710	2184
Dukinfield	...	...	19311	18940	1407
Hyde	...	...	32075	31600	3079
Macclesfield	...	...	34905	35260	3214
Sale	...	...	28071	32320	3629
Stalybridge	...	...	24831	24000	3132
			198147	200030	19217



Urban Districts. (32)	Population at Census, 1931.	Population supplied by Registrar- General, 1935.	Area in Acres.
Alderley Edge ...	3145	2934	678
Alsager ...	2852	2950	2241
Altrincham ...	21356	20860	1425
Bebington ...	32805	36340	12235
Bollington ...	5027	4944	1291
Bowdon ...	3285	3182	850
Bredbury & Romiley ...	10876	12380	3990
Buglawton ...	1651	1652	2911
Cheadle & Gatley ...	18473	22460	5087
Compstall ...	865	794	903
Ellesmere Port ...	23000	24840	9143
Hale ...	10667	11140	1288
Handforth ...	1031	1478	1311
Hazel Grove ...	13300	14510	5447
Hollingworth ...	2299	2139	2086
Hoole ...	5889	6107	334
Hoylake ...	21129	21000	5933
Knutsford ...	5879	5681	1760
Lymm ...	5643	5812	4313
Marple ...	7389	7621	3055
Middlewich ...	5458	5478	1082
Mottram-in-Longdendale ...	2636	2550	1084
Nantwich ...	7133	7126	703
Neston ...	7859	8460	8497
Northwich ...	18732	18200	1398
Runcorn ...	18127	18200	1274
Sandbach ...	6411	6492	2694
Tarporley ...	2452	2349	6195
Wilmslow ...	9760	10940	5090
Winsford ...	10998	10750	5785
Wirral ...	9583	10920	5639
Yeardsley-cum-Whaley ...	1745	1781	1323
	297450	312070	107045

Rural Districts.  
(11)

Bucklow ...	20115	26170	51313
Chester ...	16165	18680	32488
Congleton ...	13124	13780	40152
Disley ...	3212	3350	2466
Macclesfield ...	19161	20040	79494
Malpas ...	4283	4284	21405
Nantwich ...	26626	26780	98466
Northwich ...	26498	27980	54300
Runcorn ...	31878	34140	46921
Tarvin ...	13279	12970	56871
Tintwistle ...	2020	1926	13619
	176361	190100	497495
Administrative County ...	671958	702200	623757

**Rateable Value.**

The rateable value of the Administrative County of Cheshire for General County Rate purposes at 1/4/36 was £4,394,448. A penny rate over the whole County represented the sum of £16,900 (estimated).

## Section II.-Births and Deaths.

---

The figures are for the Administrative County, 1935, unless otherwise stated.

**Live Births:—**

		Total.	Male.	Female.
Legitimate	...	9304	4789	4515
Illegitimate	...	313	166	147

Birth Rate per 1,000 of the estimated resident population, 13.7.

**Comparative Birth Rates:—**

England and Wales	...	14.7
121 Great Towns	...	14.8
140 Smaller Towns	...	14.8
London	...	13.3

**Highest Birth Rates in Sanitary Districts:—**

Ellesmere Port U.D.	...	18.9
Yearsley-c-Whaley U.D.	...	16.8
Malpas R.D.	...	16.6
Tarvin R.D.	...	16.5

**Lowest Birth Rates in Sanitary Districts:—**

Bowdon U.D.	...	8.2
Hale U.D.	...	8.9
Hoylake U.D.	...	10.7
Knutsford U.D.	...	10.7
Tintwistle R.D.	...	10.9

	Total.	Male.	Female.
Stillbirths	430	248	182

Stillbirths Rate per 1,000 total (live and still) births, 42.8.

	Total.	Male.	Female.
Deaths	8092	4065	4027

Death Rate per 1,000 of the estimated resident population, 11.5.



## Comparative Death Rates:—

England and Wales ... ..	11.7
121 Great Towns ... ..	11.8
140 Smaller Towns ... ..	11.2
London ... ..	11.4

## Highest Death Rates in Sanitary Districts:—

Tarporley U.D. ... ..	15.8
Malpas R.D. ... ..	15.6
Sandbach U.D. ... ..	14.3

## Lowest Death Rates in Sanitary Districts:—

Chester R.D. ... ..	8.9
Ellesmere Port U.D. ... ..	9.2
Powdon U.D. ... ..	9.4
Cheadle and Gatley U.D. ... ..	9.5

For a stricter comparison of the Districts the Registrar-General's comparability factor should be used.

The principal causes of death are set out in the following table:—

Disease.	No. of Deaths.
Heart Disease ... ..	1978
Cancer ... ..	1138
Cerebral Hæmorrhage ... ..	489
Tuberculosis (all forms) ... ..	367
Pulmonary ... ..	287
Non-Pulmonary ... ..	80
Pneumonia ... ..	396
Bronchitis ... ..	245
Nephritis ... ..	313

The deaths from the chief zymotic diseases were as follows:—

Whooping Cough ... ..	30
Measles ... ..	9
Diphtheria ... ..	53
Diarrhoea and Enteritis (under 2 years)	25
Scarlet Fever ... ..	5
Typhoid and Paratyphoid ... ..	5
Smallpox ... ..	Nil.

The Zymotic Death Rate is .18.

## Births and Deaths.

The figures for the past 20 years are as follows:—

				Births.		Deaths.
1935	...	...	...	9,617	...	8,092
1934	...	...	...	9,490	...	7,814
1933	...	...	...	9,021	...	8,253
1932	...	...	...	9,209	...	8,055
1931	...	...	...	9,610	...	7,679
1930	...	...	...	9,976	...	7,519
1929	...	...	...	9,794	...	8,474
1928	...	...	...	9,968	...	7,520
1927	...	...	...	10,080	...	7,606
1926	...	...	...	10,333	...	7,368
1925	...	...	...	10,356	...	7,670
1924	...	...	...	10,687	...	7,601
1923	...	...	...	11,061	...	7,101
1922	...	...	...	11,395	...	7,691
1921	...	...	...	12,440	...	7,197
1920	...	...	...	14,075	...	7,246
1919	...	...	...	9,999	...	8,066
1918	...	...	...	9,838	...	8,903
1917	...	...	...	9,970	...	7,278
1916	...	...	...	11,537	...	7,730

Deaths from Puerperal Causes (Headings 29 and 30 of the Registrar-General's Short List):—

	Deaths.	Rate per 1,000 total (live and still) births.
No. 29 Puerperal Sepsis ... ..	15	1.49
No. 30 Other Puerperal Causes	25	2.49
Total ... ..	40	3.98

It is gratifying to observe that this rate (3.98) is below that for 1934, which was 4.13.

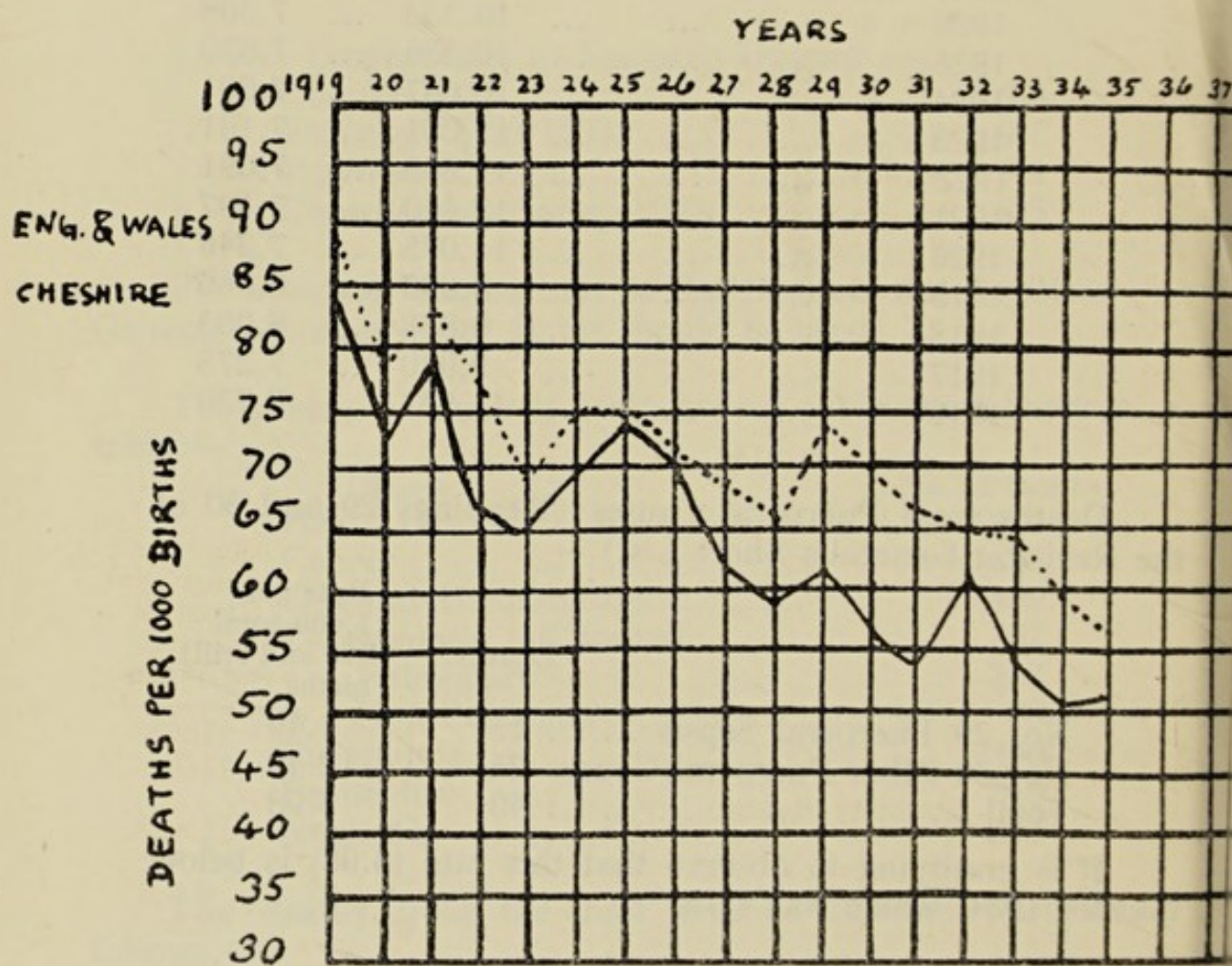
#### Infantile Mortality.

There have been 499 deaths of infants under 1 year in the Administrative County during 1935, i.e. 464 legitimate and 35 illegitimate. These figures show an infantile mortality as follows:—

All infants per 1,000 live births ... ..	51.9
Legitimate infants per 1,000 legitimate live births	49.9
Illegitimate infants per 1,000 illegitimate live births ... ..	111.8

In 1934, there were 485 deaths, the rate being 51.1 per 1,000.





## Comparative Rates:—

England and Wales ... ..	57
121 Great Towns ... ..	62
140 Smaller Towns ... ..	55
London ... ..	58

## Highest Rates in Sanitary Districts:—

Winsford U.D. ... ..	113
Bollington U.D. ... ..	109
Nantwich U.D. ... ..	94
Congleton M.B. ... ..	82

## Lowest Rates in Sanitary Districts:—

Compstall U.D. ... ..	Nil.
Handforth U.D. ... ..	Nil.
Hollingworth U.D. ... ..	Nil.
Tintwistle R.D. ... ..	Nil.
Macclesfield R.D. ... ..	26

## VITAL STATISTICS.

10 Year Averages, 1925—34.

	Cheshire	Aggregate Administrative Counties England and Wales
Birth Rate .. ..	14.59	15.88
Death Rate .. ..	11.63	11.74
Maternal Mortality Rate—		
Sepsis .. ..	1.504	1.639
Other Causes .. ..	2.745	2.539
Total .. ..	4.249	4.178
Infant Mortality Rate .. ..	60.5	62.3
Deaths from Diarrhoea and Enteritis (under 2 years of age) for 1000 registered births .. ..	4.391	5.870
Deaths per million population from—		
Enteric Fever .. ..	8.4	8.4
Scarlet Fever .. ..	17.0	16.9
Diphtheria .. ..	72.7	68.6
Whooping Cough .. ..	70.1	78.9
Measles .. ..	54.7	74.2
Tuberculosis—Respiratory .. ..	532.1	665.9
Tuberculosis—Other forms .. ..	147.9	152.5
Cancer .. ..	1444.3	1425.7
Cardiac Disease .. ..	2250.6	2175.5



# COUNTY OF CHESHIRE.

## BIRTH AND DEATH RATES, 1925-34.

*The Figures for Aggregate Administrative Counties in England and Wales are shown in brackets.*

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Birth Rate per 1,000 .. ..	16.0 (17.9)	15.8 (17.4)	15.2 (16.4)	15.0 (16.4)	14.6 (15.8)	14.7 (16.0)	14.2 (14.8)	13.5 (14.9)	13.2 (14.4)	13.7 (14.8)
Death Rate per 1,000 .. ..	11.9 (11.8)	11.3 (11.2)	11.5 (12.0)	11.3 (11.3)	12.7 (12.8)	11.1 (11.1)	11.3 (11.3)	11.8 (11.8)	12.1 (12.3)	11.3 (11.8)
Maternal Death Rate (per 1,000 births)										
(a) from Sepsis .. ..	2.12 (1.36)	1.65 (1.48)	0.99 (1.49)	1.61 (1.70)	2.14 (1.77)	1.72 (1.79)	0.99 (1.59)	1.14 (1.53)	1.27 (1.73)	1.41 (1.95)
(b) from other causes .. ..	2.70 (2.62)	1.94 (2.52)	2.48 (2.47)	3.61 (2.71)	2.65 (2.51)	2.68 (2.44)	2.18 (2.45)	3.21 (2.55)	3.28 (2.66)	2.72 (2.47)
Total .. ..	4.82 (3.98)	3.59 (4.00)	3.47 (3.96)	5.22 (4.41)	4.79 (4.28)	4.40 (4.23)	3.17 (4.04)	4.35 (4.08)	4.55 (4.39)	4.13 (4.42)
Infant Mortality Rate per 1,000 registered live births .. ..	73 (69)	70 (64)	61 (64)	58 (60)	65 (68)	57 (56)	54 (61)	62 (60)	54 (62)	51 (59)
Deaths from Diarrhoea and Enteritis (under 2 years of age) per 1,000 registered births .. ..	6.18 (7.10)	6.19 (7.08)	4.86 (5.20)	5.02 (5.68)	4.80 (6.46)	4.21 (5.19)	3.23 (4.87)	3.69 (5.84)	2.99 (5.78)	2.74 (5.50)

Causes of Death (Rate per Million).

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Enteric Fever (including Paratyphoid)	8 (10)	18 (10)	11 (10)	8 (12)	6 (10)	9 (8)	10 (7)	7 (7)	4 (6)	3 (4)
Scarlet Fever .. .. .	33 (20)	28 (17)	15 (15)	21 (14)	33 (17)	9 (18)	7 (14)	6 (13)	12 (17)	6 (24)
Diphtheria .. .. .	53 (66)	76 (69)	48 (61)	50 (76)	96 (81)	96 (83)	72 (58)	76 (49)	57 (54)	103 (89)
Whooping Cough .. .. .	138 (136)	83 (96)	71 (89)	62 (62)	109 (150)	49 (44)	55 (52)	87 (63)	22 (53)	25 (44)
Measles .. .. .	51 (101)	89 (84)	59 (57)	74 (110)	30 (49)	108 (95)	12 (55)	60 (78)	15 (28)	49 (85)
Tuberculosis of Respiratory System	638 (750)	561 (691)	547 (715)	572 (680)	535 (710)	513 (661)	546 (663)	539 (612)	439 (611)	431 (566)
Tuberculosis—other forms ..	152 (188)	186 (174)	189 (168)	177 (162)	160 (152)	134 (147)	100 (144)	137 (141)	130 (127)	114 (122)
Cancer .. .. .	1332 (1320)	1387 (1347)	1321 (1355)	1408 (1405)	1390 (1409)	1510 (1433)	1534 (1401)	1519 (1506)	1576 (1526)	1466 (1555)
Heart Disease .. .. .	1733 (1645)	1593 (1630)	1789 (1808)	1985 (1909)	2367 (2323)	2290 (2202)	2509 (2348)	2600 (2571)	2775 (2638)	2865 (2681)



## Section III. Infectious Diseases.

### Isolation Hospitals.

Under section 63 of the Local Government Act, 1929, it became compulsory for every county to make a survey of the Isolation Hospital Accommodation for the treatment of Infectious Disease.

This survey was carried out, and as a result a draft scheme was prepared, the essentials of which have already been reported upon in previous reports. Unfortunately, it has been quite impossible to reach agreement with the Local Authorities at present owning Hospitals. The scheme, therefore, had to be amended considerably, and it is now hoped that in its present form it will prove acceptable.

In the revised scheme each hospital retains its own identity as at present, and the Chester City Isolation Hospital is included.

Those districts which contract out have been included in the Hospital Area most conveniently situated and adapted to their particular requirements.

It is recommended that there should be certain additions in the form of cubicle blocks, that all staff should be readily available for transfer in times of epidemic in any area, and that no hospital should refuse a case from outside its area of supply if the hospital to which it would normally go is full.

The various Isolation Hospitals in the County and their accommodation are shown in the following table:—

Authority.	Hospital.	Situation.	Districts Served.	Accommodation. Blocks, Wards, Beds.
Altrincham U.D.C.	Altrincham	Sinderland Road, Altrincham	Altrincham U.D. Bowdon U.D.	4 8 34
Congleton and District J.H.B.	West Heath Sanatorium	West Heath, Congleton	Congleton Borough Congleton R.D. Alsager U.D. Bridgton U.D. Sandbach U.D.	4 11 34
Crewe T.C.	Crewe	North of Crewe	Crewe Borough	4 12 40
Hyde T.C.	Hyde	Back Bower Lane, Hyde	Hyde Borough Audenshaw U.D. Bredbury and Romiley U.D. Compstall U.D. Denton U.D. Disley R.D. Dukinfield Borough Hazel Grove and Bramhall U.D. Marple U.D. Stalybridge Borough Yeardsley-cum-Whaley U.D.	4 12 44
Macclesfield T.C.	Macclesfield D.	Moss Lane, Macclesfield	Macclesfield M.B. Macclesfield R.D. Bollington U.D.	2 8 36
Nantwich J.H.B.	Alvaston	Alvaston, near Nantwich	Nantwich U.D.	3 6 20
Northwich R. Northwich U. Middlewich and Winsford	Davenham	Davenham, near Northwich	Northwich R.D. Northwich U.D. Middlewich U.D. Winsford U.D.	4 12 35
Runcorn U.D.C.	Runcorn U.D.C.	Weston Road, Runcorn	Runcorn U.D.	2 4 20
Runcorn R.D.C.	Runcorn R.D.	Parish of Dutton	Runcorn R.D.	3 9 36
Wirral J.H.B.	Clatterbridge J.H.	Clatterbridge	Bebington and Bromborough U.D. Ellesmere Port and Whitby U.D. Hoylake and West Kirby U.D. Newton and Parkgate U.D. Wirral U.D.	5 13 80

#### Smallpox Hospitals.

Authority.	Situation.	Districts Served.	Accommodation. Ward Blocks, Wards, Beds.
Congleton and District S.P.H.C.	Arcid, Sand- bach	Alsager U.D. Buckleyton U.D. Congleton B. Congleton R.D. Sandbach U.D.	2 2 12
Macclesfield	Moss Lane, Macclesfield	Macclesfield B. Bollington U.D.	1 2 6
Nantwich	Ravensmoor	Nantwich U.D. Nantwich R.D.	1 2 6
Northwich R. & U. Middlewich and Winsford U.H.C.	Marbury	Northwich R.D. Northwich U.D. Middlewich U.D. Winsford U.D.	3 9 15
Tarvin, Malpas and Tarporley	Tiverton	Tarvin R.D. Malpas R.D. Tarporley U.D.	1 1 2
Mottram, Holling- worth and Tint- wistle J.C.	Carrhouse Lane	Mottram U.D. Hollingsworth U.D. Tintwistle R.D.	1 2 6
Hyde T.C.	Old Road, Hyde	Hyde Dukinfield Bredbury and Romiley Disley R.D. Hazel Grove Bramhall U.D. Macclesfield R.D. Marple U.D. Yeardsley-cum-Whaley Droylsden U.D. Denton U.D.	2 6 30





## Ambulances.

All cases of infectious disease are dealt with by the ambulances attached to the various Isolation Hospitals.

The ambulance provision for ordinary sickness and accidents has recently been reviewed and appears adequate.

Apart from infectious cases the following are the arrangements in force in the County:—

Congleton Borough	Two motor ambulances.
Crewe Borough	Three motor ambulances.
Dukinfield Borough	Make use of Hyde Police Ambulance.
Hyde Borough	Two motor ambulances.
Macclesfield Borough	Two motor ambulances
Stalybridge Borough	One motor ambulance.
Alderley Edge Urban	One Motor ambulance—Red Cross Society.
Alsager Urban	Have arrangement with Stoke and Newcastle for use of their ambulances.
Altrincham Urban	Two motor ambulances.
Bebington Urban	One motor ambulance attached to Port Sunlight Hospital.
Bollington Urban	Have arrangement with Macclesfield Corporation.
Bowdon Urban	One motor ambulance jointly with Hale.
Bredbury Urban	Arrangement with Hyde Corporation.
Buglawton Urban	Arrangement for use of Congleton ambulance.
Cheadle Urban	A new motor ambulance has been provided by the District Council.
Compstall Urban	Make use of Hyde and Stockport ambulances.
Ellesmere Port Urban	Two motor ambulances.
Handforth Urban	Arrangement with Wilmslow.
Hazel Grove Urban	Arrangement with Stockport Corporation.
Hollingworth Urban	Arrangement with Glossop and Hyde
Hoole Urban	Make use of ambulance from Chester Fire Brigade.
Hoylake Urban	One motor ambulance.
Knutsford Urban	Agreement with Altrincham.
Lymm Urban	Agreement with Altrincham.
Marple Urban	Arrangement with Stockport.
Middlewich Urban	The Winsford St. John's Motor Ambulance.



Mottram Urban	Use Stalybridge and Hyde Police Ambulances.
Nantwich Urban	Maintain a Red Cross Ambulance jointly with Rural area.
Neston Urban	Have no ambulance.
Northwich Urban	Police hand ambulance. Imperial Chemical Co. provide their own. Use is made of a private motor ambulance.
Runcorn Urban	Council subsidise a private firm for the use of a modern motor ambulance.
Sale Borough	Two motor ambulances.
Sandbach Urban	An annual sum is paid for the use of a St. John's Brigade motor Ambulance.
Tarporley Urban	Chester Infirmary Ambulance used when necessary.
Wilmslow Urban	One motor ambulance.
Yeardsley-cum-Whaley Urban	Subscribe annually for use of New Mills Red Cross Ambulance.
Bucklow Rural	Have no ambulance, but consider the area well served.
Chester Rural	Make use of Chester ambulances.
Congleton Rural	Make use of Sandbach ambulances.
Disley Rural	Have services of Stockport ambulance
Macclesfield Rural	No ambulance, but are negotiating for use of that owned by Macclesfield Borough.
Malpas Rural	No ambulance.
Nantwich Rural	Joint use of an ambulance with Nantwich Urban District.
Northwich Rural	Make use of the ambulances from Northwich and Winsford.
Runcorn Rural	One motor ambulance.
Tarvin Rural	Make use of Chester City Ambulances.
Tintwistle Rural.	Utilise the Hyde ambulance.
Winsford Urban	Two motor ambulances belonging to St. John's Ambulance Association and Winsford and District Ambulance Brigade. Council subscribe to each Brigade.
Wirral Urban	Have agreement with Birkenhead Corporation, and are served by Clatterbridge County Hospital Ambulances.

Number of Cases of Infectious Disease notified during the year 1935.

	Small-pox.	Scarlet fever.	Diphtheria.	Enteric fever.	Pneumonia.	Puerperal fever.	Puerperal pyrexia.	Erysipelas.
Alderley Edge U.D...	—	9	2	—	2	—	—	—
Alsager U.D...	—	3	—	—	2	—	—	2
Altrincham U.D.	—	29	11	1	20	—	—	7
Bebington U.D.	—	168	92	—	38	—	2	18
Bollington U.D.	—	6	2	—	6	—	—	3
Bowdon U.D.	—	3	1	—	1	—	—	—
Bredbury and Romiley U.D.	—	61	9	—	21	—	1	4
Buglawton U.D.	—	7	2	—	2	—	—	1
Cheadle and Gatley U.D.	—	48	17	1	12	1	2	15
Compstall U.D.	—	—	—	—	1	—	—	—
Congleton M.B.	—	26	25	—	28	—	3	7
Crewe M.B.	—	291	111	1	10	1	6	7
Dukinfield M.B.	—	86	14	—	43	—	3	20
Ellesmere Port U.D.	—	262	214	—	45	1	3	14
Hale U.D.	—	8	1	—	3	1	—	1
Hindforth U.D.	—	3	—	—	—	—	—	—
Hazel Grove and Bramhall U.D.	—	71	16	1	5	—	2	1
Hollingworth U.D.	—	5	—	—	2	—	1	—
Hoole U.D.	—	29	2	—	7	—	—	1
Hoylake U.D.	—	49	19	—	25	1	1	6
Hyde M.B.	—	38	33	—	48	—	2	6
Knutsford U.D.	—	9	13	—	—	—	1	—
Lymm U.D.	—	11	1	—	1	—	—	—
Macclesfield M.B.	—	31	12	4	22	1	1	6
Marple U.D.	—	7	5	—	7	1	—	4
Middlewich U.D.	—	20	—	1	8	—	—	2
Mottram-in-Longdendale U.D.	—	12	—	—	1	—	—	5
Nantwich U.D.	—	25	4	—	4	—	—	3
Neston U.D.	—	8	5	—	4	—	1	—
Northwich U.D.	—	15	5	—	5	—	—	3
Runcorn U.D.	—	99	7	—	15	—	1	9
Sale M.B.	—	71	35	—	19	1	1	5
Sandbach U.D.	—	17	1	—	9	1	—	3
Stalybridge M.B.	—	42	22	—	24	1	2	15
Tarporley U.D.	—	—	1	—	—	—	—	—
Wilmslow U.D.	—	5	4	—	2	—	—	2
Winsford U.D.	—	35	4	—	31	1	2	9
Wirral U.D.	—	24	30	—	11	—	—	7
Yeardsley-cum-Whaley U.D.	—	5	1	—	4	—	—	—
Bucklow R.D.	—	36	41	—	14	1	1	10
Chester R.D.	—	85	24	2	17	1	1	11
Congleton R.D.	—	24	26	—	22	—	1	6
Disley R.D.	—	14	1	—	8	—	—	2
Macclesfield R.D.	—	38	3	1	7	1	—	2
Malpas R.D.	—	13	3	—	4	1	1	—
Nantwich R.D.	—	43	42	—	14	—	3	4
Northwich R.D.	—	68	3	2	26	—	2	1
Runcorn R.D.	—	125	25	—	29	—	3	20
Tarvin R.D.	—	33	7	—	18	1	—	—
Tintwistle R.D.	—	4	—	—	3	—	—	1





## Section IV.-Venereal Diseases.

The following statistics are drawn up from the returns supplied by the treatment centres used by County patients in 1935:—

Institution.	Persons attending for first time at Out-Patient Clinic suffering from				Total attendances at Out-Patient Clinic.	Number of In-Patient Days.	Doses of Salvarsan substitute given.
	Syphilis.	Soft Chancre	Gonorrhoea.	Non-Veneral conditions.			
Ashton-under-Lyne Infirmary ...	17	—	32	11	2681	20	382
Birkenhead Infirmary ...	7	—	21	9	1009	101	162
Chester Royal Infirmary	19	—	54	4	2529	237	438
Liverpool Seamen's Dispensary ...	2	—	11	16	468	—	20
Liverpool Mill Road Infirmary ...	—	—	1	—	13	—	—
Liverpool Royal Infirmary ...	5	—	8	7	469	—	65
Ancoats Hospital, Manchester	3	1	14	9	858	—	61
Manchester Skin Hospital	13	—	1	8	454	7	75
St. Luke's, Manchester	7	4	23	9	2600	120	56
Manchester, Royal Eye ..	25	—	—	—	142	—	91
Manchester Royal Infirmary ...	25	—	33	33	2527	—	331
St. Mary's, Manchester	4	—	2	12	311	—	61
Salford Boro' Hospital ..	5	1	15	33	2166	—	266
Stockport Clinic ...	7	—	23	19	1173	—	156
Stoke-on-Trent Clinic ...	3	—	4	5	268	—	54
Warrington Infirmary ...	11	—	17	7	1645	—	190
Wallasey Hospital ...	1	—	—	1	30	—	18
<b>TOTALS</b> ...	<b>154</b>	<b>6</b>	<b>259</b>	<b>183</b>	<b>19343</b>	<b>485</b>	<b>2426</b>

There is no clinic conducted entirely by the County Council.



### Examination of Specimens for Diagnosis.

The following have been examined at the University of Manchester Public Health Laboratory during 1935.

	SYPHILIS.						GONORRHŒA.				Total Num- ber of Spec- imens
	Wasserman Reaction.				Spiro- chætae.		Complement Fixation Test		Micro'pical Exam.		
	Blood.		C.S.F.								
	Total Exam	+	Total Exam	+	Total Exam	+	Total Exam	+	Total Exam	+	
1st Quarter	70	4	1	—	1	—	2	2	5	3	79
2nd „ ..	80	9	1	—	—	—	—	—	3	—	84
3rd „ ..	76	13	—	—	—	—	1	1	9	—	86
4th „ ..	70	11	—	—	—	—	2	1	10	2	82
Total ..	296	37	2	—	1	—	5	4	27	5	331

## Section V.-Tuberculosis.

Continuing the policy of co-operation with the Voluntary Hospitals, still further advancements have been made during the year and it is hoped that in the very near future all Dispensary work will be carried out within the precincts of some hospital or other. Negotiations are at the moment in progress with Northwich, Altrincham and Runcorn, and arrangements have been made with Hyde Borough Hospital. The co-operation already established with Macclesfield Infirmary and Crewe Memorial Hospital continues to prove most satisfactory. The demand for Hospital and Sanatorium beds is on the increase, with the result that the waiting lists tend to enlarge, showing that increased accommodation is needed.

It is satisfactory to note that the Joint Sanatorium Committee are contemplating an increase in their accommodation for all classes of cases, and arrangements are complete with Hyde Borough for the provision of a Pavilion for 20 female cases. With the development of the dispensary work, including artificial pneumothorax treatment and X-rays, it is becoming apparent that in the very near future the Tuberculosis Service will of necessity have to be extended. The provision of part-time clerical staff at the dispensaries has certainly eased the situation for the present.

One very satisfactory feature of the service is the increased co-operation with the general practitioners, who are now taking more advantage of the service and the opinion of the Tuberculosis officers, who are always at their service.

Since the year under review, the Ellesmere Port dispensary has been closed as redundant.

The areas in which Dispensaries have been opened by the Council and the days and time upon which the District Tuberculosis Officers attend are detailed in the following table:—

### 1. CHESTER AND CREWE DISTRICT.

DR. D. W. TOUGH.		
Address of Dispensary.	Days.	Hours.
Memorial Hospital, Crewe	Monday	10 0 a.m. to 4 30 p.m.
15, St John Street, Chester	Wednesday	10 0 a.m. to 12 noon.
Duncan Street, Birkenhead	Friday	2 0 p.m. to 4 0 p.m.
The Lodge, Darmond's Green, West Kirby	Tuesday	2 0 p.m. to 4 0 p.m.

### 2. HYDE DISTRICT.

DR. L. I. HENZELL.		
Beeley Street, Hyde	Monday	10 0 a.m. to 12 noon.
	Wednesday	2 0 p.m. to 4 30 p.m.
		6 0 p.m. to 7 30 p.m.
Throstle Grove House, Great Egerton Street, Stockport	Monday	3 0 p.m. to 5 0 p.m.
Chapel Street, Congleton	Friday	10 0 a.m. to 12 noon
General Infirmary, Macclesfield	Friday	2 30 p.m. to 5 0 p.m.
	Wednesday	9 30 a.m. (Refills)



## 3. NORTHWICH AND ALTRINCHAM DISTRICT.

DR. A. FLEMING.		
Address of Dispensary.	Days.	Hours.
12, Dunham Road, Altrincham...	Tuesday	10 0 a.m. to 12 noon.
	Wednesday	10 0 a.m. to 12 noon.
	Friday	6 0 p.m. to 7 45 p.m.
Memorial Hospital, Crewe 16, Applemarket Street Northwich	...Wednesday	2 0 p.m. (Refills)
	...Friday	10 0 a.m. to 12 noon.
28, High Street, Runcorn	...Thursday	11 0 a.m. to 12 30 p.m.

The tables included in this Report give in considerable detail an account of the work accomplished during the year 1935, and for the purposes of comparison I have separated the outstanding figures for the year under review and the two previous years.

	1935	1934	1933
New cases notified (primary)			
Pulmonary ...	492	481	482
New cases notified (primary)			
Non-pulmonary ...	247	284	272
	<hr/>	<hr/>	<hr/>
Total ...	739	765	754
	<hr/>	<hr/>	<hr/>
No of cases remaining on Registers of Notifications kept by District M.O's.H., December 31st. ...	6347	5949	5666
No. of Deaths from all forms of Tuberculosis ...	367	377	389
Death rate from all forms of Tuberculosis per 1,000 of the population	0.52	0.54	0.57
New Applicants for Treatment	498	499	528
No. of Attendances at Dispen- saries, ...	6003	5573	6098
No. of Consultations with Medical Practitioners	3076	1493	1575
Visits of T.O's. to Homes ...	1460	1069	1166
Visits of Health Visitors to Homes for Dispensary purposes ...	6211	6407	6586
X-Ray Examinations, ...	1033	617	217

Return showing the work of the Dispensaries during the year 1935:—

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 ...	221	158	8	7	35	38	67	48	256	196	75	55	582	
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	16	16	10	2	44	
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	243	237	92	88	660	
B—Contacts examined during the year:														
(a) Definitely tuberculous ..	12	17	2	5	—	—	4	5	12	17	6	10	45	
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	2	2	1	3	8	
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	56	111	99	105	371	
C—Cases written off the Dis- pensary Register as:														
(a) Recovered ..	3	12	4	4	7	9	26	22	10	21	30	26	87	
(b) Non-tuberculous (includ- ing any such cases pre- viously diagnosed and entered on the Dispensary Register as tuberculous)	—	—	—	—	—	—	—	—	326	366	203	214	1109	
D—Number of Cases on Dis- pensary Register on Decem- ber 31st, 1935:														
(a) Definitely tuberculous ...	1034	852	145	138	240	307	503	396	1274	1159	648	534	3615	
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	21	21	12	6	60	

1. Number of cases on Dispensary Register on January 1st, 1935 ... 3397
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ... 106
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ... 101
4. Cases written off during the year as Dead (all causes) ... 241
5. Number of attendances at the Dispensary (including Contacts) ... 6003
6. Number of Insured Persons under Domiciliary Treatment on the 31st December, 1935. ... 1449
7. Number of consultations with medical practitioners:—
  - (a) Personal ... 724
  - (b) Other ... 2352
8. Number of visits by Tuberculosis Officers to Homes (including personal consultations) ... 1460
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes ... 6211



## 10. Number of:—

(a) Specimens of sputum, etc., examined 1696\*

(b) X-Ray examinations made ... .. 1033  
in connexion with Dispensary work.

11. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above ... .. 5

12. Number of "T.B. plus" cases on Dispensary Register on December 31st ... .. 1202

\*In addition 1,018 specimens were received from private practitioners for examination for tubercle bacilli.

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

Name of Institution.	For Pulmonary Cases.		For Non-pulmonary Cases.		Total.
	Adults.	Children under 15.	Adults.	Children under 15.	
<i>Sanatoria.</i>					
Cheshire Joint Sanatorium, Market Drayton ..	120	—	—	—	120
Wrenbury Hall Colony, Wrenbury	50	—	—	—	50
<i>General Hospitals.</i>					
Clatterbridge (County) General Hospital, Bebington	—	—	—	—	12
<i>Poor Law Institutions.</i>					
Bucklow Institution	—	—	—	—	—
Knutsford ...	4	—	4	—	8
Arcid Institution, nr. Sandbach ...	2	—	—	—	2
Dutton Institution nr. Runcorn ...	1	—	—	—	1
Macclesfield Institution, Macclesfield	—	—	—	—	12

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

	In Institutions on Jan. 1st, 1935.	Admitted during the year	Discharged during the year	Died in the Institutions	In Institutions on Dec. 31st, 1935.
Number of doubtfully tuberculous cases admitted for observation—					
Adult males ...	6	27	27	2	4
Adult females	8	18	16	2	8
Children ...	3	19	11	2	9
Total ...	17	64	54	6	21
Number of patients suffering from pulmonary tuberculosis—					
Adult males ...	137	254	193	47	151
Adult females	75	132	108	20	79
Children ...	10	28	19	3	16
Total ...	222	414	320	70	246
Number of patients suffering from non-pulmonary tuberculosis—					
Adult males ...	11	40	37	1	13
Adult females	9	44	39	4	10
Children ...	68	125	120	7	66
Total ...	88	209	196	12	89
Grand Total ..	327	687	570	88	356



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

	In Institu- tions on Jan. 1st 1935.	Admitted during the year	Discharged during the year	Died in the Institu- tions	In Institu- tions on Dec. 31st 1935.
Number of patients suffering from pulmonary tuber- culosis—					
Adult males ...	8	22	17	5	8
Adult females	5	9	4	4	6
Children ...	—	1	—	1	—
Total ...	13	32	21	10	14
Number of patients suffering from non- pulmonary tuber- culosis—					
Adult males ...	5	8	8	—	5
Adult females	4	2	3	1	2
Children ...	2	3	4	—	1
Total ...	11	13	15	1	8
Grand Total ...	24	45	36	11	22

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

Diagnosis on discharge from observation.	For Pulmonary Tuberculosis.			For Non-pulmonary Tuberculosis.			Totals.		
	Stay under 4 weeks.	Stay over 4 weeks.		Stay under 4 weeks.	Stay over 4 weeks.				
	M. F. Ch.	M.	F. Ch.	M. F. Ch.	M.	F. Ch.	M. F. Ch.		
Tuberculous ..	1 — 1	6	7 3	— — 2	1 — 3	8 7 9			
Non-tuberculous	4 1 —	8	3 —	1 1 1	1 2 1	14 7 2			
Doubtful ...	4 — —	3	3 1	— 1 —	— — 1	7 4 2			
Totals ...	9 1 1	17	13 4	1 2 3	2 2 5	29 18 13			

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

admission to the Institution.		Condition at time of discharge.	Duration of Residential Treatment in the Institution.															
			Under 23 days.			Under 3 months.			3—6 months.			6—12 months.			More than 12 months.			TOTAL.
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Class T.B. minus.	Quiescent	1	—	—	—	2	3	3	—	6	—	3	4	1	—	—	23	
	Not Quiescent	3	1	—	4	5	2	13	10	2	13	8	—	3	1	1	66	
	Died in Inst.	1	—	—	3	—	—	—	—	—	—	—	—	—	—	—	4	
Class T.B. plus. Group 1.	Quiescent	—	—	—	1	1	—	—	—	—	—	—	—	1	—	—	3	
	Not Quiescent	—	—	—	2	—	—	2	1	—	2	1	—	—	—	—	8	
	Died in Inst.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Class T.B. plus. Group 2.	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	
	Not Quiescent	5	2	—	17	2	1	20	7	—	31	17	—	17	12	—	131	
	Died in Inst.	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	2	
Class T.B. plus. Group 3.	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Not Quiescent	5	3	—	9	5	—	14	8	—	14	12	—	11	7	—	88	
	Died in Inst.	9	4	1	13	5	—	8	5	—	8	3	1	4	2	1	64	
Bones and Joints.	Quiescent	5	2	4	—	—	—	1	—	2	—	—	—	—	—	4	18	
	Not Quiescent	12	7	2	2	4	4	3	3	3	—	2	2	3	—	9	56	
	Died in Inst.	1	1	—	—	—	—	—	—	—	—	—	—	—	2	2	6	
Abdominal.	Quiescent	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	
	Not Quiescent	—	3	2	—	3	11	—	—	11	—	1	9	—	—	3	43	
	Died in Inst.	—	—	1	—	—	1	—	1	1	—	—	—	—	—	—	4	
Other Organs.	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Not Quiescent	6	5	2	3	3	1	—	—	1	—	—	—	—	—	—	21	
	Died in Inst.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Peripheral Glands.	Quiescent	—	—	—	—	—	1	—	—	1	—	—	1	—	—	—	3	
	Not Quiescent	2	4	23	—	2	10	—	—	8	—	—	3	—	—	2	54	
	Died in Inst.	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	2	



The following table shows the number of Insured (including Discharged Soldiers and Sailors) and Uninsured persons who have received treatment during the years 1926-1935.

YEAR.	INSURED.		UNINSURED.		TOTAL.
	Males.	Females.	Males.	Females.	
1926	336	156	158	217	867
1927	412	134	169	188	903
1928	416	158	194	203	971
1929	444	175	242	303	1164
1930	438	184	241	318	1181
1931	401	202	258	316	1177
1932	376	216	250	297	1139
1933	397	208	257	337	1199
1934	409	187	265	283	1144
1935	423	195	259	304	1181

Number of new applications for treatment under the County Tuberculosis Scheme during the years 1927-1935.

YEAR.	DIS- CHARGED SOLDIERS.	INSURED.	UNINSURED.	TOTAL.
1927	—	234	216	450
1928	1	228	233	462
1929	1	241	205	447
1930	2	238	213	453
1931	—	224	192	416
1932	1	242	180	423
1933	—	273	255	528
1934	1	257	241	499
1935	—	267	231	498

Table relating to Tuberculosis in children under 16:—

Year.	Number of Children notified as suffering from Pulmonary Tuberculosis.	Number of Children notified as suffering from Non-Pulmonary Tuberculosis.	Percentage of Total Notifications.	
			Pulmonary.	Non-Pulmonary.
1927	46	224	8.303	62.57
1928	44	222	7.483	63.61
1929	47	207	7.556	63.303
1930	36	201	6.59	65.47
1931	33	185	6.3	66.55
1932	40	170	8.32	62.96
1933	31	187	6.4	65.07
1934	22	175	4.57	65.05
1935	33	152	6.7	61.54

Number of beds occupied by Children in Institutions, 1935—Pulmonary, 49; Non-Pulmonary, 211. Total, 260.



Statement shewing number of patients who received institutional treatment during 1935.

INSTITUTION.	ADULTS		Children under 16	TOTAL
	Males	Females		
SANATORIA.				
Cheshire Joint Sanatorium ...	169	144	—	313
Wrenbury Hall Colony ...	66	—	—	66
Eastby Sanatorium ...	—	—	6	6
Liverpool Sanatorium ...	8	15	40	63
	243	159	46	448
PULMONARY HOSPITALS.				
Hyde Pavilion ...	100	—	1	101
Sealand Pavilion ...	9	6	—	15
Baguley Sanatorium ...	7	3	—	10
Crewe Pavilion ...	4	—	—	4
Mount Pleasant Hospital... ..	25	26	2	53
Hefferston Grange Sanatorium ...	30	32	—	62
	175	67	3	245
GENERAL HOSPITALS.				
Crewe Memorial Hospital ...	1	—	2	3
Congleton War Memorial Hospital ...	1	2	3	6
Ashton-under-Lyne Infirmary ..	6	2	5	13
Albert Infirmary, Winsford ...	2	—	6	8
Macclesfield General Infirmary ...	3	7	9	19
Manchester Royal Infirmary ...	7	6	4	17
Chester Royal Infirmary ...	—	1	—	1
Runcorn Cottage Hospital ...	—	—	3	3
Stockport Infirmary ...	—	—	1	1
Altrincham General Hospital ...	2	1	9	12
David Lewis Northern Hospital, Liverpool ...	1	1	—	2
Liverpool Royal Infirmary ...	—	1	—	1
Royal Liverpool Children' Hospital (Myrtle Street) ...	—	—	1	1
	23	21	43	87
SPECIAL INSTITUTIONS FOR CHILDREN.				
Leasowe Hospital for Children ...	—	—	55	55
Royal Liverpool Children's Hospital, Heswall ...	—	—	43	43
	—	—	98	98
ORTHOPÆDIC INSTITUTIONS.				
Robert Jones & Agnes Hunt Orthopædic Hospital ...	26	19	43	88
North Staffs Cripples Aid Society ...	2	—	4	6
Wrightington Hospital, nr. Wigan ...	—	—	1	1
	28	19	48	95
CONVALESCENT HOMES.				
Royal Alexandra Hospital, Rhyl ...	—	7	6	13
West Kirby Convalescent Home ...	—	—	13	13
	—	7	19	26
SKIN HOSPITALS.				
Manchester & Salford Skin Hospital ...	2	7	3	12
	2	7	3	12
TOTAL IN-PATIENTS ...	471	280	260	1011
OUT-PATIENT TREATMENT AT VARIOUS CLINICS & HOSPITALS.				
TOTAL OUT-PATIENTS ...	27	58	85	170
TOTAL ALL INSTITUTIONS	498	338	345	1181

**SUMMARY OF NOTIFICATIONS DURING THE PERIOD FROM THE 1st JANUARY, 1935,  
TO THE 31st DECEMBER, 1935.**

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	8	4	25	29	52	53	50	38	11	271	289
„ Females	—	1	11	8	20	49	55	40	18	14	5	221	235
Non-Pulmonary Males	6	22	30	24	11	11	13	4	4	3	1	129	138
„ „ Females	2	23	30	15	10	11	13	3	5	5	1	118	124

**Supplemental Return.**

New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health or Chief (Administrative) Tuberculosis Officer during the period from the 1st January, 1935, to the 31st December, 1935, otherwise than by formal notification.

Age-periods ...	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total.
Pulmonary Males ...	—	—	—	1	1	9	10	12	5	4	2	44
„ Females ...	—	—	—	—	2	7	23	8	8	4	2	54
Non-pulmonary Males ...	3	3	1	4	3	2	3	1	2	1	—	23
„ Females ...	2	4	2	1	3	2	2	—	1	—	—	17

The sources from which information as to the above-mentioned cases was obtained are stated below :—

Source of Information.	No. of Cases.	
	Pulmonary.	Non-pulmonary.
Death Returns ( <i>i.e.</i> , from local Registrars, or transferable deaths from Registrar General)	11	12
Posthumous Notifications	5	5
“Transfers” from other areas (other than transferable deaths)	82	23

**Notification Register.**

	Pulmonary.			Non-pulmonary.			Total Cases.
	Males.	Females.	Total.	Males.	Females.	Total.	
Number of Cases of Tuberculosis remaining at the 31st December, 1935 on the Registers of Notifications kept by Medical Officers.	1898	1763	3661	1369	1317	2686	6347
Number of Cases removed from the Register during the year.							
Withdrawal of Notification ...	51	35	86	17	18	35	121
Recovery from the Disease ...	8	14	22	20	17	37	59
Death ...	154	122	276	18	29	47	323



# SUMMARY OF NOTIFICATIONS DURING THE YEAR 1935.

Age-Periods	Number of Notifications				Total
	0-4	5-9	10-14	15-19	
Primary Males	86	107	151	208	552
Primary Females	47	87	141	211	486
Non-Primary Males	6...	4 6	122	130	314
Non-Primary Females	5...	5 2	123	130	315

## Notes

New cases of Tuberculosis coming to the knowledge of the Tuberculosis Officer during the period from the 1st January to the 31st December 1935, notified by formal notification.

Age-Periods	Number of Notifications				Total
	0-4	5-9	10-14	15-19	
Primary Males	—	—	—	1	1
Primary Females	—	—	—	—	—
Non-Primary Males	2	3	1	4	10
Non-Primary Females	2	4	2	1	9

The figures from which information as to the above-mentioned cases has been obtained are as follows:—  
 1. Directly from the Registrar-General's Office, or transferable from other areas (other than transferable from other areas) to the Registrar-General's Office, 1935.  
 2. From other areas (other than transferable from other areas) to the Registrar-General's Office, 1935.  
 3. From other areas (other than transferable from other areas) to the Registrar-General's Office, 1935.  
 4. From other areas (other than transferable from other areas) to the Registrar-General's Office, 1935.

## Notes

Table showing the actual number of Deaths from Tuberculosis during the past twenty years.

Year.	Pulmonary.	Non-Pulmonary.	Total. All forms.
1916	510	167	677
1917	494	177	671
1918	548	196	744
1919	452	140	592
1920	454	124	578
1921	388	139	527
1922	418	132	550
1923	344	144	488
1924	362	150	512
1925	412	98	510
1926	367	122	489
1927	363	125	488
1928	381	118	499
1929	358	107	465
1930	347	91	438
1931	370	68	438
1932	367	93	460
1933	300	89	389
1934	298	79	377
1935	287	80	367

The 1935 figures are made up as follows:—

	Male.	Female.	Total.
Pulmonary	167	120	287
Non-Pulmonary	38	42	80
	<hr/> 205	<hr/> 162	<hr/> 367

#### Death Rates, 1935.

All forms of Tuberculosis, .52 per 1,000 of population.

Pulmonary Tuberculosis, .41 per 1,000 of population.

Non-Pulmonary Tuberculosis, .11 per 1,000 of population.

The figures for the five preceding years are as under:—

Year.	Pulmonary.	Non-Pulmonary.	All Forms.
1930	0.51	0.13	0.64
1931	0.54	0.10	0.64
1932	0.53	0.13	0.66
1933	0.44	0.13	0.57
1934	0.43	0.11	0.54



TABLE SHOWING DEATHS FROM TUBERCULOSIS AT DIFFERENT PERIODS OF LIFE  
IN THE ADMINISTRATIVE COUNTY OF CHESTER, DURING THE YEAR 1935.

		Aggregate of Urban Districts.													Aggregate of Rural Districts.												
Sex.	All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—	All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—			
Pulmonary Tuberculosis.	M	129	—	1	—	17	25	26	31	23	5	1	38	—	—	—	—	4	10	7	10	5	2	—			
	F	92	—	—	2	24	24	23	10	6	2	1	28	—	—	—	—	6	8	5	2	5	2	—			
Non-pulmonary Tuberculosis.	M	26	6	2	2	1	4	4	2	3	2	—	12	—	3	4	2	1	—	1	1	—	—	—			
	F	34	2	5	3	8	4	4	2	1	4	1	8	2	1	1	—	3	—	—	—	—	1	—			

Table shewing number of deaths from Tuberculosis in the various districts of the County during the year 1935 :—

District.	Population.	PULMONARY.			NON-PULMONARY			GRAND TOTAL.	Death Rate per 1000 of population.
		M.	F.	Total.	M.	F.	Total.		
MUNICIPAL BOROUGHES.									
Congleton .. .. .	13,200	2	2	4	—	1	1	5	
Crewe .. .. .	44,710	13	8	21	1	6	7	28	
Dukinfield .. .. .	18,940	3	3	6	1	3	4	10	
Hyde .. .. .	31,600	10	4	14	1	—	1	15	
Macclesfield .. .. .	35,260	9	8	17	4	1	5	22	
Sale .. .. .	32,320	7	3	10	—	2	2	12	
Stalybridge .. .. .	24,000	10	6	16	—	2	2	18	
	200,030	54	34	88	7	15	22	110	.55
URBAN DISTRICTS.									
Alderley Edge .. .. .	2,934	1	—	1	—	—	—	1	
Alsager .. .. .	2,950	1	1	2	—	—	—	2	
Altrincham .. .. .	20,860	8	3	11	1	1	2	13	
Bebington .. .. .	36,340	10	11	21	1	4	5	26	
Bollington .. .. .	4,944	2	1	3	1	—	1	4	
Bowdon .. .. .	3,182	—	—	—	—	—	—	—	
Bredbury and Romiley ..	12,380	3	7	10	—	1	1	11	
Buglawton .. .. .	1,652	—	1	1	—	—	—	1	
Cheadle and Gatley .. ..	22,460	7	4	11	4	—	4	15	
Compstall .. .. .	794	1	—	1	—	—	—	1	
Ellesmere Port .. .. .	24,840	9	4	13	3	1	4	17	
Hale .. .. .	11,140	2	2	4	1	—	1	5	
Handforth .. .. .	1,478	—	—	—	—	—	—	—	
Hazel Grove and Bramhall ..	14,570	4	—	4	—	1	1	5	
Hollingworth .. .. .	2,139	1	—	1	1	—	1	2	
Hoole .. .. .	6,107	—	—	—	—	—	—	—	
Hoylake and West Kirby ..	21,000	5	4	9	—	1	1	10	
Knutsford .. .. .	5,681	4	—	4	—	—	—	4	
Lymm .. .. .	5,812	—	1	1	1	2	3	4	
Marple .. .. .	7,621	1	1	2	—	1	1	3	
Middlewich .. .. .	5,478	1	2	3	—	1	1	4	
Mottram .. .. .	2,550	1	—	1	—	—	—	1	
Nantwich .. .. .	7,126	1	1	2	—	—	—	2	
Neston and Parkgate .. ..	8,460	1	1	2	—	1	1	3	
Northwich .. .. .	18,200	3	3	6	3	2	5	11	
Runcorn .. .. .	18,200	3	3	6	2	1	3	9	
Sandbach .. .. .	6,492	—	1	1	—	—	—	1	
Tarporley .. .. .	2,349	1	—	1	1	1	2	3	
Wilmslow .. .. .	10,940	—	1	1	—	—	—	1	
Winsford .. .. .	10,750	1	2	3	—	—	—	3	
Wirral .. .. .	10,920	3	3	6	—	1	1	7	
Yeardsley-cum-Whaley .. ..	1,781	1	1	2	—	—	—	2	
	312,070	75	58	133	19	19	38	171	.55
RURAL DISTRICTS.									
Bucklow .. .. .	26,170	9	1	10	1	2	3	13	
Chester .. .. .	18,680	5	1	6	—	1	1	7	
Congleton .. .. .	13,780	2	5	7	—	—	—	7	
Disley .. .. .	3,350	—	—	—	—	—	—	—	
Macclesfield .. .. .	20,040	4	4	8	1	1	2	10	
Malpas .. .. .	4,284	—	1	1	—	—	—	1	
Nantwich .. .. .	26,780	4	5	9	3	2	5	14	
Northwich .. .. .	27,980	3	5	8	3	1	4	12	
Runcorn .. .. .	34,140	9	4	13	3	1	4	17	
Tarvin .. .. .	12,970	2	1	3	1	—	1	4	
Tintwistle .. .. .	1,926	—	1	1	—	—	—	1	
	190,100	38	28	66	12	8	20	86	.45

Total Population 702,200.

Death Rate { All Forms of Tuberculosis .52 per 1000 of population.  
Pulmonary Tuberculosis .41 per 1000 of population  
Non-Pulmonary Tuberculosis .11 per 1000 of population.



Table showing number of deaths from various districts of the County during the

Municipal Boroughs.			
District	Population	M.	F.
...	13,200	5	3
...	44,710	13	8
...	18,940	3	3
...	31,600	10	4
...	32,260	8	8
...	32,320	3	3
...	24,000	10	6
Total	200,030	54	34
Rural Districts.			
District	Population	M.	F.
...	2,934	1	1
...	2,920	1	1
...	20,860	8	3
...	26,340	10	3
...	4,944	2	1
...	3,182	1	1
...	12,380	3	7
...	1,622	1	1
...	22,460	1	4
...	794	1	1
...	24,840	1	4
...	11,140	3	2
...	1,478	1	1
...	14,270	4	1
...	2,139	1	1
...	6,107	1	1
...	21,000	2	4
...	2,681	4	9
...	2,812	4	4
...	7,621	1	1
...	2,472	1	1
...	2,220	1	1
...	7,120	1	1
...	108,860	38	24
...	18,200	2	2
...	18,200	2	2
...	18,422	2	2
...	2,349	1	1
...	10,940	4	4
...	10,750	4	4
...	10,220	4	4
...	20,281	4	4
...	2,220	1	1

**Public Health Act, 1925.**

No action was taken by the County Council under Section 62 of this Act, which permits the Council to apply for an Order compulsorily to remove a person suffering from Tuberculosis to Hospital.

**Non-Pulmonary Tuberculosis.**

The scheme for Orthopaedic work in relation to Non-Pulmonary Tuberculosis was fully set out in my report of 1932, page 47.

The Institutions which are available for the treatment of these Orthopaedic Cases and the clinics connected with them are as follows:—

<i>Hospital.</i>		<i>Clinic.</i>
The Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry	} {	Chester. Crewe.
The Leasowe Hospital for Children The Royal Liverpool Hospital for Chil- dren, Heswall	} {	Ellesmere Port. Hoylake. New Ferry. Runcorn. Stockton Heath
General Hospital, Altrincham Royal Infirmary, Manchester Ancoats Hospital	} {	Alderley Edge. Altrincham. Hyde.
Orthopaedic Hospital, Hartshill —		Congleton. Northwich.

During the year the number of attendances at the clinics was 3361 and 152 patients received Institutional treatment.

The days and times at which the Orthopaedic Clinics are held are set out in the following table:—



## PLACES, DAYS, AND TIMES OF ORTHOPÆDIC AFTER-CARE CLINICS.

<i>Address.</i>	<i>Days</i>	<i>Hours.</i>	<i>Surgeon attends.</i>
Cottage Hospital, Alderley Edge	... Alternate Thursdays	... 2 0 p.m. to 4 0 p.m.	... Once every two or three months.
General Hospital, Altrincham	... Fridays	... 2 0 p.m. to 4 0 p.m.	... Fourth Friday each month.
15, St. John Street, Chester	... Fridays	... 10 0 a.m. to 12 30 p.m.	... Once every two months.
12, West Street, Congleton	... Tuesdays	... 10 0 a.m. to 1 0 p.m.	... Third Tuesday each month.
L.M.S. Ambulance Rooms, ... Crewe	... Mondays	... 10 0 a.m. to 12 30 p.m.	... Once every two months.
Welfare Centre, York Road, Ellesmere	... Mondays	... 2 30 p.m. to 4 30 p.m.	... *Fourth Monday each month.
Port Hoylake Welfare Centre, 8, Market Street	... Fridays	... 2 30 p.m. to 4 30 p.m.	... Third Friday each month.
Orthopædic After-Care Clinic, Hyde	... Mondays Wednesdays Fridays	... 10 0 a.m. to 5 30 p.m. ... 10 0 a.m. to 12 30 p.m. ... 10 0 a.m. to 5 30 p.m.	... Third Friday each month.
Welfare Centre, Recreation Ground, New Ferry	... Mondays	... 2 30 p.m. to 4 30 p.m.	... *Second Monday each month.
Welfare Centre, 29, High Street, Runcorn	... Fridays	... 11 0 a.m. to 1 p.m.	... *First Friday each month.
Welfare Centre, Methodist Sunday School, Stockton Heath	... Fridays	... 2 30 p.m. to 4 30 p.m.	... First Friday each month.

\* It has been found necessary to arrange for the surgeon to attend an additional session every two months at these clinics owing to increased attendances.

Statement giving Particulars of Specimens Examined in County Public Health Laboratory during the Years 1920 to 1935

YEAR.	Statement giving particulars of specimens examined in County Health Laboratory during 1920-1935.																																								Total Number of Specimens from patients examined.	Milk.	Sputa from Cows.	Total Number of Specimens examined.	Concentra- tion Method Patients' Sputa.		Total Number of Examina- tions made.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	Sputa.		Urine.		Glands.		Pleural Effusions.		Blood.		Pos.		Urethral Discharge.		Effusion from Knee Joint.		Hair for Ringworm.		Skin.		Feces for Worms.		Ulcer of Lip.		Fallopian Tubes.		Swab from Mouth.		Cerebro- Spinal Fluid.		Tonsils for T.B.		Feces for T.B.		Pos.	Neg.	Pos.	Neg.	Pos.	Neg.					Pos.	Neg.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.														Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
1920	292	1054	...	2	...	...	...	...	...	...	2	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...</

\* Film appeared to be one of secondary Anæmia.

† Gonococci present.



# Statement giving Particulars of Spots

No.	Loc.	Spots		Gonorr.	Gonorr. for T. H.	Gonorr. Fluid		Gonorr. Bladder	Gonorr. Uterus	Blood		Discharge		Eruption	
		No.	Loc.			No.	Loc.			No.	Loc.	No.	Loc.	No.	Loc.
1		1054	...	2	...	...	...	...	...	...	...	...	...	...	...
2		1284	2	3	...	1	...	...	...	...	...	...	...	...	...
3		1378	...	3	...	2	...	...	...	...	...	...	...	...	...
4		1328	3	3	...	...	...	...	...	...	...	...	...	...	...
5		1548	1	3	...	1	...	3	...	...	...	...	...	...	...
6		1568	...	3	...	...	...	...	...	...	...	...	...	...	...
7		1421	...	4	...	...	...	...	...	...	...	...	...	...	...
8		1730	...	1	...	...	...	...	...	...	...	...	...	...	...
9		1760	...	3	...	...	...	...	...	...	...	...	...	...	...
10		1717	...	4	...	...	...	...	...	...	...	...	...	...	...
11		1783	1	3	...	...	...	...	...	...	...	...	...	...	...
12		1828	...	4	...	...	...	...	...	...	...	...	...	...	...
13		1848	...	3	...	...	...	...	...	...	...	...	...	...	...
14		2087	...	3	...	...	...	...	...	...	...	...	...	...	...
15		1712	...	4	...	...	...	...	...	...	...	...	...	...	...
16		2028	1	3	...	2	...	...	...	...	...	...	...	...	...

\* almost always present. † Gonococci present.

### County Public Health Laboratory.

Table showing number of specimens examined in the County Public Health Laboratory during the year 1935 in respect of patients.

#### Sanatoria, etc.

	Neg.	Pos.
Wrenbury Hall, Wrenbury ...	298	208
Borough Hospital Hyde (T.B. Pavilion) ..	110	93

#### Other Institutions.

Clatterbridge Hospital ...	61	14
Lake Hospital, Ashton-under-Lyne ...	22	—
Altrincham General Hospital ...	14	1
Tarporley Cottage Hospital ...	—	1
Institution Hospital, Knutsford ...	11	4
Cottage Hospital, Ellesmere Port ...	15	1
Cottage Hospital, Hoylake ...	2	—
Hospital, Port Sunlight ...	2	—
Macclesfield General Infirmary ...	2	1
Victoria Memorial Hospital, Runcorn ...	3	—
Memorial Hospital, Crewe ...	1	—
Dutton Institution ...	4	1
National Children's Home, Frodsham ...	1	—
Tarvin Institution ...	2	—
Crippled Children's Home, Marple ...	—	1

#### Other Districts.

Chester ...	1	—
Stockport (Davenport) ...	1	—
Manchester (Baguley) ...	—	1

#### Total Number of Specimens examined during 1935.

	Neg.	Pos.
Sputa for T.B. examinations (23.63% pos.)	2058	637
Urines ...	9	1
Glands of Neck ...	2	—
Pus ...	4	1
Faeces ...	2	—
Hair for Ringworm ...	4	3
Milks (13.22% pos.) ...	1011	154
Sputa from Cows ...	21	35
	<hr/> 3111	<hr/> 831

Of the above specimens received from patients 394 were also examined by concentration method, of which 346 were negative and 48 positive.

Total number of examinations made, 4336.



## Section VI.-Maternity and Child Welfare

(By DR. JEAN R. SHAW).

---

### Area.

The County Area for the purpose of the Midwives Act, etc., comprises the whole of the Administrative County, but for Maternity and Child Welfare excludes the Boroughs of Crewe, Hyde, Macclesfield and Stalybridge, also the Urban Districts of Altrincham, Bebington, Ellesmere Port, Hale and Knutsford.

### General.

The Notification of Births Act of 1907 was made compulsory throughout the country in 1915. The County Scheme was commenced in March, 1916, under the supervision of a lady Assistant Medical Officer, assisted by seven Health Visitors and three part-time Nurses. In September of the same year, it was found expedient to combine the duties of the health nursing services, each Nurse being given a smaller area and becoming responsible for the health visiting of all children under five years of age, and the School and Tuberculosis work for her particular area. The Staff, then, with the addition of School Nurses, Tuberculosis Nurses and two additional Nurses, consisted of twenty Health Visitors. This arrangement led to a great saving of the Health Visitors' time, lessening of expenditure to the County in travelling, etc., and lastly preventing the possibility of a mother being visited by three different Health Visitors. At the end of 1916, there were eight Child Welfare Centres under County Council administration. This important work continued to grow steadily. More Child Welfare Centres were opened and parents were beginning to realise gradually that the established health services were for the benefit of their own and their children's health and well being. At present—(twenty years later)—there are 38 Child Welfare Centres being successfully carried on, with a Staff of 39 Health Visitors.

In 1918, the Maternity and Child Welfare Act was passed, which gave wider and more comprehensive powers to Local Authorities. The first Ante-natal Clinic was opened in 1919, with a specialist in obstetrics in charge. The Maternity and Child Welfare Committee gave permission for this Clinic to be tried for six months. It proved very successful and was continued for a few years. Subsequently it was thought this



work might be as successfully undertaken by general practitioners. This was tried for two years at Dukinfield and Stalybridge, but very few patients attended, explaining as their reason for non-attendance either that the doctor at the clinic was not their own doctor, or if they wanted to see their own doctor they would go to see him at his surgery. In 1926, these Clinics were closed, and an alternative ante-natal scheme was passed by the County whereby each local doctor could see his own patients, make out a record card of his examinations, a fee to be paid by the County for all reports received. This scheme when submitted to the Ministry of Health was not sanctioned. The clinic scheme was then reverted to, and 4 were eventually established in the County. At a later date, an improved somewhat similar plan to the one which was turned down by the Ministry was inaugurated by an Urban District Council, which was most successful (and later adopted by the County Council). After many vicissitudes the ante-natal scheme which has been in vogue since 1933, judging by the increasing numbers attending the Clinics, and of reports received, the combined schemes seem to be answering the present needs satisfactorily: i.e. (1) four Ante-natal Clinics with specialists in attendance, (2) any mother being able to go to her own doctor for examination twice during her pregnancy.

During 1916, there were actually practising in the County area 261 midwives. Of these, 108 were trained and 153 untrained women. Compare this with the return for 1935, when there were 237 trained and 13 untrained midwives practising.

During the years under review, the Cheshire Nursing Association has continued to form fresh District Associations and placed a district midwife where it was necessary and at all possible. Where impossible, and necessary, the County have subsidised midwives. In 1918, there were eight areas with subsidised midwives, but for various reasons there are now only four districts requiring this help. The midwives' duties have been greatly increased of late years. They are now expected to keep in touch with their cases during the ante-natal period as well as to attend the confinement and puerperium.

In 1926, it was arranged that each year two midwives should be sent to refresher courses. In 1927, the Maternity Homes Act was passed, which made it compulsory to register private maternity homes run for profit. A year later this Act was extended to include all Nursing Homes. These are all regularly inspected, and a high standard of efficiency insisted upon.



In 1927, the Puerperal Pyrexia Regulation was put in force, i.e., a febrile condition occurring in a woman after child-birth must be notified by the doctor in attendance.

For some years the Maternity and Child Welfare Committee have paid or assisted to pay for maternity beds in Institutions occupied by maternity patients who could not be safely confined in their homes; this Committee has also provided the services of a Consultant when requested by any doctor in attendance on a maternity case during the ante-natal period, confinement or puerperium. The Maternity and Child Welfare Service has been further extended to provide Home helps, to include orthopaedic treatment for children under 5 years of age who had or were threatened with crippling defects; beds have been provided for ailing and delicate children in several hospitals; dental treatment for expectant and nursing mothers and children under 5 years has been undertaken and milk for the above has been supplied to many necessitous families.

Under the Local Government Act (1929) the duties of Supervision of children who are maintained by foster parents for reward were transferred from the old poor law authorities to the Maternity and Child Welfare Committee. From the above resumé an attempt has been made to give some idea of how the Maternity and Child Welfare Service has grown during the twenty years it has been in force in this county.

In 1916 the Infantile Mortality was 75 per 1,000 and in 1935 it was 52 per 1,000—while realising many influences are at work to bring about this reduction, it will readily be granted that a considerable proportion of the diminution must be ascribed to the Maternity and Child Welfare Work. Apart from a reduced infantile death rate the improved general health of the young children is very evident to the officers who have been working among them during this period. While the infantile mortality has been steadily decreasing the maternal mortality rate has changed but little during the last two years. It is to be fervently hoped with better ante-natal supervision, improved obstetrical practice, and every effort made to get women to avail themselves of the facilities provided for them, that in the near future this death rate, which represents a loss of life at its best and highest capacity, may be materially reduced.

#### **Number of Midwives in Practice.**

There were 384 midwives who notified their intention to practise in the County area during 1935. Classified, these are as follows:—



### Actually practising—

Trained, 237; untrained, 13 ... ..	250
Monthly nurses ... ..	24
Midwives living outside the County area ... ..	36
In Institutions and Nursing Homes ... ..	41
Had no cases ... ..	31
Died ... ..	2

Only 13 untrained midwives attended midwifery cases during 1935 and these had very few cases without a doctor also being in attendance.

As in previous years the Nursing Associations in the County worked in unison with the Maternity and Child Welfare officials. These Associations do good work and will be a further valuable asset to the County when the new Midwives Bill is passed.

### Subsidised Midwives.

The County has continued to subsidise four midwives practising at Lymm, Tarvin, Hollingworth and Sandbach respectively. In the Autumn of 1935, owing to the removal of two independent practising midwives to other areas, a district was left without a midwife. As the parish was rather a poor one, the County decided to give an extra grant to the County Nursing Association in order that it might place a Queen's Nurse there.

### Compensation to Midwives.

There were 84 midwives compensated during the year for loss of fees owing to the inability of their patients to pay, or due to their removal to hospital for confinement.

### Inspection of Midwives.

The inspection of midwives has been carried out as in the past by the Lady Assistant Medical Officer, assisted by some of the Health Visitors.

The independent midwives are inspected quarterly; district midwives are visited twice yearly, as they are regularly supervised by their own Superintendent.

Total visits to midwives ... ..	1076
Formal inspections ... ..	834
Enquiries into still-births, puerperal fever and pyrexia, infant deaths, etc. ...	242

The Bags, Registers and Ante-natal Records of the midwives, with very few exceptions, have been found satisfactory.



The attitude towards the inspector, which she has always tried to foster among the midwives, is nowadays much more evident, namely, that her visits should be welcomed as one who comes to help them to solve their difficulties and not to increase them.

In 1934, reference was made to the new rules of the Central Midwives' Board, and one especially—28 (a)—which forbade "a midwife or maternity nurse to lay out the dead body of a patient other than a maternity case." This caused a great deal of inconvenience and annoyance to rural nursing associations. In October, 1935, this rule was rescinded.

### **Details of Midwives' Attendance at Cases during 1935.**

LIVE-BIRTHS.			STILL BIRTHS.			MIS- CARRIAGES.		
With a Doctor.	Without a Doctor.	Total.	With a Doctor.	Without a Doctor.	Total.			
3653	3794	7447	...	224	64	288	...	225

### **Ante-natal Work.**

The midwives have attended to this important branch of their work on the whole fairly well. As pointed out in a previous report, it is difficult to get mothers to realise the necessity for their being under ante-natal supervision. Judging from the increased number of ante-natal forms received from doctors, the midwives are able to persuade more mothers to take advantage of the County Scheme whereby they can be examined twice during their pregnancy by their own medical attendant.

### **Home Helps.**

A scheme of Home Helps was commenced during the year under review

### **Midwives' Association.**

The Cheshire Midwives' Association (affiliated to the Midwives' Institute) was formed in June, 1925, and had its tenth annual meeting in June, 1935, when Mr. P. Malpas, Ch.M., F.R.C.S., gave a most instructive address, which was much appreciated by all present.

During the Session, 1934-35, as in previous years, a series of lectures has been given at each of the seven branches.

During 1935, two midwives attended a month's Refresher Course at Liverpool Maternity Hospital.

The following notifications have been received under the Central Midwives' Board Rules:—

		Medical Help.		Still-Births		Death of a Child.		Laying out of Dead.		Source of Infection.		Artificial Feeding.		Discharge from Eyes.
Trained	...	2770	...	74	...	6	...	20	...	50	...	56	...	35
Untrained	...	48	...	3	...	—	...	—	...	2	...	2	...	1

### Puerperal Pyrexia.

Sixty-one cases of Puerperal Pyrexia were notified during 1935. These included four abortions.

The day of onset was as follows:—

1st day—	1 case.
2nd „	— 6 cases.
3rd „	— 12 cases.
4th „	— 12 cases.
5th „	— 4 cases.
6th „	— 6 cases.
7th „	— 5 cases.
8th „	— 5 cases.
9th „	— 5 cases.
10th „	— 4 cases.
11th „	— 1 case.
12th „	— 1 case.

Number of above cases proved to be Puerperal Fever ... ..	11
Cases already in Hospital notified as Pyrexia	8
Number sent to Hospital for treatment—	
Pyrexia ... ..	13
Puerperal Fever ... ..	7
Number seen by Consultants ... ..	6
Number of deaths of notified cases ... ..	3

Disinfection of midwives in contact with above cases was carried out in 46 cases.

The following are some of the causes other than Puerperal Fever to which the raised temperature was attributed:—

- Albuminuria, 2 cases.
- Influenza, 4 cases.
- Phlebitis, 4 cases.
- Bronchitis, 3 cases.
- Inflamed Breast, 3 cases.



Breast abcess, 4 cases.  
 Cystitis, 2 cases.  
 Septic Perineum, 3 cases.  
 Retained Membrane, 3 cases.  
 Pyelitis, 2 cases.  
 Appendicitis, 1 case.  
 Scarlatina, 1 case.

### **Nursing and Maternity Homes.**

Number on Register at end of 1935 ... ..	57
Number given up during 1935 ... ..	1
Number of new homes registered, 1935 ... ..	8
(3 were changes of addresses).	
Number of inspections carried out, 1935 ... ..	195

The Nursing Homes have been inspected regularly as in previous years, and have on the whole been efficiently run.

There have been 708 births in the above Homes, and 574 medical and surgical cases during 1935.

### **Births, Etc., Visitations by the Health Visitors.**

Under this Section, the work has been carried on as in previous years. On the notification of a birth in any district an Enquiry Form has been forwarded to the Health Visitor of that district, who, as soon as possible after the tenth day, visits the mother.

The Health Visitors encourage the mothers to continue with breast feeding which the efficient midwives have established.

During the past year, the number of visits to babies under one year has worked out at an average of 7.5 per notified child. Children who are weakly and requiring more supervision have been visited more frequently. During the second year of life, according to the County Scheme, the children should be visited quarterly, and in subsequent years until school age half-yearly visits should be paid. As the work of the Health Visitor increases, it is to be hoped that due allowance of time is permitted for home visting. It is in the homes that the Health Visitor has her best opportunity of a heart to heart talk with her mothers. It is there she sees the difficulties that they are up against, and that she can help them to improve their surroundings, and teach them what is best for their own and their children's health.

The following is a summary of the visits paid by the Lady Medical Officer and Health Visitors during 1935.

First visits to infants under 1 year ... ..	6,028
Revisits to children under 1 year (Ophthalmia, etc.) ... ..	33,749
Revisits to children over 1 year ... ..	48,527
Visits to expectant mothers ... ..	1,689
Visits to Midwives ... ..	1,076

### **The Method of Feeding Babies.**

The following table shews the method of feeding, during the first six months of life, of children over six months and under one year. There were 690 rural cases and 1,766 urban cases.



	BREAST.					MIXED.					ARTIFICIAL.				
	1931 %	1932 %	1933 %	1934 %	1935 %	1931 %	1932 %	1933 %	1934 %	1935 %	1931 %	1932 %	1933 %	1934 %	1935 %
1st Month— Rural ...	80	74	74	77	71	1	1	2	2	2	19	25	24	21	27
Urban ...	72	74	75	75	71	5	2	3	3	3	23	24	22	22	26
2nd Month— Rural ...	74	70	70	75	68	2	3	2	2	4	24	27	28	23	28
Urban ...	67	70	71	72	67	5	2	4	3	4	28	28	25	25	29
3rd Month— Rural ...	70	66	64	70	63	3	4	4	4	5	27	30	32	26	32
Urban ...	60	65	61	65	62	6	3	5	6	7	34	34	34	29	31
4th Month— Rural ...	63	60	60	63	57	6	6	6	7	7	31	34	34	30	36
Urban ...	53	60	59	59	56	8	3	5	8	9	39	37	36	33	35
5th Month— Rural ...	55	57	54	59	54	9	6	8	8	8	36	37	38	33	38
Urban ...	50	58	55	56	53	9	4	6	10	11	41	38	39	34	36
6th Month— Rural ...	52	54	51	57	53	10	7	9	9	8	37	39	40	34	39
Urban ...	46	55	52	54	51	10	5	6	11	12	44	40	42	35	37

From the above table it is shown that at the end of 6 months 53 per cent. of rural mothers and 51 per cent. of urban mothers were able to feed their infants entirely on breast milk. Eight per cent. of rural mothers and 12 per cent. of urban mothers had breast milk supplemented with artificial feeding; 39 per cent. rural babies and 37 per cent. urban babies were artificially fed. During 1935 the lowest percentage on record of natural feeding at the end of the first month is shown, but, fortunately, this was not so with the other 5 months reported on.

### Health of Infants.

The method of feeding till 6 months old and health of children at 12 months old is shown below (4,121 infants).

				Good.			Fair			Poor.
				%			%			%
Breast	{	Rural	...	82	...		15	...		3
		Urban	...	83	...		15	...		2
Mixed	{	Rural	...	70	...		18	...		2
		Urban	...	80	...		16	...		4
Artificial	{	Rural	...	73	...		23	...		4
		Urban	...	74	...		21	...		5

The illnesses from which children between one and two years of age have suffered during the first year of life are shown in the following table:—

			Birth to 3 months.	3 months to 6 months.	6 months to 9 months.	9 months to 12 months.			
Total.			%	%	%	%			
Respiratory Diseases	...	7% ...	·4	...	1·6	...	2	...	3
Convulsions	...	·5% ...	·3	...	·1	...	·07	...	·03
Gastro-Enteritis	...	4% ...	·5	...	1·5	...	1	...	1
Measles	...	2% ...	—	...	·4	...	·6	...	1
Whooping Cough	...	3·5% ...	—	...	·5	...	·5	...	2·5
Marasmus	...	·1% ...	·1	...	—	...	—	...	—

### Health of the Older Children.

In the following table the health of the children at 2 years, 3 years, 4 years respectively, who have been visited during 1935, is shewn.



Feeding.	Health, 2 years; 4083 children.			Health, 3 years; 3703 children.			Health, 4 years; 3534 children.		
	Good.	Fair.	Poor.	Good.	Fair.	Poor.	Good.	Fair.	Poor.
Breast—	%	%	%	%	%	%	%	%	%
Rural ...	81	16	3	84	13	3	85	13	2
Urban ...	84	16	3	84	13	3	83	14	3
Mixed—									
Rural ...	77	18	5	80	16	4	84	14	2
Urban ...	79	17	4	77	20	3	81	16	3
Artificial—									
Rural ...	78	18	4	77	20	3	76	20	4
Urban ...	79	15	6	75	21	4	74	21	5

Some of the illnesses from which the above children have suffered are as follows:—

	2 years. %	3 years. %	4 years. %
Respiratory Diseases ...	3·5	3·5	2
Measles ...	3	4	5
Whooping Cough ...	5	5	6
Scarlet Fever ...	·4	·7	·9
Diphtheria ...	·1	·2	·2

Signs of Rickets were noted in 4 per cent. of the children between 1 and 4 years of age—3·9 per cent. were slight, and .05 per cent were marked.

### Vaccination.

Returns taken from reports of children between 2 and 3 years of age:—

#### Rural Areas—

Vaccinated ...	35 %
Exemption granted ...	65 %

#### Urban Districts—

Vaccinated ...	40 %
Exemption granted ...	60 %

Age at which children between 2 and 3 years (1935) walked:—

	Urban.	Rural.
12 months and under ...	10 %	7 %
Over 12 months to 15 months ...	74 %	68 %
Over 15 months to 18 months ...	13 %	20 %
18 months to 2 years ...	2 %	3 %
Over 2 years ...	1 %	2 %

**Stillbirths.**

The following table gives some particulars of 150 Stillbirths (85 males, 65 females) that have been enquired into, viz.:—

Born before arrival ... ..	10 cases.
Prolapse of cord ... ..	3 cases.
Cord round neck ... ..	3 cases.
Eclampsia ... ..	1 case.
History of albuminuria ... ..	7 cases
Ill-health of mother ... ..	14 cases.
Malpresentation or difficult labour ... ..	43 cases.
History of shock or accident ... ..	19 cases.
Ante-partum hemorrhage ... ..	5 cases.
Placenta prævia ... ..	4 cases.
Malformation ... ..	20 cases.
Syphilis ... ..	2 cases.
Cause unknown ... ..	19 cases.

50 of above cases were first births.

In 6 cases there was a previous history of more than one miscarriage or stillbirth, and in 10 cases a history of one miscarriage or stillbirth. In 7 of these 10 cases the stillbirths had occurred in the second pregnancy, so that 7 mothers had not given birth to a live child. 5 of the mothers had worked in a factory during pregnancy, and 4 others had followed other occupations. One of the above stillbirths was of illegitimate birth, and one was a twin pregnancy, one child surviving.

**Deaths of Infants under 10 days old.**

The following table gives particulars of deaths of 93 infants under ten days old (44 males, 49 females):—

Premature birth ... ..	39	{ 15 births attended by Doctor.
		{ 24 " " Midwife.
Atelectasis ... ..	4	{ 3 " " Doctor.
		{ 1 " (Inquest) " Midwife
Difficult labour ... ..	12	" " Doctor.
Feebleness ... ..	7	{ 5 " " Doctor.
		{ 2 " " Midwife.
Convulsions ... ..	3	{ 1 " " Doctor.
		{ 2 " " Midwife.
Asphyxia ... ..	2	{ 1 " " Doctor.
		{ 1 " (Inquest) " Midwife.
Malformations ... ..	16	{ 9 " " Doctor.
		{ 7 " " Midwife.
Internal Hemorrhage ... ..	5	{ 4 " " Doctor.
		{ 1 " " Midwife.
Jaundice ... ..	1	" " Doctor.
Meningitis ... ..	1	" (Inquest) " Midwife.
Pneumonia ... ..	3	" " Doctor.

Six of the mothers of the above cases had been working in a factory during pregnancy; 3 others had done charring, etc. Six of the children were of illegitimate birth. Among the above there was one twin pregnancy: both of the infants died. In 39 cases the babies were first births.



### Deaths of Infants under one year.

Table giving particulars of deaths of 124 children under one year and over ten days old (73 males and 51 females):—

	Method of Feeding.	10 days to 3 months	3 months to 6 months	6 months to 9 months	9 months to 1 year.
Respiratory Diseases ...	Breast ...	7	1	3	3
	Artificial...	8	9	9	5
Convulsions ...	Breast ...	1	—	—	1
	Artificial...	1	3	—	1
Gastro-Enteritis ...	Artificial...	—	1	—	1
Marasmus ..	Artificial...	4	2	—	—
Measles ...	—	—	1	—	—
Whooping Cough ...	—	7	1	3	2
Malformations ...	—	10	3	1	—
Meningitis ...	—	3	—	—	1
Suffocation ...	Mother committed suicide after suffocating child.				
Overlain ...	—	1	—	—	—
Debility ...	—	3	—	—	—
Tabes Mesenterica ...	—	—	1	—	—
Prematurity ...	—	14	—	—	—
Pyloric Stenosis ...	—	2	1	—	—
Hæmorrhage (after Circumcision) ...	—	1	—	—	—
Intussusception ...	—	—	2	—	—
Mastoiditis ...	—	1	—	—	1
Sarcoma (Kidney) ...	—	1	—	—	—
Scalded ...	—	1	—	—	—
Cleft Palate (Operation) ...	—	—	—	—	1

### Deaths of Children over one year.

Table giving particulars of deaths of 67 children (37 males and 30 females):—

	1—2 years old.	2—3 years old.	3—4 years old.	4—5 years old.
Respiratory Diseases ...	12	2	3	—
Convulsions ...	—	—	1	1
Whooping Cough ...	2	2	—	—
Gastro-Enteritis ...	2	—	—	—
Meningitis ...	1	1	—	—
Tubercular Meningitis ...	2	2	—	—
Tabes Mesenterica ...	1	1	—	1
Diphtheria ...	2	—	—	1
Measles ...	4	2	1	—
Accidents {	Fell out of Window	1	—	—
	Scalded ...	3	1	—
	Killed—			
	Motor ...	2	2	—
	Cyclist ...	—	—	1
Peritonitis ...	1	—	—	—
Congenital Syphilis ...	1	—	—	—
Pink Disease ...	1	—	—	—
Intussusception ...	1	—	—	—
Tubercular Spine ...	—	—	—	1
Mastoiditis ...	2	—	1	—
Appendicitis ...	1	1	—	—
Acute Toxæmia ...	—	1	—	—

## Ophthalmia.

There have been notified 40 cases of inflammation of, or discharge from the eyes of new-born babies.

30 of the cases were only slight. Most of the cases occurred between the third and fifth days. In 7 cases the birth was attended by a doctor, and 33 cases were attended by midwives. The following is a description of the cases:—

### Slight cases—

One eye affected ... ..	10
Both eyes affected ... ..	20

### Severe cases—

One eye affected ... ..	3
Both eyes affected ... ..	7

4 of the severe cases were removed to Hospital, and 4 others were attended by Health Visitors. All the cases made perfect recoveries.

## Illegitimate Children.

Special enquiries have been made into the circumstances of 82 illegitimate children born during 1935. In 43 cases the mother was unemployed: 70 of the cases were found to be quite satisfactorily cared for, 11 only fairly satisfactorily attended to and one lost sight of. The father was known to be contributing to the child's maintenance in 44 cases, and in 5 cases it was impossible to ascertain. 32 fathers made no contribution and in one case the parents had since married. 37 of the babies were being brought up by their mothers and 32 principally by grandmothers, 7 by other relatives, 3 children were adopted, 2 went into institutions and one was a nurse child.

## Expectant Mothers.

During 1935 there were 1,689 visits and revisits paid to expectant mothers. The following interesting points have been noted in 303 of the cases visited during 1935 (babies being born during 1935).

Those in good health 69%

Those in fair health 23%

Those in poor health 8%

(In all 12% were advised to seek medical advice including 5 women on account of passing a scanty amount of urine).

15% suffered from constipation.

47% had caries of the teeth.

6% had artificial dentures.

86% normal babies (of these 84% were breast fed during first month—16% artificially fed).

8% not robust.

6% miscarriage, stillbirth or died during first month.



### **Maternal Mortality (Per 1,000 live and stillbirths).**

The maternal mortality rate for 1935 was 3.98, being 1.49 from puerperal sepsis and 2.49 from other causes.

### **Maternity and Child Welfare Centres.**

During 1935 a new Centre was opened at Alsager; this is held every other Tuesday. As in the other County Child Welfare Centres a local doctor takes the consultations.

There are now 38 centres in the County Area under the County Maternity and Child Welfare Committee and one Voluntary Centre. The latter Centre is held fortnightly at Utkinton Village Institute and is maintained by one lady. This Centre is well attended by mothers and children from this village and all the surrounding villages and is much appreciated by these mothers. At each of the County Child Welfare Centres the Health Visitor has the Assistance of a Voluntary Committee. The members of these Committees are most helpful and keen on the duties allotted to them. Their continued faithful service cannot be too highly commended.

### **Cheshire Gold Cross Society.**

During 1935 the Cheshire Gold Cross Society met three times in Chester. As explained previously the object of this Society is to bring together the voluntary workers of the various County Child Welfare Centres to discuss difficulties arising in the work of the Centres, and to exchange ideas, etc. The Annual Meeting was held at the Castle, Chester, in June, 1935. At this meeting the work of the Competitions was on view, and the shields and pictures won were presented by Mrs. Baty to representatives of the successful Centres.

### **Tonsils, Adenoids and Ear Disease.**

During 1935 a number of children under 5 years of age have had operations for enlarged tonsils and adenoids.

Several young children suffering from discharging ears have been referred by their own doctor to the School Clinics for treatment.

### **Dental Treatment (Expectant Mothers and Children under 5 years of age).**

By arrangement with the Education Committee this work is undertaken by 8 school dentists. The Maternity and Child Welfare Committee pay the cost of one dentist and one nurse. The following is a summary of the work carried out:—



Number of mothers inspected ... ..	114
Number of children inspected ... ..	296
Number of mothers treated ... ..	93
Number of children treated ... ..	282
Number of temporary teeth extracted ... ..	528
Number of permanent teeth extracted ... ..	312
Number of temporary teeth filled ... ..	97
Number of permanent teeth filled ... ..	12
Other operations:—	
(1) Temporary teeth ... ..	32
(2) Permanent teeth ... ..	11

### Free Milk Supplied.

During 1935, 1077 expectant mothers, nursing mothers, and babies have received free milk through the County's Scheme for supplying free milk in necessitous cases. A pint of milk per day or a tin of dried milk per week, has been supplied for varying periods of time, depending on the circumstances of the cases.

There is still a great demand for this allowance of free milk. With so many unemployed fathers throughout the county there is little likelihood of reducing the number who require this assistance. Often it is felt that the scale of income per head on which the grant is based might be a more generous one.

### Maternity Hospitals and Homes.

During 1935 there have been 116 mothers who through the help of the County Maternity and Child Welfare Committee have had their confinements in a Maternity Hospital or Home. Only mothers who lack accommodation in their homes, or in whose confinement some difficulty is anticipated, have been eligible for this assistance.

The parents contribute to the cost as much as their circumstances will allow—usually if they are entitled to a maternity benefit this amount is claimed.

The confinements have taken place in the following Institutions:—

	Cases.
Liverpool Maternity Home ... ..	8
Clatterbridge Maternity Home ... ..	2
Crewe Maternity Home ... ..	17
Warrington Maternity Home ... ..	10
Widnes Maternity Home ... ..	8
Hyde Maternity Home ... ..	5



Ashton-under-Lyne Infirmary ... ..	25
Warrington General Infirmary ... ..	4
Longton Infirmary ... ..	9
Sale War Memorial Hospital ... ..	21
Chester Maternity Home ... ..	5
West Park Home, Macclesfield ... ..	2

### Infant Life Protection—Notification.

Number of Foster Parents on the Register ... ..	113
Number of Children on the Register ... ..	136

During 1935 the above 136 children have been regularly visited by the Health Visitor within whose area the Foster Mothers live. Only a few of the Foster Mothers have more than one nurse child.

Many of the mothers of these children are quite unable to pay the foster-mothers a sufficiency for their children's keep. Ten shillings per week is the maximum offered, and many receive less. This allows very little reward to a good foster-mother for all her care and attention: in spite of this, on the whole, the children are well looked after. There has been no case in which it was found necessary to take proceedings.

### Ante-Natal Clinics.

There are four Ante-natal Clinics in the County Area. One of these (Runcorn) has fortnightly sessions, and the other three have monthly sessions. Each of the Clinics is in charge of a specialist.

At all the Clinics the midwives are encouraged to attend with their patients, and be present at the examinations.

	Number of Sessions.	Number of Expectant Mothers.	Number of Attendances.
Congleton ...	12	41	75
Hoole ... ..	12	46	72
Runcorn ...	24	211	734
Sale ... ..	12	92	279

At Dukinfield, there is an arrangement that expectant mothers may attend the Ante-natal Clinic run in connection with the Ashton-under-Lyne Infirmary. Sixteen cases attended during 1935.

As an example of the work carried out at the Ante-natal Clinics the following report is submitted:—

## REPORT OF RUNCORN ANTE-NATAL CLINIC FOR 1935.

Total Clinics ... ..	24
New patients ... ..	252
Revisits ... ..	523
	<hr/>
Total attendances ... ..	775
	<hr/>

(Including 38 patients from the 1934 Register).

*Delivered at home—*

Normal vertex ... ..	139
Normal breech ... ..	3
Medicinal induction ... ..	2
Forceps ... ..	10
	<hr/>

(Including one set of twins). 154

*Delivered in the Liverpool Maternity Hospital—*

## Caesarean Section—

Disproportion ... ..	4
Heart disease ... ..	1
Bad obstetric history ... ..	2
	<hr/>
	7
Toxæmia of pregnancy ... ..	3
Anæmia of pregnancy ... ..	2
	<hr/>
	5
	<hr/>
Total ...	12
	<hr/>

<i>Total births</i> ... ..	166
Abortions ... ..	5
Not pregnant ... ..	41
Remaining undelivered ... ..	40
	<hr/>

Total ... 252

<i>Maternal Deaths</i> ... ..	0
(No mother died).	

*Still-births—*

Intra-natal death ... ..	3
Intra-uterine death ... ..	4
Malformations ... ..	2
	<hr/>
	9

*Neo-natal Deaths—*

Prematurity ... ..	3
--------------------	---

Total still-births and neo-natal deaths—12.



Ratio of still-births and neo-natal deaths to total births—7.2 %.

External version of breech presentation was attempted as a routine in all cases seen in the last five weeks before term. Six cases of mild toxæmia were treated at home, the severe cases being admitted to the Liverpool Maternity Hospital.

The Clinic has functioned satisfactorily throughout the year. Mainly through the co-operation of the doctors and midwives a fairly complete integration of both ante-natal and intra-natal work has been attained.

PERCY MALPAS, F.R.C.S.

The Ante-natal Scheme came into force in 1933 whereby the expectant mother can be examined twice during her pregnancy by her own doctor, who sends a full report of these examinations to the County Medical Officer of Health. The doctor receives for his reports 10/6d. and 2/6d. for non-insured and insured cases respectively.

Particulars of Reports received during 1935:—

905 cases examined (child born 1935).

256 insured: 649 not insured.

392 primiparæ, 513 multiparæ.

655 natural deliveries; 175 forceps deliveries; 20 premature births; 8 miscarriages. Induction at home 5; Induction in hospital 8; 7 Cæsarean; 15 sent to hospital, particulars not known; 12 not traced.

59 cases reported trace of albumen.

33 cases reported albuminuria.

6 cases reported sugar in urine.

8 cases reported pus in urine.

179 cases reported with caries of teeth.

28 cases reported with pyorrhœa.

5 cases reported with placenta prævia.

13 cases reported antepartum hemorrhage.

17 cases reported post-partum hemorrhage.

23 cases reported stillbirths.

28 cases reported sent to hospital.

18 cases reported some contraction of pelvis.

7 cases reported suffering from pyelitis.

There were 9 sets of twins in above, ten cases were found to be suffering from Bronchitis, one from Tuberculosis of the lungs, 9 from cardiac disease, 9 cases from goitre, and one mother died from Peritonitis. Fourteen of the above cases were seen by a specialist and 23 were X-Rayed.

## LIST OF INFANT WELFARE CENTRES.

Centres.	Weekly or Fortnightly.	Day of Centre.	Consultations held.	Average Attendances.	New Cases.	Total Attendances.
Alsager ...	Fortnightly	Tuesday	269	20	65	395
Bollington ...	Fortnightly	Thursday	460	41	36	985
Bowdon ...	Fortnightly	Thursday	358	19	19	490
Bredbury ...	Weekly	Tuesday	1240	45	114	2059
Headle ...	Fortnightly	Tuesday	596	50	74	1350
Headle Hulme ...	Fortnightly	Tuesday	595	54	68	1370
Compstall ...	Fortnightly	Thursday	526	29	34	731
Congleton ...	Weekly	Monday	1582	38	107	1848
Crisley ...	Fortnightly	Tuesday	500	24	38	632
Crookfield ...	Twice weekly	Wednesday & Thursday	2100	70	206	6881
Crookhall ...	Fortnightly	Monday	388	28	36	672
Crook Grove ...	Weekly	Thursday	983	56	90	2683
Crookwall ...	Fortnightly	Monday	355	35	65	846
Crookworth ...	Fortnightly	Wednesday	307	28	32	706
Crookle ...	Weekly	Tuesday	905	44	147	2080
Crooklake ...	Weekly	Thursday	853	58	104	2862
Crooklym ...	Weekly	Tuesday	1073	47	64	2241
Crookpas ...	Fortnightly	Tuesday	405	16	21	421
Crookple ...	Fortnightly	Tuesday	755	47	62	1179
Crookwich ...	Weekly	Monday	1217	33	58	1528
Crook Cop ...	Fortnightly	Wednesday	296	14	20	330
Crookwich ...	Twice weekly	Monday & Thursday	507	30	107	2641
Crookton ...	Weekly	Thursday	603	65	90	3138
Crookwich (Rural) ...	Weekly	Thursday	862	48	154	2409
Crookwich (Urban) ...	Weekly	Tuesday	829	44	184	2264
Crookington ...	Fortnightly	Thursday	284	17	7	422
Crookton ...	Fortnightly	Thursday	474	37	51	928
Crookmiley ...	Fortnightly	Thursday	748	54	32	1355
Crookcorn ...	Twice weekly	Tuesday & Wednesday	1856	50	256	4634
Crookle ...	Twice weekly	Monday & Thursday	2685	56	318	5393
Crookbach ...	Weekly	Thursday	1704	48	101	2415
Crookton Heath ...	Fortnightly	Monday	757	46	71	1260
Crookporley ...	Fortnightly	Thursday	201	10	19	220
Crookinton ...	Fortnightly	Thursday	461	17	7	437
Crookaverham ...	Fortnightly	Tuesday	427	33	47	869
Crookley Bridge ...	Fortnightly	Wednesday	620	52	53	1315
Crookslow ...	Weekly	Tuesday	857	37	61	1900
Crookford ...	Weekly	Friday	1082	21	77	1050



### **Artificial Sunlight Treatment.**

During 1935 there have been 31 non-tuberculosis patients under 5 years of age who have received artificial sunlight treatment at various centres. These cases have made a total attendance of 371 during the year.

### **Orthopaedic Scheme.**

The Orthopaedic Scheme, particulars of which will be found in another section of this Report, includes treatment for all orthopaedic conditions occurring in children under 5 years of age. During 1935 there were 2,991 attendances of 369 patients (non-tuberculous) at the clinics, and 24 cases received institutional treatment.

### **Institutional Treatment.**

Seventy six children received institutional treatment during 1935—47 boys and 29 girls. Of these 24 were orthopaedic cases, and 52 medical and surgical cases.

The following tables show in detail the hospitals and clinics where treatment was carried out, and the conditions from which the children were suffering:—

TABLE SHOWING INSTITUTIONAL TREATMENT AFFORDED TO CHILDREN UNDER THE COUNTY MATERNITY AND CHILD WELFARE SCHEME DURING THE YEAR 1935.

		Ortho- paedic Hospital, Hartshill.	Liverpool Open-Air Hospital for Children, Leasowe.	Robert Jones and Agnes Hunt Ortho- paedic Hospital, Oswestry.	Royal Liverpool Children's Hospital, Myrtle Street, Liverpool.	Royal Liverpool Children's Hospital, Heswall.	West Kirby Conval- escent Home.	Hoylake Babies' Hospital.	Total.
	Boys .. ..	5	9	1	1	3	2	26	47
	Girls .. ..	5	4	3	..	1	1	15	29
Orthopaedic	Congenital dislocation hips ..	2	1	1	..	..	..	..	4
	Flat Feet .. ..	..	1	..	..	..	..	..	1
	Genu Valgum .. ..	2	1	..	..	..	..	..	3
	Kyphosis .. ..	2	..	..	..	..	..	..	2
	Knock Knees .. ..	1	..	..	..	..	..	..	1
	Polioencephalomyelitis ..	1	..	..	..	..	..	..	1
	Other Forms Paralysis ..	..	1	..	..	..	..	..	1
	Rickets .. ..	..	1	1	..	..	..	4	6
	Spina Bifida .. ..	..	1	..	..	..	..	..	1
	Talipes .. ..	1	1	..	..	..	..	..	2
	Torticollis .. ..	..	..	1	..	..	..	..	1
Various Medical and Surgical	Other deformities (hands) ..	..	..	1	..	..	..	..	1
	Other deformities (legs) ..	1	..	..	..	..	..	..	1
	Anaemia .. ..	..	..	..	..	1	..	1	2
	Bronchitis .. ..	..	2	..	..	..	..	2	4
	Cleft Palate .. ..	..	..	..	1	..	..	..	1
	Colitis .. ..	..	..	..	..	..	1	..	1
	Convulsions .. ..	..	..	..	..	..	..	2	2
	Dilation of Colon .. ..	..	..	..	..	..	..	1	1
	Eczema, etc. .. ..	..	..	..	..	..	..	2	2
	General Debility .. ..	..	1	..	..	2	1	10	14
	Hernia .. ..	..	..	..	..	1	..	..	1
	Malnutrition .. ..	..	1	..	..	..	..	7	8
	Marasmus .. ..	..	..	..	..	..	..	10	10
	Mastoid .. ..	..	..	..	..	..	1	..	1
	Pneumonia .. ..	..	..	..	..	..	..	1	1
	Premature Birth .. ..	..	2	..	..	..	..	1	3





## Section VII.

### County Veterinary Service.

(By A. B. KERR, M.R.C.V.S., D.V.S.M.)

---

#### INTRODUCTION.

The year 1935 was specially notable, marking as it did the inauguration of the Milk Marketing Board Accredited Scheme which came into operation on May 1st. Such was the response of Cheshire farmers to this scheme that an extension of the County's Veterinary Service was found to be essential and by the end of the year the County Council's whole time Veterinary Staff numbered eleven. A layman was also appointed for the purpose of collecting milk samples taken by the Veterinary Officers.

The pressure of work resulting from the enormously increased demand for Grade "A" licences led to some interference with the normal routine inspection of farms which had been established in the County, but with the augmented staff a resumption of that duty has now been made.

An outbreak of Foot and Mouth Disease at Adlington in the month of November also prevented routine inspection of stock in that area for several weeks, but fortunately there was no extension of the outbreak, and inspection of the herds in the district has now been resumed. It is already obvious that the accredited scheme of the Milk Marketing Board has led to a notable improvement both in the structural conditions of cowsheds and in the methods of clean milk production, but it is emphasised that the requirements demanded of producers of Grade "A" milk are practically those which should exist on any farm where milk is produced for human consumption, and merely represent the first step in a scheme which ultimately it is hoped will lead to a completely pure milk supply.

During the year Mr. McKee, M.R.C.V.S., D.V.S.M., and Mr. Taylor, M.R.C.V.S., were appointed Chief Veterinary Officers to Shropshire and Gloucestershire County Councils respectively.



## DISTRICTS OF VETERINARY OFFICERS.

---

### District No. 1.

Veterinary Officer—

Mr. E. A. Comer,  
7, Park Road West,  
Curzon Park,  
Chester.

(Telephone No. Chester 1578).

Bebington Urban.

Ellesmere Port Urban (except Ince).

Hoylake Urban.

Hoole Urban.

Neston Urban.

Wirral Urban.

Chester Rural—the following parishes:—Blacon, Bache, Backford, Croughton, Chorlton, Caughall, Capenhurst, Great Saughall, Hoole Village, Little Stanney, Little Saughall, Lea, Mollington, Moston, Mickle Trafford, Newton-by-Chester, Picton, Shotwick, Stoke, Upton, Woodbank, Wervin.

### District No. 2.

Veterinary Officer—

Mr. C. A. Stewart,  
The Cottage,  
Ashton,  
Near Chester.

(Telephone No. Kelsall 51).

Chester Rural—the following parishes:—Claverton, Christleton, Dodleston, Eaton, Eccleston, Kinnerton, Littleton, Marlston-cum-Lache, Pulford, Poulton.

Tarvin Rural—the following parishes:—Ashton, Barrow, Bruen Stapleford, Burton-by-Tarvin, Buerton, Cotton Edmunds, Clotton Hoofield, Churton Heath, Duddon, Foulk Stapleford, Guilden Sutton, Golborne David, Golborne Bellow, Hockenhull, Huntington, Horton-cum-Peele, Hatton, Huxley, Iddenshall, Kelsall, Lea Newbold, Mouldsworth, Newton-by-Tattenhall, Rowton, Saughton, Tarvin, Tiverton, Willington, Waverton.

Tarporley Urban.

**District No. 3.**

eterinary Officer—

Mr. J. D. Macbeth,  
The Laurels,  
Tattenhall,  
Near Chester.

(Telephone No. Tattenhall 10).

Malpas Rural.

Nantwich Rural—the following parishes:—Bulkeley, Bickerton, Cholmondeley, Egerton, Peckforton, Ridley.

Tarvin Rural—the following parishes—Aldford, Aldersey, Beeston, Burwardsley, Broxton, Barton, Churton-by-Aldford, Chowley, Churton-by-Farndon, Coddington, Clutton, Carden, Caldecott, Crewe-by-Farndon, Church Shocklach, Edgerley, Farndon, Grafton, Handley, Hart-hill, Horton-by-Malpas, King's Marsh, Stretton, Shocklach Oviatt, Tattenhall, Tilston.

**District No. 4.**

eterinary Officer—

Mr. E. A. Pearce,  
The Lodge,  
Frodsham.

(Telephone Frodsham 229).

Runcorn Rural.

Chester Rural—the following parishes:—Elton, Thornton-le-Moors, Hapsford, Wimbolds Trafford, Dunham-on-the-Hill.

Ellesmere Port—Ince.

**District No. 5.**

eterinary Officer—

Mr. J. H. Patterson,  
Lidgate House,  
Swanlow Lane,  
Winsford.

(Telephone No. Winsford 2345).

Northwich Urban.

Northwich Rural.

Middlewich Urban.

Winsford Urban.



**District No. 6.**

Veterinary Officer—

Mr. J. Lyon,  
Tregowris,  
Broughton Lane,  
Wistaston,  
Crewe.

(Telephone No. Crewe 2358).

Crewe Borough.

Nantwich Rural—the following parishes:—Alraham, Aston-juxtra-Mondrum, Basford, Barthomley, Bunbury, Brindley, Church Minshull, Calveley, Cholmondeston, Church Coppenhall, Haslington, Haughton, Hurleston, Leighton, Minshull Vernon, Poole, Rope, Shavington, Spurstow, Stoke, Wettenhall, Warmingham, Woolstanwood, Wistaston, Willaston, Weston, Wardle, Worleston.

Tarvin Rural—the following parish:—Tilstone Fearnall.

**District No. 7.**

Veterinary Officer—

Mr. T. D. Lloyd-Jones,  
Chestnut House,  
Shavington,  
Crewe.

(Telephone No. Willaston 7158).

Nantwich Urban.

Nantwich Rural—the following parishes:—Acton, Austerson, Audlem, Burland, Baddiley, Baddington, Broomhall, Batherton, Buerton, Blakenhall, Bridgemere, Chorley, Coole Pilate, Checkley-cum-Wrinehill, Dodcott-cum-Wilkesley, Doddington, Edleston, Faddiley, Henhull, Hankelow, Hatherton, Hunsterson, Hough, Newhall, Sound, Stapeley, Wrenbury-cum-Frith, Wybunbury, Walgherton, Woodcott.

**District No. 8.**

Veterinary Officer—

Mr. A. L. Mullen,  
St. Jude's,  
Wellington Road,  
Timperley.

(Telephone No. Altrincham 1172).

Altrincham Urban.

Bucklow Rural.

Bowdon Urban.

Bredbury and Romiley Urban.

**District No. 8—Continued.**

Cheadle and Gatley Urban.  
 Compstall Urban.  
 Dukinfield Borough.  
 Disley Rural.  
 Hale Urban.  
 Hazel Grove and Bramhall Urban.  
 Hyde Borough.  
 Hollingworth Urban.  
 Knutsford Urban.  
 Lymm Urban.  
 Marple Urban.  
 Mottram Urban.  
 Sale Borough.  
 Stalybridge Borough.  
 Tintwistle Rural.  
 Yeardsley-cum-Whaley Urban.

**District No. 9.**

Veterinary Officer—

Mr. B. Brown,  
 Ashlea,  
 Middlewich Road,  
 Sandbach.

(Telephone No. Sandbach 221).

Alsager Urban.  
 Buglawton Urban.  
 Congleton.  
 Congleton Rural.  
 Congleton Borough.  
 Sandbach Urban.

**District No. 10.**

Veterinary Officer—

Mr. J. B. Garside,  
 The Kraal,  
 Knutsford Road,  
 Wilmslow.

(Telephone No. Wilmslow 68).

Alderley Edge Urban.  
 Bollington Urban.  
 Handforth Urban.  
 Macclesfield Rural.  
 Macclesfield Borough.  
 Wilmslow Urban.



## EVOLUTION OF THE COUNTY VETERINARY SERVICE.

It may be well at this point to outline briefly the policy adopted by the Cheshire County Council with regard to the issue of Grade "A" Licences, and also to give some account of the evolution of the Veterinary Service, for it was this service which was chosen to operate the Milk Marketing Board's Accredited Scheme, almost in its entirety. The fact that this recently appointed service was able to cope with the unprecedented and practically simultaneous demand for Grade "A" Licences, was extremely satisfactory; and now that Cheshire has considerably more producers of Grade "A" milk than has any other county in England, one can confidently maintain that the steps taken in this county have resulted in a very considerable improvement in its milk supply, in a remarkably short period of time.

The responsibilities of County Councils in connection with the administration of the Diseases of Animals Acts and Orders and the Milk and Dairies Acts and Orders are varied and important; moreover, they have recently been emphasised and increased by the introduction of the Milk Marketing Board's "Accredited Scheme."

In this County of Cheshire alone, approximately 2,050 farmers have been granted licences to produce Grade "A" milk since April of last year.

The supervision of these Grade "A" farms, the quarterly examinations of the milk stock, and the very considerable associated administrative duties, make it essential that some carefully planned organisation is available which can efficiently and economically deal with such work.

Fortunately the Cheshire County Council had set up a Milk and Dairies Committee, whose function it was to discharge the responsibilities of the County Council in connection with the Milk and Dairies Act. The Committee, which is a statutory one reporting directly to the County Council, first met in December, 1925, and it can be fairly claimed that the detailed attention which the Committee has been able to give to its deliberations has led to the adoption of a progressive and far-sighted policy.

In Cheshire it has been found that a whole time Veterinary Service working in the County Public Health Department can very conveniently discharge duties imposed upon County Councils in the aforementioned legislation. In order to support this submission, it may be well to give a short account of the evolution of a whole time Veterinary Service in this County.



In the year 1931, Cheshire County Council on the recommendation of the Milk and Dairies Committee decided to appoint one whole time Veterinary Officer whose duty it was to supervise and co-ordinate the work of the 21 part time Veterinary Officers employed by the County. These latter Officials carried out all veterinary duties in connection with the Diseases of Animals Acts and Orders and also made inspections of herds under Section 4 of the Milk and Dairies (Consolidation) Act of 1915.

It soon became evident that the amount paid in fees to part time Veterinary Officers was more than sufficient to establish a whole time Veterinary Service, and accordingly, in 1933, five Assistant Veterinary Officers were appointed.

These Officers performed all the veterinary work under the Tuberculosis Order and carried out all the veterinary duties associated with the Milk and Dairies Acts and Orders. Routine inspection of all dairy herds in the County was inaugurated and at the end of one year it was found that the whole time Veterinary Officers had examined rather more than ten times the number of cows than had the part time Officers in any previous year. A considerable number of cows giving tuberculous milk were detected and eliminated, complaints under section 4 of the Consolidation Act were reduced in number, and a notable improvement in the methods of milk production was effected.

Finally, the cost of the whole time Service was found to be less than the part time by £1,250 per annum.

After the Milk Marketing Board's Accredited Scheme was launched in May, 1935, it was decided by the County Council that the whole time Veterinary Officers should be responsible, not only for the quarterly examination of the cows on Grade "A" farms, but also for the supervision of the construction, hygienic conditions, etc., of cowsheds and dairies and the collection of all necessary milk samples.

After the first few months of the scheme's operation it became obvious that an extension of the Veterinary service was urgently required and the number of Veterinary Officers has now been increased by five, so bringing the staff up to eleven (one County Veterinary Officer and ten Assistant Veterinary Officers).

In addition a layman has been appointed for the collection of milk samples. This collector visits the various Veterinary Officers each day and receives from them any milk samples which they have taken. These samples he brings back to the laboratory for bacteriological examination.

The cost of this extended service is almost covered by the amount received in Grade "A" Licence fees—£2,100 per annum.



The purely administrative duties are supervised by the County Medical Officer's Superintendent Clerk, and the success which has followed the efforts made appears to be due to the establishment of a whole time Veterinary Service working in association with a Department experienced in the organisation and administration of many analogous schemes.

In order to lighten the duties of the Veterinary Officers and also to make use of valuable advisory facilities, all potential and established holders of Grade "A" Licences whose milk samples may from time to time fail to conform with the standards laid down are referred to the County Agricultural Organiser, who arranges that advice on clean milk production is at once available for them.

Finally, all sanitary authorities in the administrative area are notified regularly regarding Grade "A" Licences issued to farmers in their respective areas. There seems little doubt that Veterinary Officers are by reason of their training most fitted for carrying out all the executive work, for in addition to their knowledge of purely Veterinary matters, they have received adequate training in the construction of farm premises and the technique of clean milk production. Moreover, from their close association with Agriculturists, they have the advantage of being able to appreciate the various difficulties which at times confront farmers and explain to them the most practical manner of dealing with them.

After this brief outline of the policy in Cheshire it may be advisable to show in rather more detail the steps which led to its adoption.

With the launching of the accredited scheme came the necessity of reviewing the conditions applicable to the granting of Grade "A" Licence and the determining of what in the opinion of the Milk and Dairies Committee was the most suitable way of ensuring the scheme's success. Firstly, it was appreciated that the scheme was a national one and that uniformity in procedure by Local Authorities was highly desirable. Secondly, it was recognised that here was the beginning of the solution of a major social problem, one so vast indeed that its complete solution could only come about by a series of progressive steps. The Committee therefore decided that any measures they should recommend would be of such a nature that agriculturists could be expected to adopt them whole-heartedly, but measures nevertheless which would undeniably indicate substantial progress.

It was obvious that in the production of Grade "A" milk the personal factor was by far the most important one, enabling many farmers to produce clean milk in unsuitable surroundings but it was also fully realised that to ensure the production of clean milk on a large scale suitable premises were essential. The Committee therefore decided that the premises of applicants for Grade "A"



Licences must conform with the requirements laid down in the Milk and Dairies Order, 1926. Unfortunately the interpretation of this Order by various Local Authorities seems to vary widely, with the result that throughout the country there is a lack of uniformity in its application. In this County the policy has been one of moderation; the essentials of the Order have been demanded on every Grade "A" farm, but no rigorous standard has been set up. In brief, on every Grade "A" farm in Cheshire the following conditions must be fulfilled.

Cowshed floors and channels must be impervious, i.e., concrete or good blue bricks set in cement. Lighting and ventilation must be adequate; by that is meant that in any part of a cowshed in hours of daylight newspaper print may be easily read and that the foul air is replaced by fresh air with a frequency which prevents closeness and humidity inside the building. Manure dumps must be away from the cowshed doors and at least ten yards from the building. The approaches to the sheds must be kept reasonably clean. An ample water supply is required for swilling down the sheds. The channels must discharge into suitably trapped drains outside the building. Cows, milking stools, and other utensils must be kept clean. Long hairs on udders and flanks must be clipped. Dairies must be well lighted and ventilated. Floors and walls be smooth and impervious. There may be no inlet to a drain inside the building. Dairies must not communicate directly with the cowsheds, bedroom, scullery or privy, etcetera. Steam sterilization of dairy utensils is strongly advised and practically universally adopted on the larger farms. On small holdings however sterilization of utensils with boiling water has proved satisfactory.

It will be seen that no hard and fast standard has been laid down with regard to available air space of cowshed, the size of air inlets and outlets, the amount of window space in square feet, etc., etc., for it was appreciated that in many existing buildings especially in those of older type it was impossible to obtain conditions found in modern cowsheds.

Yet even these older cowsheds can practically always be improved to such an extent that their conditions meet the requirements of the Order.

It was emphasised that the official responsible for the inspection of farm premises should have practical as well as technical knowledge of farm stock, of clean milk production, and the construction of farm premises.

Having reached the decision regarding the conditions to be observed on Grade "A" farms, the attention of the Committee was directed to the manner in which the necessary milk samples should



be taken and finally it was decided that each of the district veterinary Officers should be provided with a refrigerator and that a layman should be appointed whose duty was the collection of all milk samples for bacterial count taken by the Veterinary Staff. These samples are taken by the Veterinary Officers around milking times. The samples taken in the afternoon from 4 to 6 p.m. are brought home and stored in the refrigerators at a temperature of about 3° above freezing point. Morning samples are taken from about 6-30—8 a.m. and are placed in the refrigerators along with the over-night samples. During the day these samples are collected and brought into the laboratory of the Royal Infirmary, Chester, where the bacterial counts are carried out. Apart from the storage of the sample in the refrigerators no means are taken to keep the milk at a reduced temperature.

The Committee's next important recommendation was that apart from the annual licence fee farmers should not be asked to contribute to the cost of the service. Lastly, as has been indicated, the inspection of premises, the examination of cows, and the taking of the necessary milk samples was placed in the hands of the County Veterinary Staff.

### THE TUBERCULOSIS ORDER OF 1925.

The main purpose of this Order is the destruction of cattle suffering from the following Tuberculous conditions:—

1. Tuberculosis of the udder.
2. Giving tuberculous milk.
3. Chronic cough and definite clinical symptoms of tuberculosis.
4. Tuberculous emaciation.

The Order is worked in conjunction with Part IV of the Milk and Dairies Order and ensures the speedy removal and slaughter of animals which are found on routine inspection to come within its scope.

The following figures indicate the work done under the Order for the year 1935.

Premises on which the disease was reported or otherwise suspected ... ..	1,291
Premises on which the disease was found to exist ... ..	1,161
Premises on which the disease was found not to exist ... ..	130
Number of cattle slaughtered by Local Authority—	
(a) Cows in milk ... ..	956
(b) Other cows or heifers ... ..	300
(c) Other bovine animals ... ..	2
	1,258
Number of cattle on premises visited ... ..	70,057
Number of cattle clinically examined ... ..	20,970



Diseased animals found to be suffering from—

(a) Advanced Tuberculosis ... ..	907	
(b) Not advanced Tuberculosis ... ..	348	
(c) No tuberculous infection ... ..	3	
	—	1,258

Number of affected animals suffering from—

(a) Tuberculosis of the udder and/or giving tuberculous milk ... ..	529	
(b) Chronic cough, etc ... ..	265	
(c) Tuberculous emaciation ... ..	461	
	—	1,255

	£	s.	d.
Total agreed value of cattle slaughtered ... ..	10,231	15	0
Total amount of compensation paid to owners ... ..	4,948	2	6
Average valuation per head ... ..	8	2	8
Average compensation received by owner ... ..	3	18	8
Salvage obtained from carcasses after deduction of expenses for the purpose of salvage ... ..	1,107	11	6

Number of cattle dealt with and by whom reported—

(a) Owners ... ..	630	
(b) Veterinary Practitioners ... ..	21	
(c) Detected by County Veterinary Officers ... ..	620	
	—	*1,271

\*Thirteen of these animals died before investigations could be completed.

### COMPARATIVE TABLE.

Year.	No. of cows slaughtered under Tuberculosis Order.	Remarks.
1933	2023	No routine inspection in operation.
1934	1401	1st year of routine inspection.
1935	1258	2nd year of routine inspection.

Arrangements for the slaughter and disposal of animals remain unchanged.

Analysis of the statistics reveals two satisfactory features, firstly the large number of cows detected and slaughtered, which had suffered from tuberculosis of the udder and whose milk was definitely dangerous, and secondly, the reduction in number of cows suffering from Tuberculous Emaciation. These findings were anticipated in the annual report of last year, and it is hoped that cases of Tuberculous Emaciation will continue to steadily decrease in number. A decrease in the number of udder cases however



cannot be expected at the present time, for with efficient inspection it is evident that the number of tuberculous udders detected varies little from year to year.

It is fully realized that the foregoing figures do not form a reliable index of the disease in the county, as it is certain that many badly affected animals are sent direct to the knacker by their owners, despite the fact that such action is strongly discouraged by the members of the veterinary staff.

The general administration of the Order has been carried out without any difficulty. No owner has refused to have his animal slaughtered, and in every case the valuation of the animal has been amicably arranged. In three cases it was impossible to demonstrate tuberculosis on post-mortem examination and the respective owners were paid the agreed valuation plus £1 as required by the Order. Two of these animals were found to have suffered from a non-tuberculous pneumonia, and the other from emphysema of the lungs.

The practice of advising owners to attend the post-mortem examination of their animals has been continued, and the veterinary officers have made every endeavour to arrange these examinations to suit the convenience of these owners. Many farmers have taken advantage of this arrangement and it is felt that they have been impressed by the scrupulously fair and impartial manner in which such examinations are conducted.

Unfortunately many instances of apparent hardship do occur in connection with this Order. For example, a recently purchased cow may be found to be giving tuberculous milk, and on post-mortem examination the disease may be found to be advanced, in which case the amount paid in compensation to the owner is only one quarter of the agreed valuation. Such losses are especially serious among the smaller, less prosperous class of stock owners, and the suggestion is again made that some scheme of insurance might be evolved to mitigate, at least to some extent, these unfortunate losses.

The majority of animals reported under the Tuberculosis Order which on examination did not come within its scope were found to be suffering from Jöhne's Disease, but fewer cases were observed than in the previous year, and it seems certain that the protection of water and food supplies from infection is being more generally observed by the farming community. Such practical measures are within the power of practically all stockowners and their universal application would lead to a very rapid decrease in the incidence of the disease.



## THE TUBERCULOSIS ORDER OF 1925.

List of Parishes, etc., and Cases dealt with therein.

Year ended 31st December, 1935.

Acton .. .. .	7	Burton, Wirral .. .. .	2
Adlington .. .. .	8	Butley .. .. .	1
Agden (Knutsford) .. .. .	2	Burwardsley .. .. .	4
Agden (Malpas) .. .. .	1	Byley .. .. .	3
Aldersey .. .. .	3	Basford .. .. .	2
Aldford .. .. .	2	Blackden .. .. .	5
Alderley, Nether .. .. .	3	Calveley .. .. .	5
Alderley Edge .. .. .	2	Capenhurst .. .. .	4
Alderley, Over .. .. .	1	Carden .. .. .	4
Allostock .. .. .	1	Caughall .. .. .	4
Alraham .. .. .	3	Chorlton .. .. .	1
Alsager .. .. .	3	Christleton .. .. .	3
Alvanley .. .. .	6	Clutton .. .. .	4
Anderton .. .. .	2	Coddington .. .. .	4
Antrobus .. .. .	2	Cotton Edmunds .. .. .	1
Appleton .. .. .	1	Crewe-by-Farndon .. .. .	1
Ashley .. .. .	4	Cuddington, Tattenhall .. .. .	2
Aston-by-Budworth .. .. .	8	Crewe .. .. .	4
Audlem .. .. .	9	Clotton Hoofield .. .. .	9
Austerson .. .. .	3	Crowton .. .. .	3
Baddington .. .. .	4	Cuddington, Northwich .. .. .	7
Backford .. .. .	5	Checkley .. .. .	5
Baddiley .. .. .	3	Chelford .. .. .	2
Barnston .. .. .	2	Cholmondeley .. .. .	6
Barrow .. .. .	10	Caldy .. .. .	1
Batherton .. .. .	1	Cholmondeston .. .. .	5
Barthomley .. .. .	8	Chorley .. .. .	6
Bartington .. .. .	1	Chorlton .. .. .	4
Boughton, Great .. .. .	1	Church Coppenhall .. .. .	4
Bredbury .. .. .	1	Church Hulme .. .. .	1
Bradwall .. .. .	8	Church Lawton .. .. .	2
Brereton .. .. .	11	Church Minshull .. .. .	9
Bridgemere .. .. .	2	Churton-by-Aldford .. .. .	5
Brimstage .. .. .	3	Clive .. .. .	1
Brindley .. .. .	7	Cogshall .. .. .	2
Broomhall .. .. .	9	Croughton .. .. .	1
Bebington-cum-Bromborough .. .. .	6	Cranage .. .. .	1
Beeston .. .. .	3	Coole Pilate .. .. .	2
Bexton .. .. .	3	Cheadle .. .. .	4
Bechton .. .. .	6	Caldecott .. .. .	1
Bickerton .. .. .	1	Comberbach .. .. .	1
Bickley .. .. .	6	Crowley .. .. .	2
Blacon-cum-Crabwall .. .. .	2	Darnhall .. .. .	6
Blakenhall .. .. .	2	Delamere .. .. .	1
Bollington, Altrincham .. .. .	1	Disley .. .. .	1
Bollington, Macclesfield .. .. .	4	Dodcot-cum-Wilkesley .. .. .	4
Bosley .. .. .	5	Dodleston .. .. .	12
Bostock .. .. .	3	Duddon .. .. .	4
Broxton .. .. .	6	Dunham-o'th-Hill .. .. .	9
Budworth, Little .. .. .	19	Dutton .. .. .	1
Buerton .. .. .	15	Daresbury .. .. .	1
Buglawton .. .. .	6	Eastham .. .. .	5
Bulkeley .. .. .	3	Eaton-by-Congleton .. .. .	6
Bunbury .. .. .	3	Eaton-by-Tarporley .. .. .	14
Burland .. .. .	7	Eccleston .. .. .	4



Edge, Malpas .. ..	10	Leftwich .. ..	1
Edgerley .. ..	1	Leighton .. ..	7
Egerton .. ..	5	Little Leigh .. ..	3
Edlaston .. ..	4	Littleton .. ..	1
Elton .. ..	4	Lostock Gralam .. ..	1
Faddiley .. ..	8	Lyme Handley .. ..	3
Farndon .. ..	4	Lymm .. ..	3
Foulk Stapleford .. ..	1	Little Stanney .. ..	3
Frodsham .. ..	11	Lea-by-Backford .. ..	2
Frodsham Lordship .. ..	4	Macclesfield Forest .. ..	1
Frankby .. ..	1	Macefen .. ..	5
Fallibroome .. ..	1	Malpas .. ..	11
Gawsworth .. ..	12	Manley .. ..	5
Golborne Bellow .. ..	1	Marbury-cum-Quoisley .. ..	5
Goostrey .. ..	1	Marlston-cum-Lache .. ..	2
Grappenhall .. ..	3	Marthall .. ..	4
Guilden Sutton .. ..	1	Matley .. ..	2
Greasby .. ..	2	Marston .. ..	3
Hampton .. ..	5	Marton, Chelford .. ..	1
Handforth .. ..	2	Marton, Winsford .. ..	3
Handley .. ..	17	Mere .. ..	3
Hankelow .. ..	9	Mickle Trafford .. ..	4
Hapsford .. ..	1	Middlewich .. ..	1
Hartford .. ..	1	Minshull Vernon .. ..	14
Harthill .. ..	1	Mobberley .. ..	8
Haslington .. ..	8	Mollington .. ..	7
Hatherton .. ..	14	Mottram St. Andrew .. ..	3
Hattersley .. ..	2	Mouldsworth .. ..	7
Hatton .. ..	6	Moulton .. ..	1
Haughton .. ..	13	Millington .. ..	1
Hazel Grove-cum-Bramhall .. ..	1	Nantwich .. ..	9
Helsby .. ..	3	Ness .. ..	1
Henbury .. ..	3	Neston .. ..	6
Henhull .. ..	2	Newbold Astbury .. ..	3
High Legh .. ..	3	Newton-by-Frodsham .. ..	1
Hollingworth .. ..	3	Newhall .. ..	3
Hoole Village .. ..	4	Norley .. ..	4
Hooton .. ..	5	North Rode .. ..	4
Hough .. ..	2	Norton, Runcorn .. ..	1
Hoylake-cum-West Kirby .. ..	1	Oakmere .. ..	10
Hurleston .. ..	2	Odd Rode .. ..	7
Hunsterson .. ..	6	Oldcastle .. ..	1
Huntington .. ..	4	Ollerton .. ..	1
Hulme Walfield .. ..	1	Over .. ..	16
Hassall .. ..	1	Peckforton .. ..	1
Halton .. ..	1	Peover Inferior .. ..	3
Ince .. ..	6	Peover Superior .. ..	8
Irby .. ..	3	Picton .. ..	3
Iddinshall .. ..	2	Plumbley .. ..	2
Kelsall .. ..	8	Poole .. ..	4
Kermincham .. ..	1	Poulton .. ..	15
Kinderton .. ..	5	Pickmere .. ..	3
Kingswood .. ..	4	Poynton .. ..	6
Kingsley .. ..	4	Puddington .. ..	1
Kinnerton, Lower .. ..	3	Pulford .. ..	7
Knutsford .. ..	2	Preston-o'th-Hill .. ..	4
Kettleshulme .. ..	1	Prestbury .. ..	1
Lach Dennis .. ..	7	Raby .. ..	1
Ledsham .. ..	3	Rainow .. ..	6
Leese .. ..	1	Ridley .. ..	11



Rope .. .. .	1	Tilstone Fearnall .. ..	5
Rostherne .. .. .	3	Tiverton .. .. .	4
Rowton .. .. .	2	Toft .. .. .	1
Rudheath .. .. .	6	Tushingham-cum-Grindley	5
Rushton .. .. .	14	Twemlow .. .. .	1
Saighton .. .. .	2	Upton-by-Chester .. ..	4
Sandbach .. .. .	4	Upton, nr. Macclesfield ..	3
Saughall, Great .. ..	6	Utkinton .. .. .	10
Shavington .. .. .	7	Walgherton .. .. .	1
Shocklach Church .. ..	3	Wardle .. .. .	10
Shotwick .. .. .	3	Warford, Great .. .. .	2
Siddington .. .. .	5	Warmingham .. .. .	2
Smallwood .. .. .	1	Waverton .. .. .	4
Somerford .. .. .	2	Weaverham-cum-Milton ..	4
Somerford Booths .. ..	1	Wervin .. .. .	4
Sound .. .. .	5	Weston, Crewe .. .. .	2
Sproston .. .. .	4	Weston, Runcorn .. .. .	1
Spurstow .. .. .	9	Wettenhall .. .. .	10
Stapleford .. .. .	2	Wharton .. .. .	3
Stanthorne .. .. .	4	Wharcroft .. .. .	4
Stapeley .. .. .	3	Whitley Superior .. ..	3
Stockham .. .. .	1	Wigland .. .. .	1
Stoak .. .. .	4	Willaston, Nantwich .. ..	5
Stoke .. .. .	5	Wilmslow .. .. .	6
Stretton .. .. .	1	Wimbolds Trafford .. ..	2
Storeton .. .. .	9	Wirswall .. .. .	5
Styal .. .. .	1	Wimboldsley .. .. .	3
Sutton, Great .. .. .	1	Wincle .. .. .	1
Sutton, Little .. .. .	1	Wistaston .. .. .	3
Sutton, nr. Macclesfield ..	5	Withington, Lower .. ..	5
Sutton Weaver .. .. .	3	Withington, Old .. .. .	1
Sale and Ashton-on-Mersey	3	Woodbank .. .. .	4
Tabley Inferior .. .. .	3	Woodford .. .. .	1
Tabley Superior .. .. .	3	Woolstanwood .. .. .	6
Tarporley .. .. .	8	Worleston .. .. .	11
Tarvin .. .. .	8	Willington .. .. .	1
Tattenhall .. .. .	15	Wybunbury .. .. .	7
Tetton .. .. .	3	Wheelock .. .. .	1
Thornton Hough .. .. .	6	Wrenbury-cum-Frith .. ..	10
Thornton-le-Moors .. ..	6		
Threapwood .. .. .	2		1291
Thurstaston .. .. .	4		
Tilston .. .. .	2		

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

Section 4 of the above Act provides that any Medical Officer of Health finding a sample of milk produced in the County area to contain tubercle bacilli must give notice to the County Medical Officer, whose duty it is to arrange for veterinary inspection of the cattle in the herd where the milk is produced.

On receipt of such notice the County Medical Officer of Cheshire informs the Chief Veterinary Officer, who arranges the inspection of the cattle on the farm concerned.



Individual samples of milk are taken from any cows showing symptoms suggestive of tuberculosis of the udder, and the milk from the rest is occasionally grouped, or more usually one control sample is taken. Individual samples are examined microscopically and usually the offending animal is detected at once in this way. Unfortunately, however, it is not always possible to eliminate the source of infection so readily, as in a small proportion of cases tubercle bacilli are eliminated in the milk, before any clinical evidence of the disease is evident; but even in such cases it is not deemed desirable to take a large number of group samples, as it is almost invariably found that on a second visit being made several weeks later some clinical evidence of the disease has made its appearance. The commonest reason for failure to detect infected animals in herds reported under the Act is that they have been disposed of between the time of the taking of the sample and the result of the examination being made known—usually a period of six weeks; during this period, it also frequently happens that one or other of the veterinary officers detects the offending animal during a routine inspection of the herd.

During the year 1935, the following neighbouring authorities notified farms as under:—

Birkenhead ... ..	36	St. Helens ... ..	5
Droylsden ... ..	1	Stockport ... ..	4
Eccles ... ..	2	Stretford ... ..	13
Liverpool ... ..	32	Wallasey ... ..	16
Manchester ... ..	88	Warrington ... ..	5
Salford ... ..	30	Wigan ... ..	1
Stafford ... ..	3		

The number of complaints received under Section 4 of the Act shows an increase from that of the previous year due undoubtedly to the greater number of samples examined by Local Authorities.

During the year, 316 visits to farms were made, where 11,759 cows were examined, 206 of which were found to be suffering from tuberculosis of the udder. 152 of the affected animals were detected on the first visit merely by clinical examination, plus microscopic examination of the milk. 34 were found in a similar manner, on a second visit being made. The remaining 20 were identified after biological examination of samples of their milk, 10 of such samples being taken on the first visit, and 6 at the subsequent visit. These figures show the great value of careful microscopic examination of milk samples and emphasise the necessity of clinical examinations being augmented by the microscope. Indeed it is becoming increasingly difficult to detect animals notified under the Act, as the vast proportion of them show little clinical evidence of disease. The old standing well established type of tuberculous udder is now a rarity in this county and most of the animals are detected only after careful microscopic examination of their milk.



## MILK (SPECIAL DESIGNATIONS) ORDER, 1923.

The principal designated milks in their order of precedence are:—

1. Certified.
2. Grade "A." (T.T.) Tuberculin Tested.
3. Grade "A."

The licensing Authority for the first two is the Ministry of Health, and all cows in such herds must be tested with tuberculin twice a year, and any reactors must be removed immediately from the herd. A high standard of cleanliness is required, that of Certified milk being the most exacting. The County Veterinary Staff takes no part in the testing of these herds.

Grade "A" milk producers are licensed by the County Council, and the cows are clinically examined four times a year, by the County Veterinary Officers, who, at the time of each inspection, take a bulk sample of milk and submit it for bacteriological examination.

Before a licence is granted to an applicant for the sale of Grade "A" Milk, the following conditions must be satisfied:—

1. Every milch cow in the herd must pass a clinical examination by one of the County Veterinary Officers.
2. Any cow found to be showing evidence of any disease which is likely to affect the milk injuriously must immediately be removed from the herd or isolated as the case may require, and must not be re-introduced until certified by the Veterinary Officer as having recovered.

The milk from such a cow must not be sold as Grade "A."

3. The herd must not include any animal which, to the knowledge of the owner, has at any time reacted to the tuberculin test.
4. The cows in milk belonging to herd must be kept separate from all other cows in milk.
5. A Herd Book or Register of all the milch cows in the herd (showing additions and removals) must be kept, and all those cows must be suitably marked for purposes of identification (e.g. with numbers tattooed on the ear, or branded on the horn).
6. The cow sheds, etc., must satisfy conditions required for the production of clean milk.



7. A bulk sample of milk taken from the herd must not contain more than 200,000 bacteria per c.c., or any coliform bacillus in 1/100 c.c.
8. The milk is either bottled on the farm or sent off in sealed containers.

The standard required of Grade "A" milk is not high, and is within the reach of practically any producer who is prepared to carry out the ordinary technique required for clean milk production. This can be done with little additional expense, apart from the installation of steam sterilizing equipment, without which it is practically impossible to maintain the required standard during the summer months.

The number of producers of designated milks in the County are:—

Certified ... ..	19
Grade "A" (T.T.) ... ..	16
Grade "A" ... ..	2086

---

### ATTESTED HERDS.

The term attested is applied to herds which after two successive tuberculin tests in which no reactors were found succeed in passing without a reaction a combination of tuberculin tests applied by a veterinary representative of the Ministry of Agriculture. This scheme was introduced by the Ministry of Agriculture and Fisheries during the year, but owing to the necessarily exacting nature of its requirements was received with little favour by agriculturists. Nevertheless, the scheme is welcomed, marking as it does the first effort by the Government to promote interest in the task of eradicating tuberculosis. In the whole of England there were at the end of August only 24 attested herds, the largest of these being the property of Mr. John Done, Manor Farm, Malpas.

---

### MILK AND DAIRIES ORDER, 1926.

Part IV of the Milk and Dairies Order requires that every County Council and County Borough Council shall cause to be made such inspections of cattle as may be necessary and proper for the purposes of the Act and of this Order.

There are in the County over 6,000 farms and of these approximately 2,000 are licensed for the production of Grade "A" milk, consequently the stock on these farms are examined four times a



year, and it is hoped that in the near future most milk for human consumption will come from such herds, for it is realised that clinical examination of cows must be both thorough and frequent, if really good results are to be expected. In the meantime, however, it has only been found possible to inspect the other herds in the county once, largely on account of extra work which had to be done under the Accredited Scheme. It is thought, however, that a half-yearly inspection of these herds will be possible in the future.

The main object of routine inspection of cattle is the detection and elimination of cattle suffering from any of the forms of tuberculosis defined in the Tuberculosis Order, 1925, but in addition to performing this duty each veterinary officer is expected to advise in matters relating to clean milk production, the early recognition of tuberculosis, etc. Obviously to get the best out of such work the confidence and co-operation of the farmer must first be gained, and it is with great pleasure that I am again able to report that the farmers of Cheshire have continued to be most obliging, helpful and friendly to the veterinary staff.

The objects of routine inspection of cows do not seem to be generally well understood, so it is again emphasised that although regular clinical examination of herds results in the great majority of dangerous cows being detected, it does not lead to any material reduction in the incidence of the disease. It is claimed for the system of inspection, however, that cases of udder tuberculosis and other forms of disease are quickly detected, with the result that the milk supplies are infected for a relatively short period. Indirect benefits are that the poorer type of cow becomes a rarity. Cases of emaciation due to tuberculosis become fewer in number. Suspicious udder conditions are more quickly reported, and methods of milk production are improved. It is emphasised, however, that clinical examination does not, and never can by itself, do much towards the eradication of tuberculosis, a disease which, in the writer's opinion, is likely to remain at about its present level, so long as the present intensive system of dairy farming persists, and the herding together of animals in insanitary buildings continues.

This latter evil is one which has, during the past few months, been considerably reduced in this county. When, however, a farm is found, on routine inspection, to be unsuitable for clean milk production, it is the custom to notify the appropriate sanitary authority of that fact. As a result of this procedure, many improvements to cowsheds have been effected. During the year, under this Order, Veterinary Officers made 5,223 visits to farms, where they examined 144,026 cattle, 348 of which were found to come within the scope of the Tuberculosis Order.



## SCHOOL MILK SUPPLY.

On October 1st, 1934, the Milk Marketing Board brought into operation a scheme whereby milk is provided to scholars at the rate of  $\frac{1}{2}$ d. per one-third of a pint, instead of the pre-existing charge of 1d. The main object in the scheme is to encourage and increase the consumption of milk. The Board will only accept milk the source and quality of which has been approved by a Medical Officer of Health. In Cheshire the County Medical Officer of Health requires that all milk supplied to schools must be at least of Grade "A" standard. There are in the county 121 herds supplying milk to schools. Each of these herds is licensed for the production of Grade "A" milk, and is inspected each quarter by a member of the veterinary staff.

There are 295 Schools supplying milk to scholars under the "Milk in Schools" scheme, and 67 Schools supplying milk otherwise.

## SUMMARY.

The appended tables show that during the year the Veterinary Staff in the performance of their various duties paid 6,377 visits to farms, examined 173,934 cows in milk, and carried out 3,567 microscopic examinations with the result that 1,258 animals were found to come within the scope of the Tuberculosis Order.

TABLE I—MICROSCOPIC EXAMINATIONS.

	Positive.	Negative.	Total.
Milk ... ..	557	2668	3225
Expectorate ... ..	229	113	342
			<hr/> 3567 <hr/>

TABLE II.

	No. of Visits.	No. of Cows Examined.	No. Dry or Sold.	No. of Cows found T.B. from Clinical Examination (Plus Micro).	Biological Samples.		Positive Result of Biological Samples.		SECOND VISIT.						Total number of Cows notified from Farm.	No. of Cows found T.B. on Biological Examination after Negative Micro.	No. of Cows notified not found T.B.	
					Control	Others	Control	Others	No. of Cows found T.B. from Clinical Examination (Plus Micro).	Biological Samples.	Positive Result of Biological Samples.	No. of Cows Examined on Second Visit.						
												No. Dry or Sold.	No. of Cows Examined on Second Visit.	No. Dry or Sold.				No. of Cows Examined on Second Visit.
Arising under Tuberculosis Order..	808	19417	4568	704	9	1	..	..	..	..	..	..	..	704	..	128		
Notified under Section 4 of the Milk and Dairies Act, 1915 ..	316	8327	1255	152	487	91	84	11	2164	182	34	153	26	9	206	..	..	
Routine Inspections ..	5213	143791	26608	338	79	58	8	6	235	51	4	6	19	..	348	..	12	
	6337	171535	32431	1194	575	150	92	17	2399	233	38	63	51	26	1258	..	140	



## Section VIII.-Food and Drugs (Adulteration) Act, 1928.

---

The Chief Inspector of Weights and Measures (Mr. Stacey Hallard) reports as follows:—

During the year ended 31st December, 1935, a total of 1,577 samples were submitted to the County Analyst for analysis; these comprised 1,380 foods and 197 drugs.

Of the foods, 840 were milks, of which 54 were certified by the County Analyst as not being up to standard.

Fifteen other samples were reported against, viz.:—2 Seidlitz Powders, 5 Zinc Ointments, 2 Rums, 2 Sausages, 2 Whiskys, 1 Gin and 1 Peroxide of Hydrogen.

Regarding the milk samples reported against, legal proceedings were instituted in 4 instances. The seller of a sample 14 per cent deficient in fat was ordered to pay £2 2s. 0d. costs. Three other sellers of milk which contained 3.6 per cent., 10.8 per cent. and 14.1 per cent. of extraneous water were fined 10/- and £4 4s. 0d. costs, £5 and £3 3s. 0d. costs, and £5 and £4 3s. 6d. costs respectively.

Seven of the non-standard milk samples were certified as abnormal and in these cases the attention of the farmer was drawn to the matter with a view to improving the quality thereof.

Cautions were administered to the sellers of the remaining non-standard milks.

With regard to samples other than milk, legal proceedings were instituted in 3 cases and the following results obtained; the seller of Rum containing 5.8 per cent. extraneous water was fined £2 and £5 4s. 6d. costs, the seller of whisky containing 5.4 per cent extraneous water was fined £1 and £3 costs, and failure to label sausages containing preservative to the extent of 150 parts per million Sulphur Dioxide resulted in a firm being fined £5 and an employee £1 for aiding and abetting in the offence. In the remaining cases the sellers were cautioned.

A detailed account of the above has been supplied to the Ministry of Health.



## Section IX. Mental Deficiency.

At the end of the year 1935, there were 203 defectives being maintained in Institutions, apart from 3 out on licence.

There were 767 cases under supervision. This supervision is carried out by the Health Visitors, who visit each case a number of times during the year, and report quarterly on their visits.

More institutional accommodation is required, and until the extensions at Cranage Hall are made this defect cannot be remedied.

There are no Occupation Centres in the County.

The methods of ascertainment are the same as in previous years. Every effort is made to obtain particulars of all mental defectives in the County. Health Visitors, District Nurses, Relieving Officers, Head Teachers, parents and various officials report cases.

### Particulars of Mental Defectives (as on 31st December, 1935).

#### A. Number of Cases "Subject to be dealt with":—

1. Under "Order":—	M.	F.	T
(a) (1) In Institutions (excluding cases on Licence)—			
Under 16 years of age ...	15	20	35
Aged 16 years and over ...	85	81	166
(2) On Licence from Institutions—			
Under 16 years of age ...	—	—	—
Aged 16 years and over ...	3	—	3
(b) (1) Under Guardianship (excluding cases on Licence)—			
Under 16 years of age ...	—	—	—
Aged 16 years and over ...	—	1	1
(2) On Licence from Guardianship—			
Under 16 years of age ...	—	—	—
Aged 16 years and over ...	—	—	—
2. In "Places of Safety":—			
Under 16 years of age ...	—	—	—
Aged 16 years and over ...	—	—	—
3. Under Statutory Supervision ... ..	399	368	767
4. Action not yet taken under any of the above headings:—			
(a) Notified by Local Education Authorities (Sec. 2 (2) ... ..	—	—	—
(b) Mental Defectives in receipt of Poor Relief:—			
(1) Institutional—			
(a) In Public Assistance Institutions not approved under Sect. 37 ...	28	56	84



	M.	F.	T.
(b) In Institutions certified under the M.D. Acts (including those approved under Sect. 37)—			
(1) Cases "placed" under Sec. 3 ... ..	6	9	15
(2) Other Cases ... ..	4	6	10
(2) Domiciliary ... ..	59	69	128
B. Number of Cases who may become "Subject to dealt with":—			
1. In Institutions or under Guardianship—dealt with under Sec. 3:—			
(a) In regard to whom the Local Authority contributes under its permissive powers ... ..	1	1	2
(b) Maintained wholly by parents, relatives or others ... ..	33	16	49
(A number of cases may not be known to us).			
2. Reported to the Local Authority from any reliable source, but as to whom no action has been taken ... ..	—	—	—
3. Under Voluntary Supervision ... ..	—	—	—

The following table gives details of the various Certified Institutions where defectives were being maintained by the Council at 31st December, 1935, excluding cases on licence:—

<i>Institution provided for Defectives by Cheshire Joint Board—</i>	M.	F.	T.
Cranage Hall ... ..	—	36	36
<i>Institution provided for Defectives by other Local Authority—</i>			
Calderstones (Lancashire Mental Hospitals Board) ... ..	3	—	3
<i>Other Certified Institutions for Defectives—</i>			
Ashton House, Oxton, Birkenhead ... ..	—	2	2
Brentry Colony, Bristol ... ..	1	—	1
Dovecot, Knotty Ash, Liverpool ... ..	—	2	2
Gillibrand Hall, Chorley ... ..	—	2	2
Mary Dendy Home, Sandlebridge, Alderley Edge ... ..	22	11	33
Royal Albert Institution, Lancaster ... ..	25	4	29
Royal Earlswood Institution, Redhill ... ..	1	—	1
Royal Eastern Counties Institution, Clacton-on-Sea ... ..	—	1	1
St. Raphael's Colony, Brentford ... ..	1	—	1
Stoke Park, Bristol ... ..	10	3	13
Whittington Hall, Chesterfield ... ..	—	7	7
<i>Certified Public Assistance Institutions—</i>			
Arclid House, Sandbach (Cheshire C.C.) ... ..	21	9	30
Burton House, Sedgeley (Staffordshire C.C.) ... ..	2	—	2
The Lodge, Caersws (Montgomeryshire C.C.) ... ..	2	4	6
Seafeld House, Seaforth (Lancashire C.C.) ... ..	2	—	2
Tarvin House, Chester (Cheshire C.C.) ... ..	11	21	32
Total ...	101	102	203

## Section X.-Welfare of the Blind.

### General.

The requirements of the Blind Persons Act, 1920, are met by the Council in its revised Scheme for the Welfare of Blind Persons, dated May, 1931. The provisions of this Scheme are executed, subject to the general administrative supervision of the Blind Persons Inter-Sub-Committee of the Council, by the Blind Welfare Societies at Chester, Ashton-under-Lyne and Macclesfield, which receive annual grants in accordance with the Scheme of the Minister of Health under the Local Government Act, 1929. The closest co-operation is maintained with these Societies, and the various services rendered by them continue to be entirely satisfactory.

### Certification.

To ensure that no person's name is placed on the register without the certificate of a medical practitioner with special experience in ophthalmology, all applicants are examined by the County Oculist, Dr. W. Dunlop Hamilton. Those who wish may be examined a second time under the Medical Referee Service—conducted jointly with the N.W. Counties Association—by Mr. R. H. Bickerton, of Liverpool.

### Statistics.

Number of Registered Blind Persons in the County at 31st March:—

	1935.	1936.
Under 5 years ... ..	0	1
5-16 years ... ..	25	27
16-21 years ... ..	17	16
21-40 years ... ..	124	120
40-50 years ... ..	102	110
50-70 years ... ..	379	404
Over 70 years ... ..	331	356
Total ... ..	978	1034

Registered Blind Persons in County employed, being trained, or otherwise at 31st March:—

Employed	{ in Workshops ... ..	3	3
	{ as Home workers ... ..	45	45
	{ variously ... ..	49	46
Being trained ... ..		9	7
Trained but unemployed ... ..		10	5
Unemployable ... ..		827	889



### **Workshop Employés.**

Annual grants are made at the rate of £40 or £52 a year to recognised Workshops for each new Cheshire entrant. There were none such in 1935 .

### **Home Workers.**

The three voluntary societies arrange for the employment at home of those capable of it and for augmentation of their earnings by up to 5/0d. weekly. Further augmentation of 6/6d. weekly is given by the Council to all County approved Workers.

### **Home Residents.**

Annual grants in accordance with the Local Government Act Scheme are paid to several organisations, subject to the same services continuing to be rendered on behalf of Cheshire residents in Homes for the Blind: additional capitation grants of £13 a year are occasionally made for new entrants, whose weekly income is augmented if necessary to enable them to meet the maintenance charges. At the end of 1935, there were 8 Cheshire residents being so maintained in the Homes of the Manchester and Salford Society at Pendleton, 2 in the Homes of Henshaw's Institution at Old Trafford and Rhyl, and 1 at the Home of the National Institute for the Blind at Hastings.

### **National Library for the Blind.**

A grant at the rate of £40 a year was made in 1935 to the National Library for the Blind on behalf of 1 Cheshire Home Worker, who was a Blind Copyist for its northern branch, apart from the usual annual grant for general services, which are used by slightly over 100 Cheshire residents.

### **Other Services.**

The usual annual grants were continued in 1935 to the National Institute for the Blind and the North-Western Counties Association for their respective national and regional services.

### **Wireless Certificates.**

128 Certificates entitling the recipient to a free wireless licence were issued in 1935 to applicants on the register.

### **Necessitous Blind.**

The unemployable are naturally by far the largest part of the registered blind population, and many of them are in need of financial help. In its Scheme under the Local Government

Act, 1929, the Council made a declaration that all assistance to necessitous blind persons should be henceforth provided by virtue of the Blind Persons Act and not as Poor Relief. The Council's Scheme for Domiciliary Assistance, dated February, 1931, provides that the weekly income of every adult registered blind person be augmented where necessary to between 17/6d. and 25/0d., and that of a married blind couple to between 30/0d. and 45/0d., according to circumstances.

In 1935, grants were made by the Blind Persons Inter-Sub-Committee in 124 cases, and withheld in 26. Grants which ceased numbered 70. In addition, 14 grants in respect of sighted dependents were assigned on behalf of the Public Assistance Committee, and 5 such grants ceased.

At the end of the financial year 1935-36, there were 541 weekly grants so made being received by blind persons in the County and 49 by sighted dependents.

The following table shows the work for the various institutions and associations:



## Section XI.-Public Assistance Institutions

### General.

The recommendations as set out in last year's Report as to future usage of the Hospital Blocks of the Institutions, have recently been adopted, and are now being put into force. The full benefit of these alterations will not be evident, however, for some little time, as the process of transfer of cases will naturally be slow, as it is desirable that no undue hardship should result.

### Treatment of Cancer Cases.

Arrangements for treatment of Cancer cases have been made with the Chester Royal Infirmary, but treatment is also carried out at the Clatterbridge County General Hospital.

The following table shows the work of the various Institutions and accommodation:—

	Arclid	Dutton	Knutsford	Macclesfield	Nantwich	Northwich	Tarvin	Totals
Sick and Maternity Beds ..	90	69	177	203	131	52	39	761
Admissions and Births ..	146	160	443	548	395	117	154	1963
Confinements .. ..	4	8	16	91	10	6	3	138
Live Births .. ..	3	7	15	86	9	6	2	128
Deaths .. ..	50	47	106	106	92	34	43	478
Patients Discharged ..	87	72	336	423	290	90	104	1402
Patients staying 4 weeks or less	81	62	266	350	247	75	74	1155
4—13 weeks	27	29	106	95	92	25	38	412
over 13 weeks	29	28	70	84	43	17	35	306
Average No. of Beds occupied	56	65	135	241	105	47	56	705
Highest No. of Beds occupied	77	76	218	252	120	56	72	871
(Date) .. ..	14/iii	30/iv	5/iv	21/xii	3/iv	30/i	22/xi	—
Lowest No. of Beds occupied	34	55	192	212	93	40	61	687
(Date) .. ..	16/xii	30/viii	25/vii	6/iii	1st/i	16/xi	19/vii	—
Surgical Operations ..	8	—	20	4	21	—	—	53
Abdominal Operations ..	—	—	—	—	2	—	—	2

# List of works carried out at Poor Law Institutions during 1935.

## ARCLID.

Erection of Master's House.  
Alterations to Dining Room.  
Painting Hospital Wards and Re-flooring ditto.  
Improvements to Sewage Installation.  
Pointing to back of Main Block.

## MACCLESFIELD.

Alterations to Maternity Ward.  
Improvements to Male inmates' Lavatory and Staff Bathroom.  
Installation of 2 new Washing Machines.

## NANTWICH.

Repairs to roof of Main Block.  
Rebuilding chimneys.

## NORTHWICH.

Improvements to Kitchen.

## SHOTWICK.

Conversion of Shotwick Mansion into Public Assistance Institution.  
Installation of Refrigerating Plant throughout the various Institutions.



## Section XII.

### Clatterbridge (County) General Hospital.

---

This Hospital having completed its first year as a General Hospital under the County Public Health Committee I am able to submit the first report by the Medical Superintendent.

This report shows the excellent work carried on at the Hospital under the most trying conditions. These conditions it is hoped will soon be remedied, plans for large extensions having now been approved by the Ministry of Health.

These extensions consist of an entirely new administrative block, ward block of 90 beds, operating theatre, X-ray department, out-patients' department, extensions to the maternity block and further accommodation for nursing staff.

#### CLATTERBRIDGE (COUNTY) GENERAL HOSPITAL.

##### MEDICAL STAFF.

##### *Medical Superintendent.*

J. B. Yeoman, M.D., F.R.C.S. (Edin.), D.P.H.

##### *Deputy Medical Superintendent.*

Susan Beatty, M.B., B.Ch., B.A.O.

##### CONSULTING STAFF.

Surgeon—C. Alex. Wells, F.R.C.S. (Eng.)

Gynæcologist—Morris Datnow, M.D., F.R.C.S. (Edin.)

Orthopædic Surgeon—T. Hartley Martin, M.B.

Eye Surgeon—F. C. Plummer, M.D.

Ear, Nose and Throat—Philip Garson, F.R.C.S. (Edin.),  
D.L.O.

Dental Surgeon—C. E. Wilkinson, L.D.S.

Pathologist—R. Howard Mole, M.D.

District Tuberculosis Officer—D. W. Tough, M.B., B.Ch.

##### RESIDENT MEDICAL OFFICERS.

Drs. Glennie and Sutherland.

Matron—Mrs. Holbert, S.R.N., S.C.M.

Deputy Matron and Sister Tutor — Miss Osborne, S.R.N.,  
S.C.M.

Home and Night Sisters—Sister Pollock; Sister Thompson.

Assistant Home Sister—Sister Batey.



Maternity Sister—Sister Robertson.  
 X-Ray Sister—Sister Bolland.  
 Children's Sister—Sister Loxham.  
 Sanatorium Sister—Sister Wells.  
 Theatre Sister—Sister Ellson.  
 Out-Patient Sister—Sister Meador.  
 Ward Sisters—Sister Bell and Sister Gooderham.  
 Massage—Mrs. Cox, Chartered Masseuse.

All the Sisters are State Registered Nurses.

Clerk and Steward—Miss Tilston.  
 Lady Almoner—Miss Zambuhl.  
 Clerk to the Medical Superintendent—Miss Bishop.

*To the Hospital Management Committee,  
 Clatterbridge, 11th January, 1936.*

Ladies and Gentlemen,

A duty incumbent upon the Medical Superintendent of Clatterbridge is that of presenting an annual report. In pursuance of the fulfilment of that obligation, this statement has been prepared. Foremost in the records of events may be mentioned that on the 1st April, 1935, the Hospital under the provisions of the 1929 Local Government Act was appropriated to the Public Health Service. County Boroughs have already in many instances appropriated the Poor Law Hospitals, but Cheshire is among the first of the County Authorities to carry out this necessary provision on behalf of the sick.

Consequent upon this, and in active collaboration with the Public Assistance Officials, a large amount of work has been expended upon the selection of suitable institutions and the allocation to them of persons, who though inmates of Clatterbridge, were not of a type which required to be accommodated in a General Hospital.

“Nought theirs but sullen waiting for no end.”

Like every Poor Law Infirmary, Clatterbridge had many sufferers from chronic ailments, for which science could offer no remedy. Perhaps the commonest of these ailments was that failing all along the line caused and determined by the efflux of time which is called old age. Acute as applied to disease means an illness coming sharply to a crisis and ending in a comparatively short time in recovery or death.

Chronic means “continued and abiding.”



Recently a detailed American study, directed to the prevention of unnecessary debility and the care of those incapacitated through chronic illness, used in the selection of patients a definition "persons who have been or who are likely to be incapacitated by disease for a period of at least three months, that is unable to follow the daily routine of the average normal person, whose incapacity will probably continue for an indefinite period." We use the name much more for illness which will in all probability permanently incapacitate from the resumption of wage earning.

A very much less elaborate and complex arrangement than that of a General Hospital is needed to maintain these persons in the comfort demanded by their unfortunate circumstances. These arrangements are supplied ungrudgingly in accordance with the humanitarian and social demands of our day in the Institutions of the Public Assistance Authority.

Places have already been found for many of the permanently incapacitated, so that the unsound economic position of receiving acute and chronic sick in the same wards is considerably relieved. A further effect of their removal is that there is a lessening of the terrible congestion which has characterised the Hospital during the last few years. Nevertheless, overcrowding is still marked, and part of the 1835 buildings, from which old persons have been removed, has still to be made use of for hospital needs. The modicum of relief afforded, likewise, is not enough to permit the introduction of a proper system of classification, so that dissimilar disorders must be treated in beds side by side.

Not infrequently, relatives of patients complain about this, and it must be admitted that they have legitimate cause, but at present it is irremediable.

### **Position at the Succession.**

On the demise of the Board of Guardians the Public Assistance Committee found a Hospital which in many particulars had passed far beyond the level of a country poor-law infirmary. For example, provision had been made for regular visitation by prominent consultants from Liverpool and other voluntary hospitals. Also, X-ray equipment of modern type had been supplied. An expert bacteriologist and pathologist was employed to assist in diagnosis. Nursing of the patients was no longer uncontrolled and haphazard, but was of high standard by trained women.



Threatened appropriation was not all to the good, for, undoubtedly, it led to procrastination in the natural development of the Hospital. For some the restraining factor seemed to be the fear that wasteful expenditure might be incurred, if any change was made in the wards and equipment, and for others the natural abhorrence of any change, which wittingly or unwittingly characterises all of us, more especially as we advance in years. Much of the equipment, which had been adequate for a small poor-law institution, was rapidly passing out of date, and was insufficient for the largely and quickly increasing number of patients. Improvised gear no longer served its intended purpose.

The wastefulness and inefficiency induced by the failure to employ mechanical devices to save labour had become increasingly emphasised. Coupled with all this, the increase in population in the area, for which stupendous would not be an inaccurate appellation, almost swamped the Hospital provision. All ward accommodation was in fact overtaxed, and recourse had to be made to the annexation of the Chapel, with its separation from its usual occupation.

A worse form of ward could scarcely be devised, but the sick had to be received. The stress upon the institution involved a very great responsibility and much anxiety upon the officials.

### **Staff.**

Mention should be made of the new appointment connected with the finances of the Institution, namely that of a Lady Almoner; already the usefulness of this functionary has been amply demonstrated.

The Steward and her staff have worked admirably throughout the trying transition period, and this report would be incomplete without due acknowledgment of indebtedness.

The Chief Engineer and his staff work well under conditions which are very trying and disheartening.

The modern ambulances are now properly manned, and the distances traversed to other County Institutions are no longer a hardship to patients or a handicap to their recovery.

Ward Porters and Gardeners are of too recent appointment to call for comment.

Scrubbing of stone stairs and passages in the old parts of the Hospital precludes the possibility of dispensing with certain domestic labour. The purchase of electric trucks, dish washer and potato peeler, which has been sanctioned, will tend to modernise and quicken the operations in which they are concerned.



### **Nursing Staff.**

During 1935, as in past years, there has been a large amount of sickness among the Nurses. It is disproportionate to their numbers in comparison with that among women of similar ages in the general population. - This is all the more striking when it is recollected that they are a group into the selection of which consideration of physique enters in no small measure. In the main, it may be attributed to working in overcrowded wards and sleeping in apartments which are too small owing to the necessity for what is euphoniously termed "doubling up" among themselves. Almost 50 per cent. of the probationers were in the Hospital at one time or another incapacitated by congested throats, anæmia, or whitlows, all indicating health conditions below par. Rectification can only be assured by pressing on with the new scheme.

The Hospital is recognised by the State as a training institution to secure registration.

Years prior to the establishment of a State Register, steps were taken systematically to train the younger nurses at Clatterbridge in the principles of sick nursing, and to guide them in the fundamental subjects which form the basis of their professional work. They were subjected to an examination by an independent outside examiner, and when successful received a certificate stating their qualifications.

On the establishment of the National Register, the Hospital was recognised as a Minor Training School, and at the end of two years of training, Nurses who had passed the preliminary examination were drafted, by agreement, to Liverpool Hospitals to complete their studies and examinations.

When a Resident Medical Officer was appointed, the Hospital was in a position to apply for, and receive sanction to train candidates throughout their course, thus becoming a Major Training School. Since its recognition in October, 1931, 55 of our Nurses have had their names placed on the State Register.

Apart from general training, the Central Midwives' Board grant after examination, to successful candidates, who have undergone a specialised study of Midwifery, certificates enabling them to practise as Midwives. This recognition has become of still greater importance since a Bill for State Endowment of Midwives has been foreshadowed. The Spital Maternity Home, as the Midwifery Annexe is named, had until recently too little work to comply with the regulations of the Central Midwives' Board. Application might be now made for authority to train 5 of our own nurses who have obtained State Registration, in each year.



A pertinent statement from the Lancet Commission on Nursing is here quoted: "Hospitals should recognise that the Nurses are paying indirectly, if not directly, for their training, and that the onus rests on the Hospitals to provide good facilities for such training, including expert instruction during hours on duty."

The time is not far distant when every well regulated hospital will have its staff large enough to ensure eight-hourly shifts, to the enormous advantage of the patients and its members. An eight-hours spell of duty is already in use for the three male Nurses.

The majority of probationers say that they find the double burden of ward work and study for examination a great strain.

The addition to the staff of two theatre orderlies has filled a yawning gap in the establishment.

Many hospitals are now attracting the best type of candidate by holding what is termed a Preliminary Training School. This is an intensive course on Anatomy, Physiology and Hygiene, lasting some two months. The pupils pass to the wards for instruction only on Saturdays and Sundays, or other arranged times. By this means the candidate has an opportunity to determine whether or not sick nursing is her métier.

She has also broke the back of her book studies before she fully embarks on her course. As Clatterbridge is the only Major Training School under the County Council, the pupils of its nursing school should be employed to form a pool from which nurses could be drafted to any institution in the County as required.

The College of Nursing favours the establishment of Preliminary Training Schools connected with a group of hospitals in each area. The course would cover the theoretical part of the syllabus for the preliminary State Examination.

### **Statistics.**

The total number of admissions to the Hospital (including births) was 1,981.

This was an increase of 311 over the number in 1934.

Discharges numbered 1,715, and there were 220 deaths. There were 213 more discharges and 46 more deaths than in 1934.

In both years the stillbirths numbered 18.

On the 31st December, 1935, 344 patients were in Hospital, which was 46 more than on the corresponding date in 1934.



A consideration of the duration of treatment in the Hospital is always of interest, as it is an indication of the acuteness or chronicity of the maladies from which the patients have suffered.

1,312 or 67.8 per cent. were discharged under 4 weeks.

431 or 23.3 per cent. 4 weeks and under 13 weeks.

192 or 9.9 per cent. 13 weeks or more.

Adopting the American criterion referred to earlier in this report, the figures show over 90 per cent. of the admissions are within the definition of "Acute." An analysis of the statistics fails to reveal that there was any epidemic outbreak such as Influenza to account for the demands upon the beds, so the increase of 311 in the admissions may be referred to either an increased population to supply sick persons or increasing popularity of the Hospital. Both of these factors undoubtedly contributed. Now-a-days, Liverpool cannot, as it did in former times, supply hospital accommodation for the inhabitants of Wirral, owing to increased demands of its own population. A great portion of the community has lost its morbid dread of hospitals, and now to its great advantage thinks in sickness of the ward and uses it, where aforetime a stuffy back bedroom would have been utilised.

### **Surgery.**

"Yet it is no mistaken idea to call in a Consultant."

*Hippocrates, 460 B.C.*

The number of surgical operations undertaken (exclusive of dental extractions) was 523.

General anæsthetics were used in 395 cases; modern basal anæsthetics avertin and evipan in 7; spinol in 23; sacral in 6; and local in 92.

One hundred and eighty-three abdominal sections were performed. There were 67 ear, nose and throat operations, 65 gynæcological and 4 upon the eye. 140 orthopædic operations were performed. Diathermy is employed; blood transfusions have been used.

Patients suffering from malignant disease numbered 34. Operative procedure and radium were used in attempts to destroy this disease. 16 patients were fit to be discharged, and 18 died. Up to the present time, science has failed despite all its efforts and great amount of research, to stem the terrible tide of death from Cancer. Many of our cases previously had been operated upon, and the operations had given them a longer lease of life and a more merciful release. Early recognition of malignancy and removal or destruction by radium still remain the only safeguards. Radium was



used in 9 instances. The disease had begun in the digestive system in 19 patients; in the genito urinary system in 6; in the skin in 2; in the glands in 2; and in the breast, lungs, bone, orbit and endocrine system in 1 each.

239 persons were admitted as the result of accidents. Of these, 56 were due to road traffic and 183 to other mishaps.

### **Maternity.**

“Not alone to women upon earth are there pains,  
but everywhere the birth-pangs are grievous.”

*Oppian*, A.D. 193.

The facilities offered by the Ante-Natal Clinic were used by 103 expectant mothers, who attended on 519 occasions. An average of 9.94 expectant mothers attended each clinic. The maximum number on any occasion was 17, and the minimum number 3. Resulting from this work, women in many instances were safeguarded from troubles which might at their confinements have led to serious complications or loss of life. 295 women were confined in Hospital, and the average duration of stay was just over 14 days. Beyond all other improvements in the obstetric art is the safe alleviation of pain attained by the use of the Minnitt Apparatus. Daily expressions of gratitude are received, more especially from mothers who, previous to this invention had suffered agony in child bearing.

### **Eye Department.**

The Eye Surgeon treated 109 patients in the Hospital, and 67 out-patients.

### **X-Ray Department.**

673 Radiographs were taken, contrasting with 498 in 1934.

### **Dentistry.**

The Dental Surgeon filled 43 teeth; performed 171 extractions; and reported on 34 patients.

### **Massage and Electrical Department.**

Patients treated numbered 187, and in addition all the mothers in the Maternity Department were instructed by classes in exercises to facilitate their return to normal. The total number of treatments was 1,170. Included in this figure are 42 out-patients with 287 treatments.

### **Venereal Disease Clinic.**

This is entirely a continuation clinic for patients in whom the diagnosis has been arrived at in the wards of the Hospital. 12 patients attended and received treatment on 106 occasions.



## Bacteriological and Pathological Work.

(Dr. Howard Mole).

Total number of examinations in 1935—780.

	Specimens Examined.	Positive.	Negative.
Tuberculosis (County Laboratory).	75	14	61
Wassermann Reactions (Manchester University)	91	14	77

## Out-patients.

275 persons were examined in the out-patient department and of these 12 were admitted to Hospital. 175 had been in-patients prior to their relegation to "out-patients" for continued treatment.

The total number of attendances was 1,220.

TABLE 1.

Classification of In-patients who were discharged or died in the hospital in the year ended 31st December, 1935.

Disease Groups.					Children		Men & Women.	
					Dis- charged	Died	Dis- charged	Died
A.	Acute Infectious Disease (1)	..	..	..	3	—	9	—
B.	Influenza (2)	..	..	..	—	—	14	—
C.	Tuberculosis Pulmonary	..	..	..	—	—	9	7
	Non-Pulmonary	..	..	..	5	3	5	3
D.	Malignant Disease	..	..	..	—	—	21	16
E.	Rheumatism.							
	(1) Acute Rheumatism (Rheumatic Fever) together with sub-acute Rheumatism and Chorea	..	..	..	8	—	5	2
	(2) Non-articular manifestations of so-called Rheumatism, (muscular Rheo-fibrositis, Lumbago and Sciatica)	..	..	..	—	—	4	—
	(3) Chronic Arthritis	..	..	..	—	—	10	1
F.	Venereal Disease	..	..	..	1	—	8	1
G.	Puerperal Pyrexia	..	..	..	—	—	5	—
H.	Puerperal Fever (A) Women confined in hospital	..	..	..	—	—	—	—
	(B) Other cases	..	..	..	—	—	3	3
I.	Other diseases and accidents connected with pregnancy and child birth	..	..	..	—	—	28	1
J.	Mental Diseases (a) Senile Dementia	..	..	..	—	—	3	2
	(b) Other	..	..	..	1	—	22	—
K.	Senile Decay (3)	..	..	..	—	—	1	—
L.	Accidental Injury & Violence (4) in respect of cases not included above	..	..	..	51	1	174	13
M.	Disease of the Nervous System and sense Organs	..	..	..	30	10	70	19
N.	Disease of the Respiratory System..	..	..	..	18	7	52	15
O.	Disease of the Circulatory System..	..	..	..	8	1	45	56
P.	Disease of the Digestive System	..	..	..	97	1	178	17
Q.	Disease of the Genito-urinary System	..	..	..	9	—	147	23
R.	Disease of the Skin	..	..	..	34	—	17	1
S.	Other Disease	..	..	..	18	5	16	5
T.	Mothers and Infants discharged from Maternity Wards and not included above	..	..	..	260	7	305	—
U.	Any person not falling under any of the above headings	..	..	..	21	—	—	—
Totals					564	35	1151	185



TABLE 2.

## COMPARATIVE STATEMENT OF PROGRESS.

	1931	1932	1933	1934	1935	
Resident Medical Staff .. ..	1	1	2	2	3	
Trained Nurses .. ..	18	18	18	19	24	
Probationers .. ..	50	50	50	50	54	
Male Nurses .. ..	—	—	—	—	3	(also 2 theatre orderlies)
No. of Confinements .. ..	199	192	203	225	295	note increase
Total No. of admissions.. ..	981	1311	1674	1670	1981	n.b. 'Flu in 1933
Total No. of Discharges .. ..	1039	1115	1686	1502	1715	
Highest No. of Patients in Hospital	282	312	368	358	366	n.b. 'Flu in 1933
Lowest No. of Patients in Hospital	216	242	289	292	301	
Average No. Patients in Hospital	246	287	317	299	340	n.b. 'Flu in 1933
No. of Beds provided .. ..	291	291	291	291	291	Note lowest No. Beds occupied in excess of No. provided.
No. of X-Rays .. ..	312	364	549	498	673	
No. of Operations .. ..	184	258	410	415	523	note increase
Bacteriological and Pathological work (specimens) .. ..	305	317	599	541	780	

## IN-PATIENT DISCHARGES.

1932.	78.3% of discharges were in hospital under 4 weeks.	11.2% exceeded 13 weeks.
1933.	76.3% of discharges were in hospital under 4 weeks.	11.2% exceeded 13 weeks
1934.	75.8% of discharges were in hospital under 4 weeks.	10.7% exceeded 13 weeks.
1935.	67.8% of discharges were in hospital under 4 weeks.	9.9% exceeded 13 weeks.

N.B.—The percentages of stay in hospital over 13 weeks include long Orthopaedic cases (acute work in character) and 'permanent' residents'

## OUT-PATIENT DEPARTMENT.

1931.	22 persons attended.	Total No. of attendances =	37
1932.	27 persons attended.	Total No. of attendances =	52
1933.	46 persons attended.	Total No. of attendances =	180
1934.	84 persons attended.	Total No. of attendances =	567
1935.	275 persons attended.	Total No. of attendances =	1220

Note steady increase in out-patient department both of No. of persons attending and total No. of attendances—most of these are continuation treatments of previous in-patients owing to early discharge of patients necessitated by overcrowding.

## PRE-NATAL CLINIC.

Year.	Total No. of Patients.	Total No. Attendances.	Average Attendance per week.	Average attendance per patient.
1931	79	189	3.6	2.4
1932	78	227	4.3	2.8
1933	84	356	6.7	4.3
1934	78	430	8.2	5.5
1935	103	519	9.94	5.0

These figures indicate a growth in development of this department, as the patients are evidently attending with greater regularity and earlier in pregnancy.



## TABLE 3.

## ADMISSION OF PATIENTS FROM OTHER CHESHIRE INSTITUTIONS.

			1930	1931	1932	1933	1934	1935
No. 1	Area	Bucklow Area (Knutsford)	—	—	4	11	2	17
No. 2	Area	Macclesfield and Congleton	—	—	—	1	3	5
No. 3	Area	Nantwich Area .. ..	—	—	4	20	30	32
No. 4	Area	Northwich and Runcorn (Dutton) Area .. ..	—	8	20	30	63	84
No. 5	Area	Tarvin Area .. ..	1	5	4	6	25	51
No. 7	Area	Stalybridge & Dukinfield (Ashton-under-Lyne) Area..	—	2	1	1	2	2
Total .. ..			1	15	33	69	126	191

You are all familiar with the condition of the buildings and appreciate to the full the difficulties of administering a Hospital in which the demand for beds far outnumbers the existing provision. Between 1921-31 Wirral Rural District had increased 56.5 per cent., Ellesmere Port 44.8 per cent., Bebington 40 per cent., and in these areas it is estimated that in the succeeding years there has been no falling off in the rate of increase. Hundreds of houses are in course of erection and apparently are occupied as soon as they are built. No attempt was made to co-ordinate the supply of Hospital beds to the number of the augmented population, nor would this have been feasible, for the Hospital was in transition from poor law to general functions. Divorce had not yet been pronounced absolute between treating the sick and public assistance.

To-day the position is one of extreme urgency. Plans for the necessary extensions have been approved by the Ministry of Health, and assurances are given that as soon as practicable the works will be begun. Many varieties of public undertaking may be deferred to a more convenient season, but this is not the case with a Hospital. Overcrowding means danger to life, more prolonged detention, discomfort among patients, and ill health with frayed tempers in the staff. Economically also a failure to progress is unsound. The plans cover the requirements and no good purpose would be served by again detailing the items. Continued stimulation of a muscle reduces it to a condition of fatigue in which no response is elicited, and perhaps an analogous state might be induced by too persistent reiteration of Clatterbridge necessities.

J. B. YEOMAN,

*Medical Superintendent.*



## Section XIII.-Water Supplies.

---

The County of Cheshire is fortunately situated for water supplies. The water-bearing rocks of the new red sandstone underlying a large part of the County constitute a valuable source of supply, which, in the opinion of experts, is capable of yielding far more water than the population is likely to require. The water supplies of twenty-two County Districts are drawn from boreholes in the sandstone.

Upland surface water supplies from the southern part of the Pennine Chain have been largely utilised by Manchester, Stockport, Macclesfield, Dukinfield, Hyde, Stalybridge, and Yeardsley-cum-Whaley, in the north-east and eastern part of the County.

Certain areas in the County are supplied by the big Municipal Undertakings of Manchester, Stockport, Warrington, Macclesfield and the Chester Waterworks Company, while the Vyrnwy main of the Liverpool Corporation, which extends from the south-west boundary to the northerly boundary of the County, supplies water en route to parts of five County Districts.

There are three main areas which are in need of public water supplies. The eastern parishes of the Macclesfield Rural District have a large acreage with a low population; springs and wells are fairly abundant and it cannot be said that there is an economic need for a piped supply. There are other parishes, however, on the western side of this district which should be provided with a piped water supply.

The other two principal areas in need of public water supplies are certain parishes in the Bucklow Rural District between Knutsford and Lymm, the easterly parishes of the Chester Rural District, and the Rural Districts of Tarvin and Malpas.

Schemes for public water supplies are being prepared for certain parishes in the Rural Districts of Bucklow, Chester Tarvin, Malpas, and Macclesfield. The schemes of the Chester and Tarvin Rural District Councils have actually been submitted to the Ministry of Health.

It will be seen that the County is well supplied with water, but supplied by too many Authorities. Excluding the County Boroughs there are thirty-seven different undertakings supplying water. It is generally held that small schemes of water supply usually have high maintenance costs and are at a disadvantage owing to lack of co-operation.



The policy of Local Authorities in the central portion of the County has been to retain their individual undertakings and independence. Within a few miles of each other are four undertakings (with a fifth shortly to be constructed), each with its own separate pumping station and reservoir. Trunk mains of these Authorities lie side by side in certain roads, a state of affairs which could have been avoided had there been effective co-operation on the part of the Authorities concerned. A single pumping station capable of producing sufficient water would have saved unnecessary expenditure of public money on these four separate units.

It is hardly surprising that there is a proposal to apply the principle of "rationalisation" to the water undertakings of central Cheshire by the formation of a Joint Water Board.

At the request of the Ministry of Health a conference was held in March, 1935, at Manchester, which was attended by representatives of 17 Urban and 10 Rural District Councils. Representatives of Local Authorities were appointed to serve on the Cheshire and North West Derbyshire Regional Advisory Committee. This Committee acts in a purely advisory capacity; any new scheme of water supply in the area will be submitted to the Committee for its observations and report.

## MUNICIPAL BOROUGHES.

### CONGLETON.

The quality of the water supply has been satisfactory but the quantity diminished during the drought periods of the summer months. Apart from ordinary mains extensions to meet new housing development there have been no important extensions of water mains. It is reported that in various parts of the Borough small diameter mains have become incrustated and need scraping in order to give a better supply.

### CREWE.

The water supply is obtained from boreholes in the red sandstone at Whitmore, Staffordshire, owned by the London Midland and Scottish Railway Company. The water is of a high degree of organic purity, free from metallic contamination and of sound bacteriological condition.

There has been no important extension of mains during the year.



## DUKINFIELD.

### STALYBRIDGE.

Both these boroughs are supplied with water by the Ashton-under-Lyne, Stalybridge and Dukinfield (District) Waterworks Joint Committee. The chemical analysis shews that the supply is of a high degree of purity.

1686 yards of new mains were laid during 1935 in the Borough of Dukinfield.

### MACCLESFIELD.

During the year the water supply has been satisfactory in quantity and quality—monthly samples were submitted for chemical and bacteriological examination. Small extensions of mains have been carried out during 1935. Only a few scattered farms are without a mains water supply.

## HYDE.

### SALE.

The water supply in both these boroughs is provided by Manchester Corporation. It has been satisfactory in quantity and quality. One mile three furlongs of new mains were laid in the Borough of Hyde during 1935.

## URBAN DISTRICTS.

### ALSAGER U.D.

The supply of water has been satisfactory both in quantity and quality. A Water Softening Plant was erected and came into use in September. The Plant consists of two 7ft. diameter "Permutit" base-exchange units containing a natural zeolite and is capable of treating 110,000 gallons at a hardness of 21.17° between regenerations, reducing the water to zero hardness.

The supply to consumers is softened and delivered at ten degrees of hardness. The Plant is working satisfactorily.

Samples of the water submitted to the County Analyst were reported to be of a high degree of purity and of sound bacteriological condition.

### ALTRINCHAM U.D.

The Urban District is supplied with water by Manchester Corporation Water Undertaking. The supply has been satisfactory both in quantity and quality.



## BEBINGTON U.D.

The Urban District is supplied with water by the West Cheshire Water Board. The supply has been satisfactory in quantity and quality.

## BOLLINGTON U.D.

There has been no shortage of water in the district and the quality has been uniformly good. A new borehole has been put down at the Millbrook Waterworks but has not yet come into operation. A 3-inch main has been extended 1,100 yards to supply six houses.

## BUGLAWTON U.D.

The Urban District is well supplied with water of a high degree of purity.

## BREDBURY AND ROMILEY U.D.

The Urban District is supplied with water by Stockport Corporation. The supply has been satisfactory in quantity and quality. Stockport Corporation are proceeding with the construction of a new reservoir at Greave Fold, Romiley. 3,952 lineal yards of new water mains have been laid in the District during the year; in some parts of the District water mains have been enlarged.

## CHEADLE AND GATLEY U.D.

The Urban District is supplied with water by Stockport Corporation. Complaints were received with regard to lack of pressure in certain parts of the District, and also discoloration of the water. Representations were made to water undertakers by the Urban District Council. During the year mains extensions were carried out to new building estates in course of development.

## COMPSTALL U.D.

No action has yet been taken with regard to the existing water supply being superseded; this supply was reported by the County Analyst to be unsatisfactory in January, 1935. During August the supply failed completely, and for a time the inhabitants of Compstall village carried water from two wells, one of which was subsequently found to be polluted. Later, arrangements were made for a supply of water to be obtained from the undertaking of Chapel-en-le-Frith U.D.C., but before the connection was made the rain came and the reservoirs filled up. In April, 1936, Compstall was transferred to the Urban District of Bredbury and Romily and steps will be taken to provide a satisfactory water supply.



## ELLESMERE PORT U.D.

The Urban District is supplied with water by the West Cheshire Water Board, with the exception of Ince, which is supplied by the Helsby Water Undertaking of the Runcorn Rural District Council. The Ince district is said to be in need of an improved water supply.

## HALE U.D.

The Urban District is supplied with water by the Manchester Corporation.

## HANDFORTH U.D.

## HAZEL GROVE AND BRAMHALL U.D.

Both these Urban Districts are supplied with water by Stockport Corporation. Scattered houses in the Upper Torkington area of Hazel Grove are said to be in need of an improved water supply.

## HOLLINGWORTH U.D.

The Urban District is supplied with water by Manchester Corporation.

## HOOLE U.D.

The Urban District is supplied with water by the Chester Waterworks Company.

## HOYLAKE U.D.

The water supply has been satisfactory in quality and quantity.

## KNUTSFORD U.D.

On the 29th January, 1935, the old source of supply of the Knutsford Light and Water Company was discontinued and a bulk supply obtained from Manchester Corporation Water Undertaking. The supply is satisfactory in quantity and quality.

## LYMM U.D.

The water supply has been adequate throughout the district. Chemical and bacteriological tests shew that the water is of excellent quality. Mains extensions have been carried out in Booths Lane, Lymm Park and Newfields Area.

## MARPLE U.D.

Water is purchased in bulk from Stockport Corporation. The quality is satisfactory but it is stated that the quantity has been unsatisfactory on three occasions during the year. 379 yards of new water mains have been laid in the district.



## MIDDLEWICH U.D.

The water supply of the district has been satisfactory both in quality and quantity.

## MOTTRAM-IN-LONGDENDALE U.D.

The Urban District is supplied with water by Manchester Corporation Waterworks.

## NANTWICH U.D.

The period of restricted supply, due to the drought of 1934, ended in February, 1935, and since that date a constant supply has been provided. The water has been satisfactory in quality.

## NESTON U.D.

The water supply of the Urban District has been satisfactory in quality and quantity. During the year 1,610 yards of new water mains were laid and some 200 yards of worn out main replaced.

## NORTHWICH U.D.

The whole of the Urban District is adequately supplied with water of good quality.

## RUNCORN U.D.

The water supply has been satisfactory in quality and quantity. The Runcorn District Water Board are considering a new source of water supply. 2.06 miles of new mains have been laid during the year.

## SANDBACH U.D.

A constant supply of good quality water has been maintained throughout the year. Experiments have been made with a view to stabilising the degree of hardness and eliminating after-precipitation in the mains, but these have not realised expectations. Estimates are under consideration for a scheme of treatment by the base-exchange process.

## TARPORLEY U.D.

The village of Tarporley is supplied with water by Liverpool Corporation. The outlying parts of the district—Rushton and Utkinton—are dependent upon springs and wells. A public supply is needed for these areas.

## WILMSLOW U.D.

The Urban District is well supplied with water by Stockport Corporation.



## WINSFORD U.D.

The drought had the effect of lowering the level of Oakmere Lake to such an extent that pumping operations were restricted. New sources of supply were brought into use—springs in Shays Brook in the Parish of Little Budworth, and at Abbots Moss in the Parish of Marton. The supply is said to be adequate and the analysis shews it to be of satisfactory quality.

## WIRRAL U.D.

The Urban District is supplied with water by the West Cheshire Water Board.

## YEARDSLEY-CUM-WHALEY U.D.

The district is well supplied with water of good quality. 440 yards of 3-inch main have been laid to meet building development.

## RURAL DISTRICTS.

## BUCKLOW R.D.

The water supplied in the district is either purchased in bulk from or supplied by various Statutory Authorities direct. The quantity and quality have been satisfactory.

During the year work was begun on works of water supply for the parishes of Peover Superior, Peover Inferior, Ollerton, Toft and Mobberley; some 17 miles of water mains were laid.

Schemes have been submitted to the Ministry of Health for the following:—

Approximately 40 miles of water mains for the parishes of Agden, Bollington, Millington, High Legh, Aston-by-Budworth, Tabley Inferior, Tabley Superior (part) and Mere (part).

Extensions of water mains in the parishes of Partington and Ashley.

Negotiations are proceeding for the extension of water mains in the parish of Marthall.

## CHESTER R.D.

Parishes on the outskirts of Chester are supplied by the Chester Waterworks Company and the Wrexham and East Denbighshire Water Company. A few parishes on the north eastern boundary of the district are supplied by the Runcorn Rural District Council.



In August, 1935, some three miles of 15-inch main passing through the north eastern parishes (which formerly supplied water to Wallasey), fell out of use and was acquired by the Rural District Council. This main is now connected up with the Helsby water undertaking of the Runcorn Rural District Council for the purpose of continuing a supply to several premises which formerly were consuming Liverpool water.

In January, 1936, a scheme was submitted to the Ministry of Health for a public water supply for seven parishes in the north eastern part of the Rural District, including one parish which is being transferred from the Tarvin Rural District. The scheme has been sanctioned.

#### CONGLETON R.D.

Work is in progress on a scheme for laying some 27 miles of water mains in the district; up to the present 15, 000 yards of mains have been laid.

On the completion of the work all parishes with the exception of Hulme Walfield will have a piped supply, and this parish will be considered when the scheme is complete.

Analysis of the water in April, 1935, confirms the previous reports that the water is of an exceptionally high degree of purity, although somewhat hard.

The erection of a plant to soften the water at its source is in hand.

#### DISLEY R.D.

The trunk main of the Stockport Corporation Water Undertaking, which passes through the district, provides a supply of water to the greater part of the area. Only a few outlying farms and cottages are dependent on wells.

#### MACCLESFIELD R.D.

During the year 2,635 yards of 3-inch mains have been laid in the parishes of Adlington and Tytherington.

Parishes in need of an improved water supply are Chelford and Snelson, parts of the parishes of Gawsworth, North Rode and Pott Shrigley, Siddington and Lower Withington.

Schemes are being prepared for Chelford and Snelson, and for a part of the parish of Gawsworth.

#### MALPAS R.D.

The township of Malpas and the parish of Bickley are supplied with water from the Liverpool Corporation main.



In June, 1935, a scheme was submitted to the Ministry for a public water supply for the parishes of Bickley (part), Hampton, Marbury and Norbury. The scheme has been sanctioned and the work is being carried out.

#### NANTWICH R.D.

During the year mains have been extended in the Woodworth Green area of Bunbury and the parish of Bickerton.

The whole of the rural district is provided with an adequate supply of water. Samples submitted to the County Analyst were reported to be of sound bacteriological quality.

#### NORTHWICH R.D.

Some difficulty was caused by the failure of Oakmere Lake supply (Winsford U.D.C. Waterworks) which supplied water to a part of the rural district. In addition, the Northwich Urban District Council, who supply 250,000 gallons per day to the eastern parishes, gave warning that the consumption of water had exceeded the maximum quantity under the agreement.

As new housing development and proposed pail closet conversion schemes in the semi-urban parishes will result in increased consumption of water, the Rural District Council have taken steps to increase the supply of water at their Crabtree Green Waterworks by laying several additional spring collectors. During the year a borehole 500 feet in depth was sunk at Eddisbury Hill. A fourteen days' pumping test made in November proved that over one million gallons of water per day was available.

Application has been made for loan sanction for the provision of pumping plant, etc., and a further application to the Ministry of Health is pending for the distribution of the supply to the eastern parishes.

#### RUNCORN R.D.

The water supply in the whole district has been satisfactory in quality, but anxiety has been experienced about the quantity in certain districts which depend on a pumped supply. A scheme is now before the Ministry of Health which will overcome this difficulty, and also serve the few areas at present without a piped supply, including the higher portions of Kingsley, Newton-by-Frodsham and Alvanley.

During the year approximately twelve miles of new mains have been laid in the parishes of Antrobus, Crowley and Seven Oaks.



## TARVIN R.D.

In January, 1935, a scheme was submitted to the Ministry of Health for a public water supply for the parishes of Broxton and Burwardsley.

The scheme was sanctioned and the work was completed during the year.

Parishes in need of an improved water supply are:—Barrow, Clotton, Duddon, Handley, Huxley, Shocklach and Tattenhall.

A large scheme for works of water supply for the greater part of the district, including transferred parishes of an adjoining district, has been submitted to the Ministry of Health.

## TINTWISTLE R.D.

A piped supply is provided to the village of Tintwistle by the Tintwistle Waterworks Company. The supply is obtained from springs on Tintwistle Moors which are liable to diminish in their yield during periods of dry weather. As a result of representations to the Company negotiations with the Manchester Corporation are being made for a supplementary supply.

## MINISTRY OF HEALTH INQUIRIES ATTENDED.

Date of Inquiry.	Local Authority.	Amount of Loan. £	Subject of Inquiry.
11/1/1935	Tarvin Rural District Council	4,500	Works of water supply for the parishes of Broxton and Burwardsley.
16/1/1935	Nantwich Rural District Council	15,360	Excess expenditure on loans, amounting to £121,000, sanctioned on the 8th March, 1932. (Bearstone Water Scheme).
12/2/1935 to 14/2/1935	Cheshire County Council Derbyshire County Council	—	Alteration of Cheshire and Derbyshire boundaries.
22/2/1935	Handforth Urban District Council	23,570	Works of sewerage and sewage disposal.
26/2/1935	Sandbach Urban District Council	6,000	Conversion of pail closets and privies to water closets.
13/3/1935	Runcorn Rural District Council	14,757	Works of water supply for the contributory parishes of Alvanley, Frodsham, Frodsham Lordship, Helsby, Kingsley, Kingswood, Manley and Newton-by-Frodsham.
23/4/1935	Chester Rural District Council	14,571	Works of sewerage for the contributory parish of Blacon, including works in the City of Chester.



9/5/1935	Northwich Rural District Council	7,300	Works of sewerage and sewage disposal for the contributory parishes of Rudheath and Lostock Gralam.
5/6/1935	Congleton Rural District Council	19,500	Works of sewerage and sewage disposal for the contributory parish of Church Hulme.
4/6/1935	Malpas Rural District Council	5,208	Works of water supply for the contributory parishes of Bickley, Hampton, Marbury-with-Quoisley and Norbury.
14/8/1935	Macclesfield Rural District Council	9,500	Works of sewerage for the contributory parish of Sutton.
18/9/1935	Macclesfield Rural District Council	4,600	Works of sewerage for the contributory parishes of Butley and Fallibroome.
19/9/1935	Congleton Rural District Council	22,000	Works of sewerage and sewage disposal for the contributory parish of Odd Rode.
24/9/1935 to 27/9/1935	Cheshire County Council	—	Review of County Districts.
16/10/1935	Lymm Urban District Council	18,000	Works of sewerage to meet new development and to replace sewers damaged by subsidence due to brine pumping.

All Ministry of Health Inquiries with regard to works of water supply, sewerage and sewage disposal are attended and reported upon. The views of the County Medical Officer of Health on the various schemes are frequently asked by the Ministry's Inspectors. Local Authorities are always glad to have the support of the County at the Public Inquiries in addition to contributions which are often made by the County Council under the Local Government Act, 1929.

## Section XIV.-Sewerage and Sewage Disposal.

---

Generally speaking the County as a whole is adequately provided with sewerage and sewage disposal services. All the municipal boroughs have modern treatment works which are maintained in a satisfactory condition. The urban districts are also well provided for in this respect. Of these, only two—Compstall and Handforth—are without adequate sewers and disposal works. Both are small districts with a limited revenue and are subsequently being transferred to larger Authorities. A sewerage scheme for Handforth has actually been sanctioned and work will shortly be begun.

The larger urban districts are alive to the necessity for providing extended sewerage and sewage disposal facilities to meet new development and future requirements of their areas.

With the introduction of piped water supplies in many rural parishes, together with new housing development having baths and W.C's, there is a general demand for a standard of sanitation equal to that of urban areas. The old conservancy systems should be replaced with water carriage systems where practicable.

Schemes of sewerage are being considered or are in course of preparation for various parishes by the Rural District Councils of Bucklow, Chester, Congleton, Disley, Macclesfield, Nantwich, Northwich, Runcorn and Tarvin.

### MUNICIPAL BOROUGHES.

#### CONGLETON.

The reconstructed sewage disposal works continue to discharge satisfactory effluents.

Sewer extensions have been carried out to meet new development. The Astbury Marsh and West Heath areas are still without proper sewerage facilities. It was stated in the report for 1934 that a scheme was being prepared.

#### CREWE.

Periodical samples of sewage effluents from the sewage disposal works have been reported to be satisfactory. All parts of the borough are adequately sewered.



## HYDE.

The sewage disposal works consist of tanks and bacterial filters which are supervised by the Mersey and Irwell Joint Committee. Land has been acquired during the year for the re-modelling of the works.

## MACCLESFIELD.

The sewage of the borough is dealt with by modern disposal works consisting of tanks and bacterial filters which are supervised by the Mersey and Irwell Joint Committee.

Sewer extensions have been carried out for new Housing Estates in Moss Lane area.

## DUKINFIELD.

## STALYBRIDGE.

The sewage of these two boroughs is dealt with at the disposal works of the Dukinfield and Stalybridge Joint Sewerage Board. Samples of sewage effluents examined by the Mersey and Irwell Joint Committee were reported to be satisfactory.

## URBAN DISTRICTS.

## ALSAGER U.D.

Periodical samples of sewage effluents from these works have been reported to be satisfactory.

## ALDERLEY EDGE U.D.

The sewage of the urban district is treated in tanks and irrigated on land. The disposal works are supervised by the Mersey and Irwell Joint Committee.

A part of Chorley Hall Lane is said to be in need of sewerage facilities.

## ALTRINCHAM U.D.

The sewage works consist of sedimentation tanks and land irrigation. The works are supervised by the Mersey and Irwell Joint Committee.

A storm overflow sewer has been constructed in Craven Road to deal with new development in Sinderland Road area.

## BEBINGTON U.D.

The Urban District Council have in course of preparation a large scheme for re-sewering the district. This scheme when completed will provide adequate drainage facilities for the developing parts of the district and also for the developed parts of the district where the sewers are at present overloaded.



### BOLLINGTON U.D.

The Mersey and Irwell Joint Committee supervise the sewage disposal works, which consist of tanks and bacterial filters. During the year the works have been improved by the construction of two Humus Tanks.

### BOWDON U.D.

Sewage is treated by means of sedimentation tanks and land irrigation. The works are controlled by the Mersey and Irwell Joint Committee.

### BREDBURY AND ROMILEY U.D.

Tenders are being invited for the new main drainage scheme and the reconstruction of the sewage disposal works.

### BUGLAWTON U.D.

The sewered portion of the urban district is drained to the disposal works of the Congleton Municipal Borough.

The outlying parts of the district are rural in character and sparsely populated.

### CHEADLE AND GATLEY U.D.

The whole of the urban district is now provided with sewerage facilities.

The sewage of the urban district is received and treated at the disposal works of Manchester Corporation.

### COMPSTALL U.D.

There are no sewage works for the urban district; the existing sewers discharge into a power lodge owned by the Calico Printers' Association.

### ELLESMERE PORT U.D.

The major portion of the urban district drains to disposal works at Little Stanney which consist of tanks and bacterial filters. The remaining part of the district drains to disposal works at Ellesmere Port which were reconstructed in 1933. The effluents from both works discharge into the tidal portion of the river Mersey.

During the year 710 yards of new sewers were laid by the Council and 1,112 yards by Estate developers.

The parish of Ince, which was transferred from Chester Rural District, is said to be in need of sewerage facilities.



### HALE U.D.

The district is well provided with sewerage facilities; seventy-five per cent. of the sewage is treated at the Council's Sewage Works which consist of Activated Sludge Tanks and Storm Tanks.

Sewage from the northern part of the district is received and treated at the Altrincham Sewage Works, by agreement.

### HANDFORTH U.D.

It is anticipated that within a few months work will be begun on the sewerage scheme for the major portion of the urban district.

### HAZEL GROVE AND BRAMHALL U.D.

Hazel Grove district drains to a modern sewage works of recent construction. Bramhall drains to a separate disposal works of obsolete design, which, as a result of rapid development, is overtaxed. The Council's consulting engineers have submitted a report on the existing Bramhall sewerage system and also the feasibility of discharging the sewage of Bramhall into the sewers of the Cheadle and Gatley Urban District Council, as an alternative to remodelling the existing Bramhall Works. The report has been approved by the Council, and the Engineers have been instructed to prepare a detailed scheme for sewerage Bramhall into the sewers of Cheadle and Gatley Urban District and abandoning the existing Bramhall Sewerage Works.

The Consulting Engineers have also reported on the existing trunk sewers in the Hazel Grove drainage district, with due regard to the sewerage requirements of the Buxton Road, High Lane district.

During the year additional sewers, consequent upon new building development, have been laid as undermentioned:—

#### Hazel Grove—

1,403 yards of sewage sewers.

1,005 yards of surface water sewers.

#### Bramhall—

1,140 yards of sewage sewers.

2,209 yards of surface water sewers.

### HOLLINGWORTH U.D.

The urban district is drained to sewage disposal works consisting of precipitation tanks, continuous filters and land irrigation. The works are supervised by the Mersey and Irwell Joint Committee.



### HOOLE U.D.

The sewage of the urban district is received and treated at the disposal works of Chester Corporation. A small group of houses at Piper's Ash, outside the sewered area, is drained to a septic tank and filter.

### HOYLAKE U.D.

The sewage of the urban district is discharged into tidal waters. Retention tanks at Hoylake and Meols are provided with penstock valves, so that sewage is only discharged on the ebb tide.

During the year about three miles of tributary sewers have been laid.

### KNUTSFORD U.D.

The urban district is drained to modern sewage works consisting of tanks and bacterial filters. Effluents examined by the Mersey and Irwell Joint Committee have been satisfactory.

### LYMM U.D.

In October, 1935, a sewerage scheme was submitted to the Ministry of Health which has been approved. The scheme provides for re-sewering practically the whole of the district; it will remedy overcharged sewers in Statham district due to building development, and damaged sewers in the Heatley district due to subsidence caused by brine pumping.

### MARPLE U.D.

The whole of the urban district is efficiently sewered with the exception of isolated cottages and farms. The north easterly part of the district drains to the sewage works of the Ludworth, Mellor and Lower Marple Joint Sewerage Board, whilst the major portion of the district drains to the Urban District Council's main works. Effluent samples examined by the Mersey and Irwell Joint Committee have been satisfactory.

### MIDDLEWICH U.D.

The sewage works, although badly affected by subsidence, are maintained in a reasonably fit condition as far as practicable, and the effluents have not caused any complaints.

### MOTTRAM-IN-LONGDENDALE U.D.

The sewered portion of the district is drained to disposal works comprising tanks, continuous filters and land irrigation, which are supervised by the Mersey and Irwell Joint Committee.

The Mottram Ward is said to be in need of sewerage facilities.



### NANTWICH U.D.

During the year work was completed on the sewerage and sewage disposal scheme. This includes the construction of intercepting sewers draining the whole of the district, a pumping station for pumping sewage to the disposal works, and full treatment works consisting of tanks and bacterial filters.

### NESTON U.D.

The urban district is sewered to disposal works consisting of tanks and bacterial filters. The final effluent is discharged into the tidal waters of the river Dee estuary.

### NORTHWICH U.D.

Sewage disposal works at Winnington, which consist of tanks and bacterial filters, deal with the sewage of the Urban district and a portion of the adjoining Northwich Rural District.

The works are maintained in a satisfactory condition and the effluents have been good.

### RUNCORN U.D.

The sewers of the district empty into two large intercepting sewers which pass under the Manchester Ship Canal and discharge into the tidal portion of the River Mersey. New sewers have been constructed to meet building development.

### SANDBACH U.D.

The greater part of the urban district is sewered to the main sewage works consisting of tanks and bacterial filters, the effluents from which have been satisfactory.

A portion of Bradwall Road and Elworth Street which cannot be sewered to the main works are dealt with by means of a small tank and filter.

### TARPORLEY U.D.

The village of Tarporley is sewered to disposal works consisting of tanks and land irrigation which are discharging satisfactory effluents.

The villages of Eaton and Rushton are in need of sewerage facilities. A sewerage scheme was begun but work has been suspended owing to the urban district being transferred to the Northwich Rural District in 1936.



## WILMSLOW U.D.

The urban district is sewered to two separate disposal works serving the northern and southern parts of the district respectively. Both works are supervised by the Mersey and Irwell Joint Committee. The works are maintained in a satisfactory condition and the effluents are good.

## WINSFORD U.D.

The greater part of the urban district drains to main disposal works consisting of screens and detritus tanks and cinder filter beds adjoining a large "Flash" into which the final effluent is discharged. There is no defined effluent outfall from the filters.

The attention of the Urban District Council has been called to the necessity for improving a small disposal works serving about 60 houses in the Meadowbank area and also with regard to the sewerage of Littler's Lane and Swanlow South areas.

## WIRRAL U.D.

During the year no comprehensive scheme of sewerage has taken place but a number of short extensions have been made to meet new building development.

The Council's Consulting Engineers have issued a report recommending the alteration and enlargement of a number of existing sewers in the district, which they state are incapable of dealing with the present discharge of sewage, and in these recommendations they have borne in mind the ultimate development of the district. The major parts of the Thurstaston Ward are still unsewered, but very little development has taken place. There are also parts of other Wards for which there are no sewerage facilities, but these parts are in the main undeveloped.

The sewered portion of the urban district drains to disposal works consisting of settlement tanks, which discharge into the tidal waters of the river Dee Estuary.

## YEARDSLEY-CUM-WHALEY U.D.

The urban district is sewered to the disposal works of the Whaley Bridge Joint Sewerage Board which are maintained in a satisfactory condition. During the year some 800 yards of new sewers have been laid to meet new development.



## RURAL DISTRICTS.

## BUCKLOW R.D.

The reconstruction of Dunham Massey sewage works is nearing completion.

A scheme of sewerage and sewage disposal was provided in the parish of Mere in connection with the development of an Estate by private enterprise.

A scheme of sewerage and sewage disposal for the parish of Partington has been submitted to the Ministry of Health.

A number of sewer extensions have been carried out in various parts of the district to meet new building development.

## CHESTER R.D.

The semi-urban parishes adjacent to the City of Chester are drained into the sewers of Chester Corporation, the sewage being treated at the Chester Sewage Works, by agreement.

In April, 1935, a sewerage and sewage disposal scheme for the parish of Blacon was submitted to the Ministry of Health. The scheme was sanctioned and the work will be carried out in due course.

A scheme for sewerage the parish of Littleton, where development is taking place, is being prepared for submission to the Ministry of Health.

## CONGLETON R.D.

Sewers and sewage disposal works are provided for the parishes of Church Lawton, Church Hulme and Elworth.

Work is in progress on a scheme of sewer extensions in the village of Holmes Chapel (Church Hulme) and the construction of new sewage disposal works.

In September, 1935, a sewerage and sewage disposal scheme for the parish of Odd Rode was submitted to the Ministry of Health. The scheme was sanctioned and the work will shortly be begun.

Sewerage schemes are also under consideration for the parishes of Astbury and Wheelock.

## DISLEY R.D.

The Furness Vale area of the rural district is sewered to the disposal works of the Whaley Bridge Joint Sewerage Board.



The Council's main sewage works deals with the remaining part of the district, with the exception of Disley Wood district which is in a different drainage area.

A scheme is in hand for sewerage this district to a small disposal works.

#### MACCLESFIELD R.D.

In October, 1935, an application was made to the Ministry for a loan of £4,600 for sewer extensions in the parish of Butley. This scheme was not sanctioned owing to the cost being too high in proportion to the number of premises served.

The parishes of Rainow and Woodford are in need of sewerage and sewage disposal facilities.

Negotiations have not yet been concluded with Hazel Grove Urban District Council with regard to the terms upon which the sewage of Poynton will be accepted by Hazel Grove.

#### MALPAS R.D.

The village of Malpas with a population of about 1,000 is the only part of the district which is provided with sewers and sewage disposal works. One half of the village drains to the south west and the other half to the west, necessitating two separate disposal works, which consist of tanks and bacterial filters.

During the year attention was called to three unsatisfactory samples of sewage effluents which appear to have been due to defective sewage distributors on the filters. These have now been put in order.

#### NANTWICH R.D.

Sewerage and sewage disposal facilities are provided for the parishes of Haslington, Shavington, Wistaston and Willaston, which are semi-urban in character.

A part of Stapeley parish is drained to the sewers of the Nantwich Urban District Council.

Parts of the rural district which are in need of sewerage facilities are:—

Parishes of Audlem, Bunbury, Calveley, Church Coppenhall, Newhall (part), Rope (part), Stapeley (part), Shavington (part), Wistaston (part), Wrenbury and Wybunbury.

The attention of the rural district council has been called to serious pollution of a stream by the effluents from Haslington Sewage Works which are in a derelict condition. A scheme for reconstructing these works is being prepared.



## NORTHWICH R.D.

An entirely new sewerage system and sewage disposal works has been provided for the parishes of Davenham, Eaton and Leftwich at a cost of £11,000.

A scheme has been prepared for submission to the Ministry of Health for the provision of sewers and sewage disposal works in the parish of Cuddington.

Owing to housing development in the parish of Rudheath a scheme was prepared for extending Rudheath Sewage Works, which had become overtaxed. This work is now in hand.

New schemes of sewerage and sewage disposal have been decided upon for those portions of the parishes of Delamere and Eddisbury which adjoin the village of Kelsall, and also the Abbey Arms area.

It is also intended to provide a main sewerage scheme for the Weaverham-Northwich Road in the parish of Weaverham, together with improvements to the existing sewage works.

## RUNCORN R.D.

Work on a new comprehensive sewerage and sewage disposal scheme, embracing all the parishes from Thelwall to Acton Grange, was begun in July, 1935.

The scheme, in addition to draining portions of those areas not at present sewered, will intercept and treat (in full treatment works), the whole of the existing drainage which at present discharges in a crude state into either the Manchester Ship Canal or the Bridgewater Canal.

Schemes of sewerage and sewage disposal are under consideration for the parishes of Great Budworth, Kingsley, Norley, Clifton and Sutton.

The existing sewage works at Helsby and Moore are maintained in a satisfactory condition.

## TARVIN R.D.

The villages of Aldford and Saughton are the only parts of the district which are provided with sewerage and sewage disposal facilities.

In July, 1931, the County Council urged the Rural District Council to provide sewers and sewage disposal works for the parishes of Barton, Churton, Farndon, Tattenhall and Waverton.

In 1935 similar services were requested for the parishes of Kelsall, Tarvin and Guilden Sutton.

The plans for sewerage and sewage disposal works for the village of Tattenhall are almost completed.

A scheme has been partly prepared for sewerage the parishes of Rowton and Waverton.

#### TINTWISTLE R.D.

The village of Tintwistle is drained to sewage works consisting of tanks and bacterial filters which are supervised by the Mersey and Irwell Joint Committee.

A portion of the Matley district is drained to the works of the Stalybridge and Dukinfield Joint Sewerage Board.



## Section XV.-Public Cleansing.

Refuse collection and disposal, and public cleansing, are undertaken in the County Districts, as follows:—

By whom carried out.	Municipal Boroughs.	Urban Districts.	Rural Districts.	Total.
Local Authority ...	7	25	1	33
Part Local Authority and part Contractor.	—	2	3	5
Contractor ...	—	5	5	10
Occupiers ...	—	1	2	3
Disposal on refuse tips ...	6	32	11	49
Burnt in Destructor ...	1	—	—	1

Information furnished by the various Local Authorities in the County shews that the majority of them are carrying out this service in a satisfactory manner. The necessity for providing a proper system of public cleansing is more generally recognised than it used to be, but the standard of scavenging in some of the rural parishes is not very high. Many rural householders are obliged to empty and cleanse pail closets and privies and dispose of their household refuse on common tips provided by the parish councils. These tips are invariably badly kept, no attempt being made to cover the refuse, which is usually deposited in an indiscriminate manner. In the villages and hamlets which have no scavenging service it is quite common to see large accumulations of ashes and refuse in gardens, no proper receptacles for the storage of refuse, and roadside ponds turned into rubbish tips.

In instances where the scavenging is carried out by contract, the refuse tips are usually ill-kept. It is advised that the attention of all scavenging contractors be drawn to the precautions suggested by the Ministry of Health with regard to the proper covering of refuse after tipping, and that a copy of such recommendations form a part of all future scavenging contracts.

In those areas which are provided with a piped water supply and sewers it should be pointed out that the annual loan charges in respect of a scheme for conversion of pail closets and privies to water closets are usually less than the actual cost incurred by the Local Authority in scavenging pails and privies, leaving aside the benefit derived from improved sanitation. This fact has been confirmed by Inspectors of the Ministry of Health at Inquiries into applications for loans in respect of conversion schemes under Section 39 of the Public Health Act Amendment Act, 1907.



The proportion of parishes scavenged in the Rural Districts is as follows:—

	Number of Parishes in District.		Number of Parishes which are scavenged.	
Bucklow R.D.	...	27	...	21
Chester R.D.	...	41	...	8
Congleton R.D.	...	27	...	8
Disley R.D.	...	1	...	1
			(whole district).	
Macclesfield R.D.	...	37	...	5
Malpas R.D.	...	23	...	1
			(private scheme by occupiers).	
Nantwich R.D.	...	67	...	12
Northwich R.D.	...	37	...	20
Runcorn R.D.	...	40	...	12
Tarvin R.D.	...	58	...	6
Tintwistle R.D.	...	3	...	—

The scavenging of every parish in a rural district is impracticable — especially those parishes having a small population and a large acreage, but there is a need for this service to be extended to a number of parishes in the County.

### REFUSE TIPS.

#### *Precautions suggested by the Ministry of Health.*

1. Every person who forms a deposit of filth, dust, ashes or rubbish, of such a nature as is likely to give rise to nuisance exceeding \*cubic yards, must, in addition to the observance of any other requirements which are applicable comply with the following rules:—

- (1) The deposit to be made in layers.
- (2) No layer to exceed \*feet in depth.
- (3) Each layer to be covered on all surfaces exposed to the air, with at least 9 inches of earth or other suitable substance; provided that during the formation of any layer not more than \*square yards may be left uncovered at any one time.
- (4) No refuse to be left uncovered for more than 24 hours from the time of deposit.
- (5) Sufficient screens or other suitable apparatus to be provided, where necessary, to prevent any paper or other debris from being blown by the wind away from the place of deposit.

\*Appropriate figures should be inserted here, after full consideration of the local conditions. The Ministry will be glad to advise on this point and, in any event, to be informed of the figures adopted.

Unless the circumstances are very exceptional, the depth of the layer should not exceed six feet.

The object of this is to provide that even the surface which is allowed to remain exposed under the proviso to (3) shall be covered up promptly; this should be done within 24 hours.



2. Every person who deposits any filth, dust, ashes or rubbish likely to cause a nuisance if deposited in any water must, so far as practicable, avoid its being deposited in water.

3. Every person who deposits any filth, dust, ashes or rubbish must take all reasonable precautions to prevent the breaking out of fires and the breeding of flies and vermin on or in such a deposit.

4. If the material deposited at any one time consists entirely or mainly of fish, animal or other organic refuse, the person making such deposit must forthwith cover it with earth or other equally suitable substance at least two feet in depth.

5. Every person who deposits any filth, dust, ashes or rubbish must take all practicable steps to secure that tins or other vessels or loose debris likely to give rise to nuisance are not deposited in an exposed condition on or about the place of deposit.

6. Sufficient and competent labour must be provided in connection with the deposit to enable the necessary measures to be taken for the prevention of nuisance.

7. So far as practicable each layer of refuse which has been laid and covered with soil must be allowed to settle, before the next layer is added.

8. Wherever practicable, the person making a deposit must avoid raising the surface of the tip above the general level of the adjoining ground.

9. All refuse must be disposed of with such dispatch and be so protected during transit as to avoid risk of nuisance.

### CONSERVANCY SYSTEMS.

From returns furnished by the various Local Authorities the number of pail closets and/or privies remaining in populous and closely built centres is as follows:—

#### MUNICIPAL BOROUGHES.

Congleton	773	Conversion of all pails will be completed at an early date. Work in progress.
Crewe	1300	Scheme for conversion of all pails to be commenced at an early date.
Dukinfield	8	These are in a Slum Clearance Area scheduled for demolition.
Hyde	194	Conversions are being carried out by negotiation with owners of property.
Macclesfield	88	(In rural outskirts of Borough only).
Stalybridge	15	
Sale	—	



## URBAN DISTRICTS.

Alderley Edge	30	Systematic conversions under the Public Health Act Amendment Act, 1907.
Alsager	—	
Altrincham	—	
Bebington	—	
Bollington	—	
Bowdon	—	
Bredbury and Romiley	175	Conversions to be carried out on completion of new sewerage scheme.
Buglawton	311	Contribution of £3 per conversion was offered by Council, but met with poor response. Scheme suspended for the present.
Cheadle and Gatley	—	
Compstall	160	A conversion scheme is impracticable at the present time on account of an inadequate water supply and the absence of proper sewers and sewage disposal works. (This District was transferred to Bredbury and Romiley U.D.C. in April, 1936).
Ellesmere Port	—	
Hale	—	
Handforth	125	Conversion of pails to be carried out on the completion of sewerage scheme.
Hazel Grove	—	
Hollingworth	132	Systematic conversions carried out under Public Health Act Amendment Act, 1907.
Hoole	—	
Hoylake	—	Privies and pails are being systematically converted to W.C.'s where new sewers are laid.
Knutsford	—	
Lymm	66	(Mainly in outlying parts of the district).
Marple	—	
Middlewich	46	(None of these are in built-up areas).
Mottram-in-Longdendale	590	U. D. Council contributes half the cost of conversion to W.C.
Nantwich	1187	Conversion scheme in course of preparation.
Neston	31	
Northwich	729	Conversions of all pails are being carried out by voluntary arrangement between Council and owners.
Runcorn	4	
Sandbach	681	Loan of £6,000 sanctioned for conversions to W.C.'s. Work in progress.
Tarporley	2	
Wilmslow		A few pails still in use at condemned houses, which will subsequently be demolished.
Winsford	427	Conversions are proceeding—chiefly for privies.
Wirral	128	No conversion scheme at present.
Yeardsley-cum-Whaley	14	These are shortly being converted.



## RURAL DISTRICTS.

Bucklow	—	
Chester	—	
Congleton	1130	Conversion of all pails pending on completion of sewerage schemes for Church Hulme and Odd Rode parishes.
Disley	48	
Macclesfield	—	
Malpas	40	(In Malpas).
Nantwich	2300	
Northwich	2171	Sanction of the Ministry of Health has been obtained for a scheme of pail closet conversions in the parish of Barnton. Schemes are being prepared for converting the whole of the pail closets in the populous parishes of Weaverham, Lostock Gralam, Davenham, Leftwich and Moulton, by loan under the Public Health Act Amendment Act, 1907.
Runcorn	359	
Tarvin	2000	Conversion scheme impracticable at the present time owing to inadequate water supply and sewerage facilities.
Tintwistle	150	The Rural District Council have been urged to consider a scheme for the conversion of all pails and privies within the sewered portion of the district.





	Bucklow R.D.	Chester R.D.	Congleton R.D.	Disley R.D.	Macclesfield R.D.	Nantwich R.D.	Northwich R.D.	Runcorn R.D.	Tarvin R.D.	Tintwistle R.D.
<b>1. Inspection of Dwelling-houses during the year:—</b>										
(1) (a) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts) .. .. .	49	180	342	27	998	120	980	232	290	333
(b) Number of inspections made for the purpose .. .. .	93	323	357	52	2102	356	1500	250	400	—
(2) (a) Number of dwelling-houses (included under sub-head) (1) above which were inspected and recorded under the Housing Consolidated Regulations, 1925.. .. .	15	—	42	8	84	—	10	42	18	20
(b) Number of inspections made for the purpose .. .. .	21	—	46	16	84	—	26	42	54	—
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .. .. .	—	110	5	—	3	38	10	—	23	—
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .. .. .	15	83	24	2	164	59	48	38	15	33
<b>2. Remedy of defects during the year without service of formal notices:—</b>										
Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers .. .. .	20	83	30	—	166	9	48	207	6	27
<b>3. Action under Statutory Powers during the year:—</b>										
(a) Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930:—										
(1) Number of dwelling-houses in respect of which notices were served requiring repairs .. .. .	—	—	—	3	167	57	—	17	—	6
(2) Number of dwelling-houses which were rendered fit after service of formal notices:—										
(a) By Owners.. .. .	13	—	4	—	1	20	—	14	2	6
(b) By Local Authority in default of Owners .. .. .	—	—	—	—	—	—	—	—	—	—
(b) Proceedings under Public Health Acts:—										
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied .. .. .	—	—	3	3	167	2	5	5	—	23
(2) Number of dwelling-houses in which defects were remedied after service of formal notices:—										
(a) By Owners.. .. .	—	—	3	—	1	2	5	—	—	21
(b) By Local Authority in default of Owners .. .. .	—	—	—	—	—	—	—	5	—	—
(c) Proceedings under Sections 19 and 21 of the Housing Act, 1930:—										
(1) Number of dwelling-houses in respect of which Demolition Orders were made .. .. .	—	—	19	—	—	17	6	18	9	—
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders .. .. .	—	—	12	—	—	5	3	10	9	—

Details of any action which has been taken or is proposed to be taken to provide further housing accommodation.—

BUCKLOW R.D.—Scheme submitted for six houses at Warburton.

CHESTER R.D.—Slum Clearance Orders confirmed by Ministry of Health will necessitate the provision of approximately 65 houses.

CONGLETON R.D.—Action deferred pending completion of Survey under Housing Act, 1935.

MACCLESFIELD R.D.—No action proposed at present.

NANTWICH R.D.—Scheme to be submitted on completion of Housing Survey.

NORTHWICH R.D.—Scheme sanctioned for 78 additional houses.

RUNCORN R.D.—Action deferred pending completion of Survey under Housing Act, 1935.

TARVIN R.D.—13 houses erected by Local Authority during 1935.

TINTWISTLE R.D.—R.D.C. state that no further housing accommodation is required.


## Section XVI.-Housing.

---

Section 32 of the Housing Act, 1930, places a duty on every County Council, as respects each Rural District within the County, to have constant regard to the housing conditions of persons of the working classes, the extent to which overcrowding and other unsatisfactory conditions exist, and the sufficiency of the steps which the District Councils have taken, or are proposing to take, to remedy those conditions and to provide further housing accommodation.

The Council of every Rural District are under an obligation to furnish the County Council at intervals such information with regard to housing matters as the County Council may reasonably require for the purpose of enabling them to carry out their duties under this section.

The following table is a record of the housing work carried out by the several Rural District Councils during the year under review.





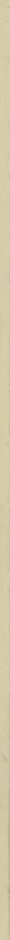
**Housing (Rural Workers) Acts, 1926-31.**

The attention of Local Authorities and property owners is again directed to the advantages of this Act, by which owners of unfit houses can, under certain conditions, obtain a grant from the County Council towards the cost of reconditioning and improving houses which are occupied by agricultural workers and other persons whose condition is substantially the same.

Since the Act came into operation a total of 154 premises in the County have been reconditioned. Many of these would otherwise have been demolished by their owners as not capable of being rendered fit at a reasonable cost.

The Acts apply equally to those Urban Districts, County and Municipal Boroughs, which may be essentially urban in character, but contain agricultural areas.

The following photographs illustrate a few typical examples of unfit houses which have been reconditioned by means of grants under this Act.



SWANLOW LANE, WINSFORD



BEFORE RECONDITIONING



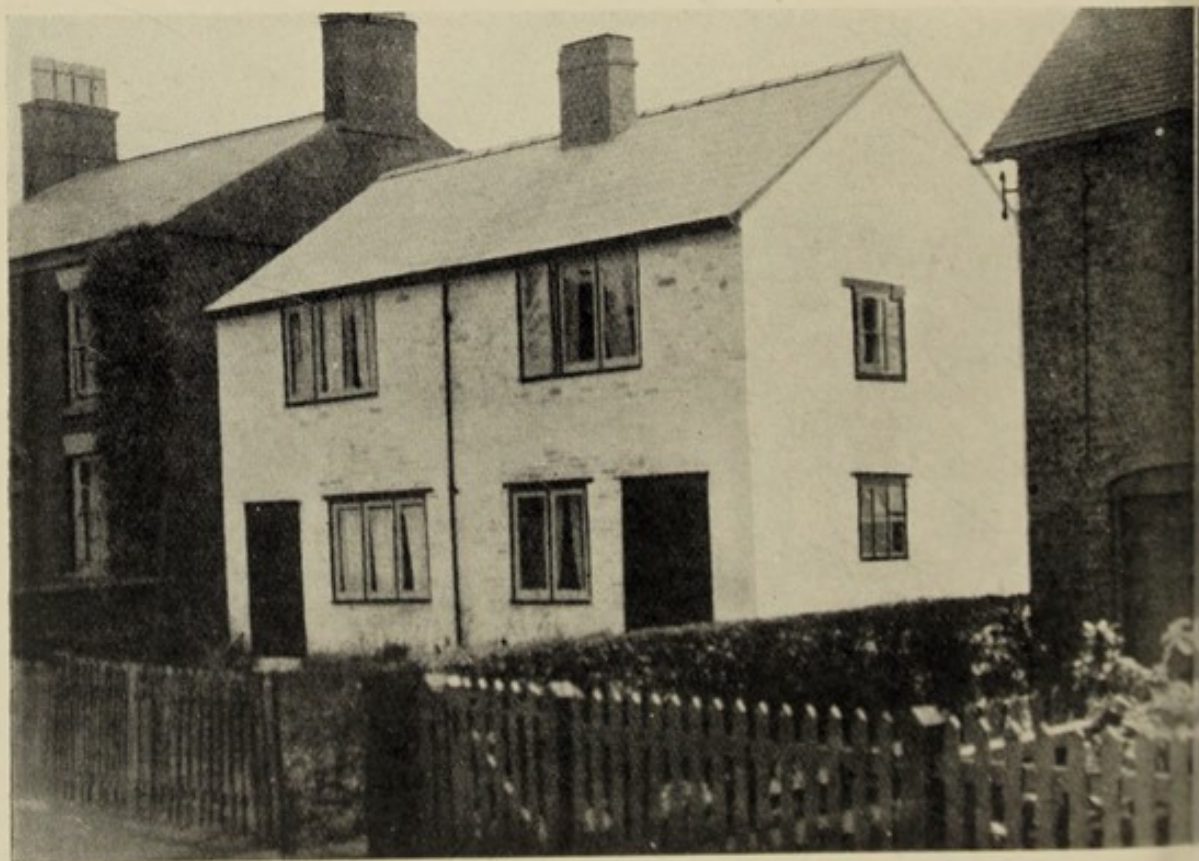
AFTER RECONDITIONING



**CREWE ROAD, WYBUNBURY**

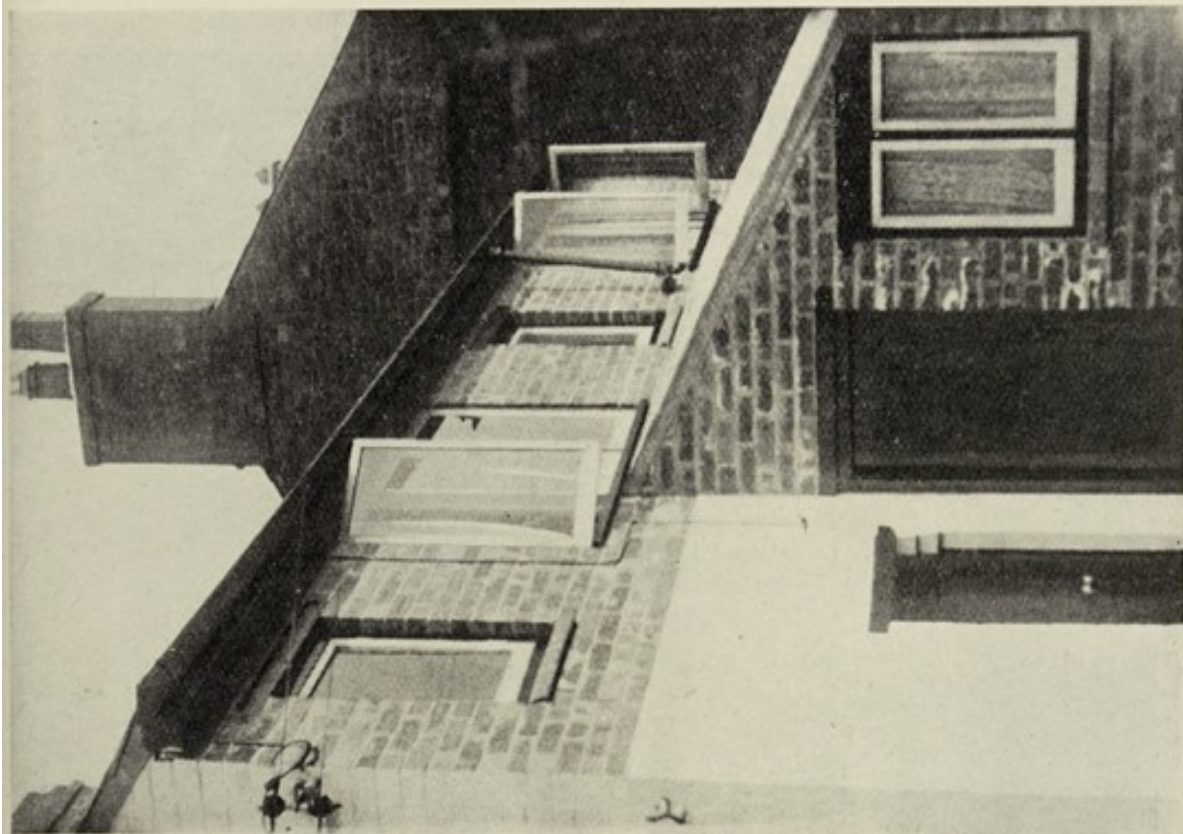


**BEFORE RECONDITIONING**

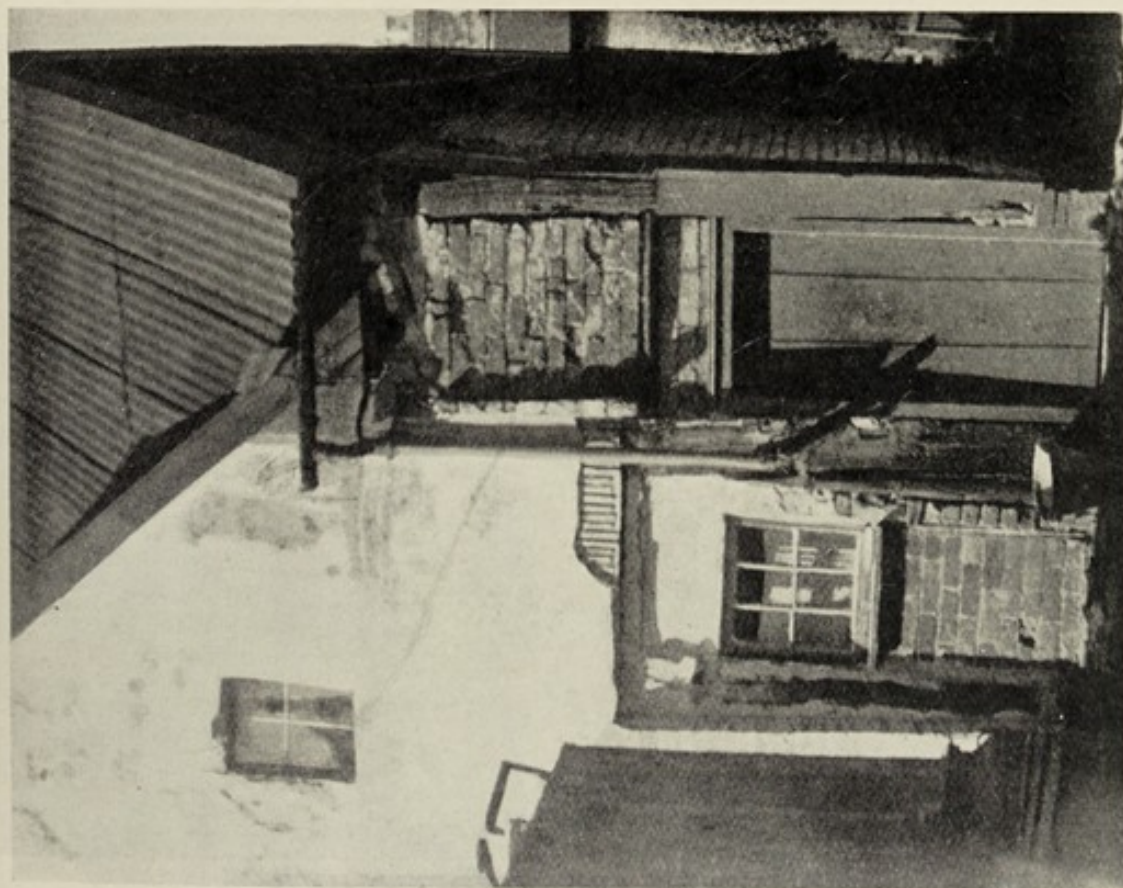


**AFTER RECONDITIONING**





**AFTER RECONDITIONING**



**BEFORE RECONDITIONING**



## THE YELD, EDDISBURY



BEFORE RECONDITIONING



AFTER RECONDITIONING

## HOUSING (RURAL WORKERS) ACTS, 1926/31.

## POSITION AT 31ST DECEMBER, 1935.

Summary of Rural and Urban Districts in which grants have been made.

District.	No. of Applica- tions.	No. of dwellings concerned.	Amount of Grants.		
			£	s.	d.
Bebington Urban District ..	2	2	100	0	0
Chester Rural District ..	1	4	300	0	0
Congleton Rural District ..	4	5	347	0	0
Malpas Rural District ..	14	26	2239	10	0
Nantwich Rural District ..	26	37	3103	0	0
Nantwich Urban District ..	2	4	400	0	0
Northwich Rural District ..	5	8	678	0	0
Runcorn Rural District ..	9	24	1795	0	0
Tarvin Rural District ..	19	38	3380	0	0
Wirral Urban District ..	2	3	220	0	0
Winsford Urban District ..	2	5	230	0	0
	88	156	12792	10	0

NOTE—The number of applications approved during the year ended 31st December, 1935, was 11, in respect of 23 dwellings, the grants made in respect thereof amounting to £1995. Also, 2 applications were withdrawn involving 4 dwellings and grants amounting to £400.



# APPENDIX

CONTAINING  
A LIST OF THE  
PLANTS AND ANIMALS  
COLLECTED BY THE  
UNITED STATES  
NAVY

PLANT	ANIMAL
1. <i>Adiantum</i>	1. <i>Amphibia</i>
2. <i>Alga</i>	2. <i>Arachnida</i>
3. <i>Angiosperm</i>	3. <i>Aspidochelone</i>
4. <i>Conifer</i>	4. <i>Bird</i>
5. <i>Cryptogam</i>	5. <i>Carnivora</i>
6. <i>Dicotyledon</i>	6. <i>Cnidaria</i>
7. <i>Equisetum</i>	7. <i>Copepod</i>
8. <i>Gymnosperm</i>	8. <i>Crayfish</i>
9. <i>Herb</i>	9. <i>Crustacea</i>
10. <i>Moss</i>	10. <i>Fish</i>
11. <i>Orchid</i>	11. <i>Insect</i>
12. <i>Parasite</i>	12. <i>Mollusk</i>
13. <i>Polyp</i>	13. <i>Nemertea</i>
14. <i>Reptile</i>	14. <i>Onychophora</i>
15. <i>Seaweed</i>	15. <i>Phoron</i>
16. <i>Shrub</i>	16. <i>Porifera</i>
17. <i>Succulent</i>	17. <i>Protozoa</i>
18. <i>Tern</i>	18. <i>Rotifera</i>
19. <i>Tree</i>	19. <i>Spongia</i>
20. <i>Unidentified</i>	20. <i>Tunicata</i>

THE  
PLANTS AND ANIMALS  
COLLECTED BY THE  
UNITED STATES  
NAVY  
ARE  
DEPOSITED  
IN THE  
LIBRARY OF THE  
UNITED STATES  
NAVY