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ANNUAL REPORT

OF THE

MEDICAL OFFICER

TO

The County Council

OF

NOTTINGHAMSHIRE,

FOR THE YEAR 1920,

BY

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and of the Royal Sanitary Institute.
Hon. Consulting Physician to the General Hospital Nottingham,
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of Consumption.

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PUBLIC HEALTH DEPARTMENT,

SHIRE HALL,

NOTTINGHAM,

August, 1921.

TO THE COUNTY COUNCIL OF NOTTINGHAMSHIRE,

GENTLEMEN,

I have the honour to present my twenty-fifth Annual Report which deals with the year 1920, according to the instructions of the Ministry of Health, but frequent reference is made to the happenings of 1921, some of which have necessarily delayed the preparation of this Report.

The Staff of the Public Health Department is hardly adequate in ordinary times when everything works smoothly; but during the stress caused by taking over the Tuberculosis work of the Insurance Committee without any extra staff, by the reorganisation of the Milk Distribution, the constant Reports required by the Ministry of Health, the preparation of evidence in connection with the Enquiry concerning the proposed Newark Extension, the Rotherham Water Bill, and afterwards the Newark Bill in both Houses, delay must arise in completing the routine periodic reports.

The unexpected resignation of Dr. Titterton, the Clinical Tuberculosis Officer, in the middle of August has placed an extra strain upon the remaining staff.

The extensions of work that have been carried out in 1920 and 1921, without extra staff have more than used up any spare energy. The whole medical, nursing and clerical staff are working to their full capacity and the wish of the Ministry of Health that an "*intensive Health Campaign*" should be undertaken is inopportune. The medical staff of the Notts Health Committee are always carrying on an "intensive Campaign" and cannot do more without being strengthened by additions which it would be unreasonable to ask for during the financial crisis.

The outbreak of Small Pox in Long Eaton on the borders of this County in June and July, 1921, and afterwards in Nottingham in July and August, caused much anxiety at the Shire Hall. This is further dealt with under the heading of Small Pox on pages 29 and 30.

The extreme necessity for economy makes it advisable that this report should be restricted to an absolute minimum Almost everything in it has already been communicated to the County Council several months ago in the usual periodic reports.

A short abstract of the Vital Statistics for the County of Notts. for the year 1920 was prepared at the end of March and circulated in April 1921. The year was very healthy with the lowest death-rate on record, namely 10.9 per 1,000 of the population, which was estimated to be 380,928.

The preliminary Report of the Census of 1921, was made public on August 24th, and shews that the population for the County of Notts. had been very slightly over-estimated in the returns forwarded to the County Medical Officer by the Registrar General for 1920. The population for 1921 is 378,476. Further details are given on pages 13, 14. From them it will be seen that all the Urban Districts have increased and all the Rural Districts except Bingham—some of them very considerably.

The deaths in 1920 numbered 4,169. If the death rate of 17.7 recorded in 1891 had prevailed in 1920 there would have been 6,742 deaths instead of 4,169—an addition of 1,573 deaths which have been saved. What are those lives worth ?

The births numbered 9,836—the largest number ever registered in the County, and the birth rate was 25.8, which is higher than the rate for England and Wales, which was 25·4. The Infantile Mortality rate was 85 per 1,000 births for the whole County but only 70 per 1,000 for the Special Area administered by the County Council, through the Maternity and Child Welfare Committee. On the other hand the Infantile Mortality rate for England and Wales was only 80 per 1,000 births which is lower than for Nottinghamshire, where the rates tend to be high as in all areas where coal mining is the leading industry. There can be no reasonable doubt that the reduction of the Infantile Mortality rate from 161 in the year 1899 to 85, a little more than one half, in 22 years is to be mainly attributed to the persistent teaching of Doctors, Health Visitors, and Midwives. The lives saved should be some compensation for the annual expenditure of the various Health Authorities in the County.

During 1920, new Child Welfare Centres were opened at Radcliffe-on-Trent, Balderton, and Edwinstowe, and in 1921 a centre has just been commenced at Ollerton.

The wish of the Ministry of Health that the County Council should take over the administration of three Urban districts and two Rural districts has not materialized. An additional Medical Officer would have been necessary and several Health Visitors; and this the County Council considered inexpedient during the financial stringency in the Country, although the expenditure would have been largely a transfer from the district rate to the County rate. The Ministry of Health have consequently agreed to postpone their requirements.

The largest and most important undertaking of the Health Committee is the treatment and prevention of Tuberculosis; especially since the transfer to the Health Committee from the Insurance Committee of the administration of Sanatorium Benefit. This was accomplished on May 1st, 1921, without any hitch, and removed a good deal of duplication of correspondence.

The most reliable guide to the prevalence of Tuberculosis is the death-rate. Notification for various reasons has proved disappointing but is being improved.

During the War, from 1914 to 1918, there was a steady increase in the deaths from Tuberculosis, notwithstanding a nearly uniform decrease for the previous 50 years. This was clearly due to War conditions, and prevailed all over Europe.

In 1919 a change back to pre-war conditions began to manifest itself, and in 1920 in spite of an increased population, there were 23 fewer deaths from Pulmonary Tuberculosis than in 1919, namely 262 against 285. The expenditure upon Tuberculosis is very large and is increasing: but undoubtedly much progress is being made in the face of considerable adverse criticism. Progress must continue on the present lines unless financial and social disaster should arise, and there should be a return of the stress that prevailed during the great War.

The plans for temporary buildings to be erected in the grounds of the Ransom Sanatorium by the Ministry of Health for an Industrial Training Centre for 20 suitable consumptive ex-service patients have been abandoned on account of the financial crisis.

The plans for an additional 80 beds at the Ransom Sanatorium which, as mentioned in last year's report, had been approved by the Ministry of Health, are now being carried out, and the buildings are well advanced. They should be completed in 1922. When all the new beds are occupied the Sanatorium work will be more than doubled.

Enteric Fever is looked upon rightly as a test of sanitary efficiency upon certain restricted lines. In 1920 there were only 3 deaths among 380,928 people—less than one per 100,000. As indicating the progress that has been made, in 1898 as many as 63 persons died out of a population of 261,224.

Scarlet Fever has increased very slightly, causing 9 deaths, compared with 6 in 1919, 20 in 1914, and 45 in 1900.

Diphtheria has also increased, as in most parts of England, and caused 49 deaths compared with 28 in 1919 and 63 in 1914.

The lessened fatality of Influenza accounts for an appreciable portion of the improved death-rate. In the year 1920 only 61 deaths were attributable to Influenza, compared with 357 in 1919 and 1552 in 1918.

As regards Venereal Disease, much progress has been made, although the whole subject is surrounded with difficulties. At the end of December 1920, the Mansfield Treatment Centre was transferred from the General Hospital to Westhill House where there is much more room. The new buildings have been thoroughly equipped for the treatment of outdoor patients, and two beds provided for emergencies arising during treatment.

Both Westhill House and the Treatment Centre at Newark have recently been inspected by the Ministry of Health.

The evening Clinic for women at Newark presided over by a lady Medical Officer did not justify the expenditure and after a few months was withdrawn.

The statistical details are given on pages 50-55. It will be seen from them that the number of attendances has increased; but there is much difficulty in obtaining an adequate attendance of women patients.

I gather from the specialist staff that as a result of three years' work far fewer cases of very virulent disease are now observed. On the other hand one of the most important

drawbacks in the work consists in the considerable number of patients of both sexes who discontinue attendance contrary to advice before they have been cured, and in some instances before they have ceased to be infectious.

There were many communications from and reports to, the Housing Commissioner in the earlier part of 1920; but by the end of the year most of the earlier stages had been finished. The actual amount of construction commenced or completed is referred to on page 67.

The list of subjects requiring attention in the future, which was given in the Reports for 1918 and 1919 still remains unsatisfied. But in the existing financial stringency it is impossible to carry them out and it would be irritating to repeat them.

Finally, I wish to express my thanks to the whole of my staff, Medical, Nursing and Clerical for their unswerving loyalty and co-operation.

I have the honour to be,

Your obedient servant,

HENRY HANDFORD,

County Medical Officer.

ANNUAL REPORT.

*COUNTY MEDICAL OFFICER'S STAFF.**

County Medical Officer of Health, Chief School Medical Officer and Chief Tuberculosis Officer—

HENRY HANDFORD, M.D., Edin., F.R.C.P., Lond., D.P.H. Camb.

Deputy County Medical Officer and School Medical Officer—

THOMAS EDWARD HOLMES, M.A., M.D., B.C. Cantab, D.P.H., R.C.P.S. Lond.

Clinical Tuberculosis Officer—

C. KINGSTON, M.R.C.S. Eng., L.R.C.P. (Lond.) D.P.H. (Oxford).

Assistant Tuberculosis Officer and Assistant School Medical Officer—

ARTHUR FREDERICK SEACOME, L.R.C.P. and L.R.C.S. Edin., D.P.H. Liv.

Resident Medical Officer, Ransom Sanatorium—

RICHARD R. S. WEATHERSON, M.B., Ch.B. Edin.

Tuberculosis Health Visitors—

MISS LEATHER, Three Years' Nursing Certificate.

MISS NICHOLSON, Three Years' Nursing Certificate.

MISS MILLICENT REYNOLDS, Three Years' Nursing Certificate, commenced August 23rd, 1920.

MISS DOROTHY BAYLE, Three Years' Nursing Certificate.

Medical Officer for Maternity and Child Welfare—

MISS ROSE HUDSON, M.B., Ch.B. Glas., D.P.H. Edin.

Superintendent Inspector of Midwives—

MISS ROSE HUDSON, M.B., Ch.B. Glas., D.P.H. Edin.

* October, 1921.

Inspectors of Midwives—

Miss Simmons, L.O.S., C.M.B.

Miss Alice Maud Reid, C.M.B., Three Years' Nursing Certificate and Certificate Sanitary Inspector, R.S.I.

Health Visitors for Maternity and Child Welfare—

Mrs. Rawson, C.M.B., San. Cert. R.S.I.

Miss Edith Horne, C.M.B.

Mrs. Mary E. Sleigh, C.M.B., Three Years' Nursing Certificate.

Miss Marian Hall, C.M.B., Three Years' Nursing Certificate.

Miss Margaret Lucy Howman, C.M.B., Three Years' Nursing Certificate. Commenced duties 14th Feb., 1921.

Miss Lucy Firth, Three Years' Nursing Certificate, C.M.B. Commenced duties 1st July, 1921.

Miss Ida Mary Ralph, Three Years' Nursing Certificate C.M.B. Health Visitor's Certificate R.S.I. Commenced duties 4th July, 1921.

Miss Hilda Sophia Gough, Three Years' Nursing Certificate C.M.B. Health Visitor's Certificate, R.S.I. Commenced duties September 8th, 1921.

Specialist Medical Officer for Venereal Diseases—

James Charles Buckley, M.D. Vict. Ch.B., Hon. Specialist Physician for Venereal Diseases, Gen. Hosp., Nottingham.

Assistant Specialist Medical Officer for Mansfield—

Ernest H. Houfton, M.D. Lond., M.R.C.S.

Assistant Specialist Medical Officers for Newark—

Members of the honorary Medical and Surgical Staff of the Newark Hospital.

Specialist Medical Officer under the Cerebro-Spinal Fever Regulations, 1919—

Frank Harwood Jacob, M.D. Lond., F.R.C.P. Lond., Hon. Physician, Gen. Hosp., Nottingham.

Chief Clerk and Sanitary Inspector—

S. Temple Brown, Cert. Royal San. Inst.

Assistant Clerk for Maternity and Child Welfare, etc.—

†Miss D. Warsop.

Assistant Tuberculosis Clerks—

Mr. W. L. Richardson.

Miss G. Flatt.

Names and Addresses of the Medical Officers of Health of the 26 Districts into which the County is Divided.

BOROUGHS AND URBAN DISTRICTS.

Districts.	Name of the Medical Officer of Health.	Address.
Mansfield (Borough)	...John Lambie, M.D., Glas. D.P.H., R.C.P.S. Ed.	Queen Street, Mansfield.
Newark (Borough)	...Dr. W. Baxter, (temp,)	...Middle Gate, Newark.
East Retford (Borough)	...Hanway R. Beale, M.D., Lond. D.P.H. Sheffield	...Bridgegate House, East Retford.
Arnold	...Harvey Francis, M.D.	...Arnold, Nottingham.
Beeston	...J. Horne Warner, M.B., B.Sc. Lond.	...25, Regent Street, Nottm.
Carlton	...J. T. Knight, M.R.C.S.	Ivy Lodge, Carlton, Nottm.
Eastwood	...F. Dixon, L.R.C.P.	...Eastwood, Notts.
Hucknall	...W. Garstang, M.B. Ch.B., Vict.	...Sherwood House, Hucknall, Nottm.
Huthwaite	...Robt. Irvine, L.R.C.P.	...Huthwaite, Mansfield.
Kirkby-in-Ashfield	...M. E. Kayton, ... L.R.C.P., D.P.H.	...Ashfield House, Annesley Woodhouse, Nottm.
Mansfield Woodhouse	...Ernest H. Houfton, M.D. Lond., M.R.C.S.	Bath House, Mansfield.
Sutton-in-Ashfield	...R. Nesbitt, ... L.R.C.S.I.	...Ashfield House, ...Sutton-in-Ashfield, Nottm.
Warsop	...H. W. Horan, M.B., B.S. Durh.	... ...Warsop, Notts.
West Bridgford	Walter Hunter, M.D.	...Bridgeway House, Arkwright Street, Nottm.
Worksop	...T. C. Garrett, M.B. C.M. Glas.	...Newcastle Avenue, Worksop.

†These give part of their time to School Medical Inspection.

RURAL DISTRICTS.

Districts.	Name of the Medical Officer of Health.	Address.
Basford	...W. H. Parkinson, M.D., D.P.H.	...Burton Buildings, Parliament St., Nottingham.
Bingham	...O. B. Eaton M.R.C.S., D.P.H.	...Long Acre, Bingham, ... Nottingham.
Blyth and Cuckney	...W. T. Wood, L.R.C.P. ...	...The Laurels, Creswell, near Mansfield.
East Retford	...Hanway R. Beale, M.D., Lond., P.H.D.	Bridgegate House, East Retford.
Leake	...N. B. M. Blackham, L.R.C.P. and S.I.	...25, Victoria St., Loughboro'
Misterton	...Edward James Bruce, M.B., Ch.B. Aberd., D.P.H., Aberd.	...North Leverton, Retford.
Newark	...Dr. W. Baxter, (temp.)	...Newark.
Skegby	...J. O. Littlewood, M.R.C.S., D.P.H.	...Highfield, Mansfield.
Southwell	...Dr. W. Baxter, (temp)	....Newark.
Stapleford	...E. Kingsbury, B.A., M.D., Dublin	...High Street, Stapleford, Nottingham.
Notts. Parishes administered by Shardlow	...Sydney Hunt, M.R.C.S.	Spondon, Derby

NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

POPULATION.

Census, 1911	344,194
Census, 1921	378,476
Estimated 1920 (supplied to County Medical Officer by the Registrar-General) ..	380,928

The *natural* increase of population for the year 1920, by excess of births over deaths was 5,667, compared with 2,948 in 1919, 1,725 in 1918, 3,372 in 1917, 4,126 in 1916 and 4,934 in 1913.

The population estimated by the Registrar General for the year 1920, and supplied by him to the County Medical Officer for calculating the birth and death-rates was 380,928. This figure is shewn by the Census returns for 1921, issued on August 24th, to be slightly too large, the figures for July 1921, or one year later, being only 378,476. As the excess of births over deaths for 1920 amounted to 5,667, this number

should be deducted from the census population of 1921 to give the probable population of the County for 1920. This calculation would give the probable population for 1920 as 372,803, or 8,125 less than the number on which all the statistics have been calculated. Consequently all the rates are a small fraction too low. The death-rate should be 11.1 instead of 10·9, and the birth-rate 26·3 instead of 25·8.

The increase in the population of the County since the Census of 1911 amounts to 34,276 or 9·9 per cent. This is a very satisfactory rate of increase when due allowance is made for the lives lost in the War, and for the diminished births, also a direct consequence of the War. For the whole of England and Wales the rate of increase was only 5 per cent.

It is also pleasing to note, as a sign of prosperity, that all the Urban Districts have increased in population, and also all the Rural Districts except Bingham, which has only diminished by 323. Some of the increases have been very large indeed and are shewn in the next table.

NOTTINGHAMSHIRE.

CENSUS POPULATION.	1911.	1921.	Increase or Decrease.
ADMINISTRATIVE COUNTY	344,197	378,476.	+ 34,279
Arnold	11,146	11,800	+ 654
Beeston	11,336	12,468	+ 1,132
Carlton	15,581	18,511	+ 2,930
East Retford ..	13,385	13,412	+ 27
Eastwood	4,692	5,074	+ 382
Hucknall	15,870	16,835	+ 965
Huthwaite	5,231	5,479	+ 248
Kirkby	15,378	17,236	+ 1,858
Mansfield	36,888	44,418	+ 7,530
Mansfield Woodhouse ..	11,015	13,465	+ 2,450
Newark	16,408	16,957	+ 549
Sutton	21,708	23,852	+ 2,144
Warsop	4,221	7,237	+ 3,016
West Bridgford ..	11,632	13 352	+ 1,720
Worksop	20,387	23,198	+ 2,811
Total Urban Districts ..	214,878	243,294	+ 28,416

RURAL DISTRICTS.

Basford	41,961	43,357	+	1,396
Bingham	14,593	14,270	—	323
Blyth and Cuckney ..	4,956	5,069	+	113
East Retford	14,774	14,820	+	46
Leake	3,720	3,732	+	12
Misterton	4,015	4,112	+	97
Newark	8,335	8,745	+	410
Skegby	6,990	8,977	+	987
Southwell	19,573	20,178	+	605
Stapleford	10,007	11,516	+	1,509
Kingston	392	400	+	8
Nottingham (Shire Hall)	3	6	+	3
Total Rural Districts ..	129,319	135,182	+	5,863

Physical Features and General Character of the District :—

Almost the whole of Nottinghamshire is within the drainage area of the River Trent and its tributaries. The highest ground is in the middle and on the western sides of the County, and does not generally exceed 600 feet above sea-level. Most of the eastern side is flat.

Most of the centre of the County is on the Trias ; in the western half Bunter sandstone predominates, and in the eastern half, Keuper Marl. Further north and west Magnesian Limestone comes to the surface, and on the extreme east the alluvial deposits of the River Trent.

To the south and east of Nottingham, beyond the right bank of the River Trent, the surface formation is mainly Lias clay with occasional patches of gravel. This is of importance because it renders the obtaining of suitable drinking water a matter of the most extreme difficulty in that area.

Chief Occupations of the Inhabitants :—

The chief occupation is coal mining. At present this is confined to the district north of Nottingham along the middle and west of the County, especially the Erewash Valley and the Leen Valley. Coal mining is now spreading further north into the Warsop, Worksop, and Blyth and Cuckney Districts and more recently to the East Retford Rural District and the Southwell Rural District. But the prolonged coal strike and the general industrial depression have led to a postponement of any active progress.

Agriculture is the next most important industry, and occupies the whole south and east of the County.

There is a good deal of industrial work, chiefly in the west where coal is abundant, consisting of hosiery manufacture, lace, engineering, tobacco manufacture, and brewing.

The only way in which occupation largely affects public health, is in relation to coal mining. Among the colliers the tuberculosis death-rate is low, but bronchitis and pneumonia mortality is high, and the infant mortality very high.

VITAL STATISTICS.

BIRTHS.

The number of live births registered in the County during 1920 amounted to 9,836, compared with 7,507 in 1919, and 7,742 in 1918. This shows an increase of 2,329 over 1919.

The birth-rate per thousand persons living, for 1920, was 25·8, compared with 19·67 for 1919.

The birth-rate for England and Wales for the same period was 25·4 for the year 1920, and 18·5 for 1919.

It is interesting to note that the birth-rate for Nottinghamshire continues to be well above that for the United Kingdom.

In accordance with the rules of the Central Midwives Board, notices of 161 still-births were sent to the County Council by certified midwives during the year 1920, compared with 126 for 1919, 112 for 1918, 107 for 1917, 111 for 1916, 107 for 1915, and 129 for 1914. It is to be noted that the number of still-births has been steadily rising. The numbers recorded must be a small proportion of the whole number of still-births occurring in the County during the year. And yet in many instances the distinction between live-birth and still-birth is so fine as to leave the door open to serious dangers.

In the following table the birth-rates of the different districts in this County are given :—

BIRTH-RATE FOR 1920, PER 1,000 OF THE POPULATION.

URBAN DISTRICTS.	RATE.
Warsop	35·1
Mansfield Woodhouse ...	31·9
Sutton-in-Ashfield ...	29·2
Hucknall	29·0
Worksop	28·8
Eastwood	28·6
Kirkby-in-Ashfield ...	28·0
Mansfield	27·9
Huthwaite	27·8
Arnold	25·9
Carlton	25·6
East Retford ...	25·5
Newark	23·9
Beeston	23·9
West Bridgford ...	13·1
MEAN OF URBAN DISTRICTS	26·8

RURAL DISTRICTS.	RATE.
Skegby	35·2
Misterton	30·1
Stapleford	25·0
Southwell	24·2
Basford	23·5
Blyth and Cuckney ...	22·7
East Retford ...	22·2
Newark	21·9
Bingham	21·4
Leake	16·4
Kingston and Ratcliffe	12·2
MEAN OF RURAL DISTRICTS	24·0
Whole County	25·8

ILLEGITIMATE BIRTHS.

In the whole County there were 514 illegitimate births, or a proportion of 55·1 per 1,000 registered births, compared with 59·9 in 1919, 62·0 in 1918, 49·8 in 1917, 46 in 1916, 42 in 1915, and 45 in 1914.

In the Urban Districts there were 54·5 illegitimate births per 1,000 total births, and in the Rural Districts 56·3.

The fact that the illegitimate births have increased by nearly 30 per cent. since 1913 and now number 514 : and that the *Infantile mortality rate amongst the illegitimate* was 145 per thousand compared with 82 among the legitimate, renders the provision of *Hostels for unmarried Mothers* and their offspring a matter of very urgent necessity. This great mortality cannot be considered an unimportant evil, as it is associated with a proportionately increased amount of sickness and defective health amongst the survivors for which, usually, the State is required to pay. Hostels, in preventing nearly one-third of the deaths and sickness, would have economic as well as humanitarian and moral functions.

THE NUMBER OF LEGITIMATE AND ILLEGITIMATE BIRTHS FOR EACH DISTRICT, IN THE YEAR 1920.

URBAN DISTRICTS.	Births.	Legitimate.	Illegitimate.
Mansfield	1291	1231	60
Newark	405	367	38
East Retford	340	317	23
Arnold	343	325	18
Beeston	302	282	20
Carlton	479	458	21
Eastwood	146	137	9
Hucknall	493	466	27
Huthwaite	164	155	9
Kirkby-in-Ashfield	477	457	20
Mansfield Woodhouse ...	437	422	15
Sutton-in-Ashfield	698	661	37
Warsop	255	247	8
West Bridgford	204	199	5
Worksop	655	619	36
TOTAL OF URBAN DISTRICTS...	6,689	6,343	346
RURAL DISTRICTS.			
Basford	1,043	1,000	43
Bingham	294	276	18
Blyth and Cuckney	108	100	8
East Retford	322	298	24
Leake	64	62	2
Misterton	111	104	7
Newark	187	175	12
Skegby	284	272	12
Southwell	453	424	29
Stapleford	276	263	13
Kingston and Rateliffe ...	5	5	—
TOTAL OF RURAL DISTRICTS ...	3,147	2,979	168

DEATHS.

The number of deaths occurring in the County in 1920 amounted to 4,169, or 390 fewer than in 1919. These include the deaths of residents taking place and registered elsewhere, but transferred to this County for statistical purposes. The mortality per 1,000 of the population amounts to the very remarkably low rate of 10·9, or 11·1 if corrections are made from the Census 1921. This is by far

the lowest death-rate ever recorded for this County, and was only approached in 1912 by a rate of 11·8. The rate for the aggregate Urban Districts was 10·4, and for the aggregate Rural Districts, 11·8.

The following table gives the death-rates of the different districts corrected for transferable deaths and calculated from the civil population supplied by the Registrar-General. With a few exceptions they all participate in the wonderfully small mortality of 1920.

NETT DEATH-RATES PER 1,000 OF THE POPULATION FOR THE YEAR 1920.

URBAN DISTRICTS.	RATE.
Eastwood	14·3
Hucknall	12·2
Worksop	11·9
Newark	11·7
Sutton-in-Ashfield ...	11·6
East Retford	11·3
Mansfield Woodhouse ..	10·7
Kirkby-in-Ashfield ..	10·5
Warsop	10·2
Arnold	10·2
Carlton	10·2
Huthwaite	9·8
Beeston	9·2
Mansfield	8·9
West Bridgford ...	7·9
Mean of Urban Districts	10·4

RURAL DISTRICTS.	RATE.
Stapleford	13·8
Blythe and Cuckney ...	13·6
East Retford ...	13·1
Bingham	13·0
Misterton	12·2
Newark	11·9
Leake	11·7
Skegby	11·0
Southwell	10·7
Basford	10·7
Kingston and Radcliffe	9·8
Mean of Rural Districts	11·8

The death-rate for England and Wales was 12·4 per 1,000 of the estimated population. It will be noted that the rate for the whole County of Notts. was lower by 1·5 per thousand. It should also be noted that all the Urban Districts except two, and all the Rural Districts except four had lower death rates than England and Wales.

It may cause surprise that the Rural Districts show a higher death-rate than the Urban. This has been very fully explained in previous reports, and is mainly to be accounted for by the predominance of old persons. When corrected for the "Age and Sex distribution," which will again be possible after the details of the 1921 Census are available—the rates for the Rural Districts fall below the Urban rates.

INFANTILE DEATH RATE.

The rate for the whole County in 1920 was 85 per 1,000 births. For the Urban Districts the rate was 89, and for the Rural 75.

RATE OF INFANTILE MORTALITY PER 1,000 BIRTHS.

	WHOLE COUNTY.	URBAN DISTRICTS.	RURAL DISTRICTS.
1895	154	180	128
1896	138	149	122
1897	152	169	128
1898	151	166	129
1899	161	178	135
1900	160	173	141
1901	145	154	132
1902	138	151	115
1903	134	141	122
1904	139	150	118
1905	126	133	114
1906	121	131	104
1907	127	134	113
1908	119	128	102
1909	106	112	93
1910	110	122	85
1911	125	137	115
1912	93	95	87
1913	101	110	82
1914	107	112	96
1915	112	125	87
1916	95	102	78
1917	95	98	89
1918	100	104	92
1919	95	100	84
1920	85	89	75

The following table shows the extraordinary variations in the infantile mortality in different Districts, while the weather conditions, which were very unusually favourable, remained the same for all.

Most of the Urban Districts, but not all, have Child Welfare Centres. The County Council is only responsible for the Districts included in the Special Area as shown under the heading of Maternity and Child Welfare on page 61. These are mainly Rural Districts but also include Carlton

and West Bridgford, and their average Infant Mortality-rate was only 70 per 1,000 births. The population of the Area is 113,244.

RATE OF INFANTILE MORTALITY FOR 1920, PER 1,000 BIRTHS.

URBAN DISTRICTS.	RATE.
Eastwood	123
Hucknall	117
Mansfield	104
Sutton-in-Ashfield ...	101
Mansfield Woodhouse ...	96
Kirkby-in-Ashfield ...	85
Arnold	84
West Bridgford ...	83
Warsop	82
Worksop	82
Huthwaite	73
Carlton	71
East Retford ...	67
Newark	66
Beeston	62
MEAN OF URBAN DISTRICTS	89

RURAL DISTRICTS.	RATE.
Stapleford	123
Skegby	112
Newark	96
Basford	78
Blyth and Cuckney ...	74
East Retford ...	65
Misterton	63
Leake	62
Bingham	47
Southwell	39
Kingston and Ratcliffe	0
MEAN OF RURAL DISTRICTS	75
Rate for the whole County	85

Table I. NOTTINGHAMSHIRE. Vital Statistics for the Year 1920.
BOROUGHS AND URBAN DISTRICTS.

BOROUGHS AND URBAN DISTRICTS.	Population, Estimated to the middle of 1920.	Births.		Deaths under 1 year of age.		Nett Deaths at all Ages belonging to the Districts.	Nett Death Date *i.e.*, Death Rate corrected for "Transferable" Deaths.	Death Rate from Pulmonary Tuberculosis per 1000 of population.	Death Rate from ALL Tuberculous Diseases per 1000 of population.
		Number.	Rate.	Number.	Rate per 1000 Births Registered.				
MANSFIELD (Borough) ...	46,219	1,291	27·9	135	104	415	8·9	0·56	0·77
NEWARK (Borough) ...	16,991	405	23·9	27	66	198	11·7	0·76	1·30
EAST RETFORD (Borough)	13,361	340	25·5	23	67	151	11·3	0·82	1·12
ARNOLD ...	13,216	343	25·9	29	84	135	10·2	0·45	0·68
BEESTON ...	12,627	302	23·9	19	62	116	9·2	0·95	1·11
CARLTON ...	18,762	479	25·6	34	71	192	10·2	1·11	1·49
EASTWOOD ...	5,091	146	28·6	18	123	73	14·3	0·19	0·58
HUCKNALL ...	17,025	493	29·0	58	117	208	12·2	0·64	0·88
HUTHWAITE ...	5,880	164	27·8	12	73	58	9·8	0·51	1·05
KIRKBY-IN-ASHFIELD ...	17,062	477	28·0	41	85	180	10·5	0·76	1·1
MANSFIELD WOODHOUSE ...	13,725	437	31·9	42	96	147	10·7	0·58	0·80
SUTTON-IN-ASHFIELD ...	23,959	698	29·2	71	101	278	11·6	0·92	1·19
WARSOP ...	7,251	255	35·1	22	82	74	10·2	0·55	0·5
WEST BRIDGFORD ...	15,528	204	13·1	17	83	123	7·9	0·32	0·3
WORKSOP ...	22,713	655	28·8	54	82	271	11·9	1·18	1·3
Totals for Urban Districts ...	249,410	6,689	26·8	602	89	2,619	10·4	0·73	0·9

Table II. NOTTINGHAMSHIRE. Vital Statistics for the Year 1920. RURAL DISTRICTS.

RURAL DISTRICTS.	Population estimated to the middle of 1920.	Births.		Deaths under 1 year of age.		Nett Deaths at all ages belonging to the District.	Nett Death Rate, *i.e.*, Death Rate corrected for Transferable Deaths.	Death Rate from Pulmonary Tuberculosis per 1000 of population.	Death Rate from all Tuberculous Diseases, per 1000 of population.
		Number.	Rate.	Number.	Rate per 1000 Births registered.				
BASFORD ...	44,101	1,043	23·5	82	78	476	10·7	0·61	0·86
BINGHAM ...	13,700	294	21·4	14	47	179	13·0	0·43	0·80
BLYTH AND CUCKNEY ...	4,764	108	22·7	8	74	65	13·6	0·21	0·63
EAST RETFORD	14,536	322	22·2	21	65	191	13·1	0·62	1·10
LEAKE	3,907	64	16·4	4	62	46	11·7	0·51	1·02
MISTERTON ...	3,688	111	30·1	7	63	45	12·2	0·54	1·35
NEWARK ...	8,536	187	21·9	18	96	102	11·9	0·70	0·82
SKEGBY ...	8,056	284	35·2	32	112	89	11·0	0·62	0·86
SOUTHWELL ...	18,786	453	24·2	18	39	201	10·7	0·64	0·80
STAPLEFORD ...	11,037	276	25·0	34	123	152	13·8	0·72	1·0
Notts. Parishes administered by SHARDLOW	407	5	12·2	—	—	4	9·8	2·45	2·45
Totals for Rural Districts ...	131,518	3,147	24·0	238	75	1,550	11·8	0·60	0·90

TABLE III. NOTTINGHAMSHIRE. Vital Statistics for the Year 1920.

WHOLE ADMINISTRATIVE COUNTY.

	Area in Acres	Persons per Acre.	Families or Separate Occupiers at Census, 1911.	Persons per Family at Census, 1911.	Population, Census, 1921.	Estimated Population 1920.	Births.		Deaths under 1 year.		Nett Deaths.	Nett Death Rate. *	Death Rate from Pulmonary Tuberculosis	Death Rate from all Tuberculois Diseases. *
							Number.	Rate. *	Number.	Rate per 1,000 Births.				
URBAN DISTRICTS	66,896	3·7	46,597	4·6	243,294	249,410	6,689	26·8	602	89	2,619	10·4	0·73	0·98
RURAL DISTRICTS	454,164	·28	29,639	4·35	135,182	131,518	3,147	24·0	238	75	1,550	11·8	0·60	0·89
WHOLE ADMINISTRATIVE COUNTY.	521,060	·73	76,236	4·5	378,476	380,928	9,836	25·8	840	85	4,169	10·9	0·68	0·95

* Rate calculated per 1,000 of the estimated Population

TABLE IV **Causes of Death during the year 1920.** **URBAN DISTRICTS.**

DISTRICTS.	Enteric Fever.	Small Pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Erysipelas.	Phthisis (Pulmonary Tuberculosis).	Tuberculous Meningitis.	Other Tuberculous Diseases.	Cancer, Malignant Disease.	Rheumatic Fever.	Meningitis.	Organic Heart Disease.	Bronchitis.	Pneumonia (all forms).	Other Diseases of Respiratory Organs.	Diarrhœa, etc. (under 2 years).	Appendicitis & Typhlitis.	Cirrhosis of Liver.	Alcoholism.	Nephritis and Bright's Disease.	Puerperal Fever.	Parturition, apart from Puerperal Fever.	Congenital Debility and Malformation, including Premature Births.	Violent Deaths, excluding Suicides.	Suicides.	Other Defined Diseases.	Causes ill-defined or unknown.	All Causes.
MANSFIELD ...	...	...	16	...	1	7	4	1	26	6	4	27	2	3	29	37	28	2	9	3	3	...	7	1	2	46	15	4	129	3	415
NEWARK ...	...	...	10	3	1	1	6	...	13	4	5	18	...	2	18	17	6	2	1	3	2	...	2	...	1	13	4	1	64	1	198
EAST RETFORD ...	...	...	4	1	...	...	1	1	11	1	3	21	1	1	8	11	12	4	4	...	1	...	3	...	2	8	4	1	48	...	151
ARNOLD ...	...	...	3	...	1	...	...	...	6	1	2	23	1	...	11	9	12	1	5	1	...	...	2	1	1	18	4	3	29	1	135
BEESTON ...	...	...	1	...	3	1	...	...	12	...	2	11	1	3	11	10	11	1	...	...	...	...	2	...	...	10	3	...	33	1	116
CARLTON ...	...	...	2	...	...	6	3	1	21	3	4	11	1	2	16	14	16	4	1	...	1	...	7	...	1	17	6	1	47	7	192
EASTWOOD ...	...	...	3	...	2	1	1	...	1	...	2	9	...	1	6	4	9	2	2	...	...	...	1	...	...	10	2	...	17	...	73
HUCKNALL ...	1	...	14	1	2	1	6	...	11	3	1	13	...	1	16	20	17	2	6	1	1	...	2	...	2	25	3	1	56	2	208
HUTHWAITE ...	...	...	2	...	...	...	3	...	3	...	3	5	...	...	8	6	8	...	3	...	...	...	1	1	...	5	...	...	10	...	58
KIRKBY-IN-ASHFIELD ...	...	...	2	...	...	...	3	...	13	3	3	12	5	2	19	21	10	...	3	1	...	...	1	2	2	15	8	2	50	3	180
MANSFIELD WOODHOUSE ...	...	...	7	...	3	2	...	...	8	2	1	7	1	1	11	9	22	3	2	...	...	...	1	1	2	19	6	...	36	3	147
SUTTON-IN-ASHFIELD ...	1	...	14	...	4	4	3	...	22	4	2	19	3	8	20	16	20	3	7	...	1	...	5	1	3	33	9	1	72	3	278
WARSOP ...	...	...	8	...	...	1	...	...	4	...	...	6	...	...	2	8	5	...	2	1	...	...	...	...	1	8	5	1	20	2	74
WEST BRIDGFORD ...	...	...	...	...	...	3	3	...	5	1	...	11	2	...	11	5	6	2	...	2	1	1	4	...	...	11	5	2	44	4	123
WORKSOP ...	...	...	13	...	1	1	1	1	27	1	2	21	3	3	22	27	23	3	6	1	...	...	3	5	1	13	7	2	84	...	271
TOTAL ...	2	...	99	5	18	28	34	4	183	29	34	214	20	27	208	214	205	29	51	13	10	1	41	12	18	251	81	19	739	30	2,619

TABLE V. **Causes of Death during the Year 1920.** **RURAL DISTRICTS.**

DISTRICTS.	Enteric Fever.	Small Pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Erysipelas.	Phthisis (Pulmonary Tuberculosis).	Tuberculous Meningitis.	Other Tuberculous Diseases.	Cancer, Malignant Disease.	Rheumatic Fever.	Meningitis.	Organic Heart Disease.	Bronchitis.	Pneumonia (all forms).	Other Diseases of Respiratory Organs.	Diarrhœa, etc. (under 2 years).	Appendicitis & Typhlitis.	Cirrhosis of Liver.	Alcoholism.	Nephritis and Bright's Disease.	Puerperal Fever.	Parturition, apart from Puerperal Fever.	Congenital Debility and Malformation, includ.ng Premature Births.	Violent Deaths, excluding Suicides.	Suicides.	Other Defined Diseases.	Causes ill-defined or unknown.	All Causes.
BASFORD ...	...	...	18	...	4	7	9	1	27	4	7	48	3	2	41	36	33	6	7	1	...	...	5	4	2	30	9	2	168	2	476
BINGHAM ...	...	...	1	1	1	5	7	...	6	1	4	22	1	1	29	15	5	2	1	2	...	...	7	1	1	8	6	...	51	1	179
BLYTH AND CUCKNEY ...	...	...	...	1	1	...	...	...	1	2	...	7	1	...	5	6	3	2	...	...	...	...	3	...	1	4	2	...	26	...	65
EAST RETFORD ...	...	...	2	1	1	4	3	1	9	2	5	20	...	...	23	9	9	1	1	1	2	...	2	...	...	9	4	3	75	4	191
LEAKE	...	...	...	...	...	1	...	...	2	2	...	8	...	...	9	1	3	...	1	...	1	...	...	...	...	1	1	1	15	...	46
MISTERTON ...	...	...	...	...	...	...	1	...	2	2	1	6	...	...	1	4	5	...	2	...	...	...	...	1	...	4	1	1	14	...	45
NEWARK ...	...	1	...	...	...	2	4	...	6	1	...	8	...	...	9	9	7	1	3	1	...	...	1	...	...	11	4	2	32	...	102
SKEGBY ...	...	...	12	...	1	...	1	...	5	...	2	6	...	...	8	4	8	2	3	1	...	...	...	...	...	12	5	...	19	...	89
SOUTHWELL ...	...	...	1	...	1	1	2	...	12	2	1	22	...	1	24	12	18	2	1	...	4	...	5	2	1	7	7	2	72	1	201
STAPLEFORD ...	1	...	1	1	3	1	...	...	8	...	3	11	...	1	15	14	8	1	2	...	...	...	4	...	2	17	4	2	51	2	152
Notts, Parishes administered by SHARDLOW ...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	4
TOTAL ...	1	1	35	4	12	21	27	2	79	16	23	158	5	5	164	110	99	17	21	6	7	...	27	8	7	103	43	13	526	10	1,550

TABLE VI. Causes of Death at Different Periods of Life in the Administrative County of Nottingham, 1920.

CAUSES OF DEATH.	Sex	AGGREGATE OF URBAN DISTRICTS.									AGGREGATE OF RURAL DISTRICTS.								
		All Ages	0—	1—	2—	5—	15—	25—	45—	65—	All Ages	0—	1—	2—	5—	15—	25—	45—	65—
ALL CAUSES	M	1373	332	63	65	60	77	146	291	339	794	141	20	30	38	26	73	153	313
	F	1246	270	52	54	68	69	179	224	330	756	97	21	14	29	53	92	144	306
Enteric Fever	M	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...
	F	2	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
Small Pox	M	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...
	F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	M	51	7	18	24	2	...	...	...	...	23	4	9	7	3	...	...	...	...
	F	48	8	15	18	7	...	...	...	...	12	3	4	3	2	...	...	...	...
Scarlet Fever	M	4	1	...	...	3	...	...	...	...	1	...	...	1	...	...	...	...	...
	F	1	...	...	...	1	...	...	...	...	3	...	...	...	1	2	...	...	...
Whooping Cough	M	8	3	2	3	...	...	...	...	...	3	2	...	...	1	...	...	...	...
	F	10	6	3	1	...	...	...	...	...	9	2	5	2	...	...	...	...	...
Diphtheria and croup	M	10	...	1	3	6	...	...	...	...	11	...	...	3	7	1	...	...	...
	F	18	1	...	6	9	1	...	1	...	10	...	...	...	8	...	1	...	1
Influenza	M	23	4	...	...	...	3	5	5	6	11	2	...	...	1	3	...	3	2
	F	11	1	...	...	...	1	4	4	1	16	1	...	...	...	3	3	2	7
Erysipelas	M	1	...	...	...	...	...	...	1	...	2	2	...	...	...	...	...	...	...
	F	3	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Pulmonary tuberculosis	M	86	1	2	1	5	19	34	23	1	27	...	...	1	5	3	9	7	2
	F	97	1	...	...	9	33	41	13	...	52	...	1	...	2	22	22	4	1
Tuberculous meningitis	M	15	1	2	5	3	3	1	...	...	8	2	1	2	2	1	...	...	...
	F	14	1	1	2	3	3	2	1	1	8	3	...	...	2	1	2	...	...
Other tuberculous diseases	M	19	1	1	4	2	4	3	2	2	10	1	1	2	2	3	1	...	...
	F	15	1	1	1	1	6	4	...	1	13	...	...	1	...	2	5	4	1
Cancer, malignant disease	M	108	...	...	...	...	...	10	54	44	77	1	...	...	...	1	3	32	40
	F	106	...	...	...	1	...	11	52	42	81	...	...	1	1	...	7	45	27
Rheumatic Fever	M	10	...	1	...	2	3	2	1	1	2	...	...	...	...	...	2	...	...
	F	10	...	...	...	4	2	3	1	...	3	...	...	...	...	2	...	1	...
Meningitis	M	18	4	1	3	5	3	1	1	...	1	...	...	...	1	...	...		...
	F	9	4	...	1	2	1	...	1	...	4	1	...	...	1	1	1	...	...
Organic heart disease	M	113	...	...	...	3	6	21	39	44	82	...	...	...	...	1	11	25	45
	F	95	...	...	...	2	2	16	33	42	82	...	...	...	1	1	5	28	47
Bronchitis	M	104	30	4	5	3	1	2	23	36	59	11	2	2	1	...	3	8	32
	F	110	30	2	4	2	...	2	16	54	51	4	...	...	1	2	1	3	40
Pneumonia (all forms)	M	121	46	18	9	4	8	10	16	10	55	14	3	4	2	3	8	7	14
	F	84	23	15	10	3	4	14	6	9	44	7	2	1	4	2	8	6	14
Other respiratory diseases	M	17	...	...	...	...	...	2	9	6	9	...	...	1	1	...	1	5	1
	F	12	2	...	...	...	2	3	4	1	8	1	...	...	...	...	...	2	5
Diarrhœa, &c.	M	40	28	1	1	...	1	3	2	4	20	14	1	...	...	1	...	1	3
	F	28	20	2	...	...	...	2	1	3	14	6	...	2	1	...	2	...	3
Appendicitis and typhlitis	M	6	...	...	...	...	1	5	...	...	3	...	...	...	2	1	...	...	...
	F	7	...	...	...	2	1	2	2	...	3	...	...	...	...	2	...	1	...	...
Cirrhosis of Liver	M	6	...	...	...	1	...	...	5	...	4	...	...	...	...	...	1	1	2
	F	4	...	...	...	...	...	1	1	2	3	...	...	...	...	...	...	2	1
Alcoholism	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Nephritis & Bright's disease	M	24	...	...	...	2	4	5	6	7	14	1	...	...	...	...	3	4	6
	F	17	1	...	...	2	2	5	4	3	13	...	...		...	1	4	3	5
Puerperal fever	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F	12	...	...	...	...	4	8	...	...	8	...	...	...	...	4	4	...	...
Parturition, apart from puerperal fever	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F	18	...	...	...	...	...	18	...	...	7	...	...	...	...	1	6	...	...
Congenital debility, &c.	M	135	135	...	...	...	...	...	...	...	53	53	...	...	...	...	...	...	...
	F	116	114	1	...	1	...	...	...	...	50	48	1	1	...	...	...	...	...
Violence, apart from suicide	M	59	3	2	3	7	12	12	15	5	32	1	1	1	1	7	12	8	1
	F	22	3	3	3	5	1	2	...	5	11	1	3	1	...	...	...	1	5
Suicide	M	16	...	...	...	1	...	6	7	2	10	...	...	...	...	...	3	4	3
	F	3	...	...	...	...	...	2	1	...	3	...	...	...	...	1	1	1	...
Other defined diseases	M	361	66	9	4	11	9	24	70	168	266	32	2	3	10	2	14	45	158
	F	361	51	8	7	14	6	34	78	163	247	19	5	2	3	8	19	42	149
Causes ill-defined or unknown	M	18	2	1	...	...	...	...	12	3	9	1	...	1	...	...	...	3	4
	F	12	1	1	1	...	...	4	3	2	1	1	...	...	...	...	...	...	...

TABLE VII. NOTTINGHAMSHIRE. Abstract of Vital Statistics.

Year.	Estimated Population at the *middle* of the year.	Annual Increase of Population	Persons per Acre.	Separate Families.	Persons per Family.	Registered Births.	Births per 1,000 of the Population.	Deaths under 1 year per 1,000 Births.	Nett Deaths.	Nett Death Rate per 1,000 of the Population.
1891	232,776	...	·44	49,186	4·7	8202	35·2	138	4135	17·7
1892	236,770	3994	·46	...	...	8007	33·9	147	4051	16·7
1893	240,026	3256	·46	...	...	7949	33·1	...	4087	17·0
1894	243,965	3939	·47	...	...	7747	31·7	130	3585	14·7
1895	248,060	4095	·48	...	...	8066	32·5	154	4128	16·6
1896	252,282	4222	·49	...	...	8154	32·3	138	3987	15·8
1897	256,667	4385	·50	...	...	8186	31·8	152	4115	16·0
1898	261,224	4557	·50	...	...	8117	31·0	151	4187	16·0
1899	265,952	4728	·51	...	...	8266	31·0	161	4375	16·4
1900	270,862	4910	·52	...	...	8292	30·6	160	4617	17·0
1901	275,971	5109	·53	59,114	4·6	8636	31·3	145	4139	14·9
1902	282,563	6592	·54	...	...	8920	31·5	138	4116	14·5
1903	289,001	6438	·55	...	...	9072	31·3	134	4146	13·9
1904	295,586	6585	·56	...	...	9379	31·7	139	4293	14·1
1905	302,321	6735	·57	...	...	8880	29·3	126	4491	14·8
1906	309,209	6888	·59	...	...	9088	29·3	121	4239	13·7
1907	316,355	7146	·60	...	...	8962	28·3	127	4550	14·3
1908	323,461	7106	·62	...	...	9818	30·3	119	4460	13·7
1909	330,831	7370	·63	...	...	9740	29·4	106	4424	13·3
1910	338,937	8106	·64	...	...	9554	28·2	110	4331	12·7
1911	345,930	6993	·66	76,236	4·5	9453	27·3	125	4550	13·1
1912	355,046	9116	·68	...	...	9213	25·9	93	4206	11·8
1913	362,307	7261	·69	...	...	9369	25·8	101	4435	12·2
1914	367,617	5310	·70	...	...	9541	25·9	107	4696	12·7
1915	353,193	3900	·67	...	...	8843	25·0	112	5068	14·3
1916	344,501	4126	·66	...	...	8567	22·8	95	4441	12·8
1917	344,822	3372	·66	...	...	7589	19·7	95	4217	12·2
1918	339,456	1725	·65	...	...	7742	20·3	100	6017	17·7
1919	366,331	2948	·70	...	...	7507	19·6	95	4559	12·4
1920	**380,928**	**5667**	**·73**	...	...	**9836**	**25·8**	**85**	**4169**	**10·9**
For comparison—										
1920	England and Wales ...		...	...	...	...	25·4	80	...	12·4
	96 Great Towns ...		...	...	...	...	26·2	85	...	12·5
	148 Smaller Towns ...		...	...	...	...	24·9	80	...	11·3
	London		...	...	...	...	26·5	75	...	12·4

SANITARY CIRCUMSTANCES OF THE DISTRICT.

Water :—

The subject of the water supply of each of the 26 Districts is dealt with by the District Medical Officers of Health in the reports for each sanitary district.

Speaking generally, the water supply is good and constant in all the districts of the County where it can be obtained from the Bunter sandstone, except in a few of the smaller rural areas, and the extension of these was under consideration when progress was stopped by the War.

On the eastern side of the County in the agricultural areas where the population is scattered, the water supply is bad and is chiefly derived from shallow wells. The Bunter supply is not available except where the Lincoln water main from their well at Elkesley passes through Nottinghamshire on its way to Lincoln. A few Notts. villages are supplied *en route*.

The chief hindrance to the supply of small villages near the pipe-line of large water undertakings is the condition sometimes enforced of requiring a service reservoir to be provided, instead of supplying direct from the main. There are advantages in a reservoir, but they are chiefly theoretical and not practical. The great and insuperable disadvantage is the large extra cost.

At a recent " Local Inquiry " it was my duty to attend as County Medical Officer. The small village in question could be supplied direct from the main for £600. A service reservoir which might be insisted on, but would be of no real use, would cost at least £1,200 extra, or double the expenditure for the simpler plan.

This is typical of other instances and is a very serious matter for small communities.

In the Bingham and Leake Rural District, the water supply is mainly derived from shallow wells in the Lias clay, or superincumbent gravel, providing extremely hard water. A constant supply for these two districts from a suitable source is most desirable, but is a matter of extreme difficulty.

The task of providing a constant supply of suitable water for approximately 50,000 people scattered in various Rural Districts and using shallow wells, is beyond the means of most of the District Councils. Indeed during the existing financial stringency it is useless to consider the question.

The water question of greatest importance during 1920 and 1921 was the Bill promoted by the Borough of Rotherham for taking about two million gallons of water daily from a well to be sunk about half a mile beyond the County boundary at Bawtry. The water would be obtained from the Bunter Sandstone and much of it would be drawn from this County.

Fortunately the Bill was thrown out on the preamble, and this County is for the moment freed from further depletion of its water.

In the Bunter Sandstone, Nottinghamshire possesses the finest source of pure water of moderate hardness in the kingdom: but the quantity available is limited. It can never increase, but shows signs of diminishing. With the growth of a colliery population in the north of Notts., the whole of the Bunter Water remaining at present unused will be needed for the population on the spot, who morally have the first claim to it.

The following Abstract shows how Nottinghamshire is supplied. It will be noted that 98,524 persons in the County obtain a constant supply of water from the City of Nottingham, who themselves obtain it from wells in the Bunter in the County. But as already stated the bunter water is limited in quantity and the City supplement their supply by about two million gallons a day from the Derwent Valley.

It will be further seen that since the year 1891 both the population supplied by the City, and also the population of the Urban and Rural Districts enjoying an independent constant supply have doubled, whilst the population with no resource except shallow wells and canals, &c., has only fallen by 14,505. These are in Rural Districts where a constant supply would still be very costly.

ABSTRACT.

	1891.	1898.	1907.	1920.
1. Extra City Supply by Nottingham Corporation ...	47,344	61,866	77,497	98,524
2. Extra Supply by Newark Corporation	8,012	8,012	11,257	9,663
3. Urban and Rural Districts with independent constant supplies ...	107,113	124,344	167,062	217,513
4. Population supplied by shallow wells, canals, rainwater, etc.	69,733	69,219	71,504	55,228
5. Totals	232,202	263,441	327,320	380,928

RIVER POLLUTION.

Rivers and Streams.

The whole of the County is in the drainage area of the River Trent and its tributaries, with the exception of a very few miles on the Derbyshire border.

During the War the inspection of rivers for pollution was practically in abeyance for three main reasons :—

(1). Absence of staff to inspect the sewage disposal works and take samples.

(2). The impossibility of getting samples analysed.

(3). The impossibility of District Councils raising money by loan for necessary additions or repairs to works.

Since the War there has been a gradual improvement, but under existing financial conditions there is naturally a disinclination to expend large sums on sewage disposal works. No high standard for effluents or for sewage disposal can be attained until it is possible for the County to maintain a

whole time Sanitary Inspector who would devote most of his time to river pollution work, and until much more satisfactory arrangements for analysis can be made.

At present little harm has resulted from the want, because improvements in sewage disposal are being carried out as rapidly as the necessary money can be found.

As regards the river *Erewash*, authority has been given to expend £8,000 upon a much needed new filter-bed at Kirkby-in-Ashfield.

Lower down at Toton the domestic sewage from the Military Depôt at Chilwell is still discharged untreated into the Erewash, but the War Office has informed the County Council that the plans for disposal works are nearly completed.

River Maun.—The effluent from the Sutton-in-Ashfield sewage disposal works is a bad one, but undergoes sedimentation and dilution in a large sheet of water, and is further purified before it reaches the river Maun. A Local Enquiry was held, plans were passed and leave to borrow money granted to renew and extend the disposal works. This was just before the War, and only a very small portion has yet been completed. Under the altered conditions and with an increased population a fresh Inquiry will probably be needed.

Drainage and Sewage, Closet Accommodation, Scavenging Sanitary Inspection of the District, Premises and Occupations which can be controlled by Bye-laws or Regulations, Other Sanitary Conditions requiring Notice, are all dealt with in the Reports for the separate districts by the Medical Officer of Health for each district.

Speaking generally, the sewage disposal arrangements were improving rapidly before the War, and progress is now being actively resumed.

As regards closet accommodation, a large number of pail closets are being replaced by water closets, but there are still far too many pail closets and a few middens, especially in the Worksop district, which require attention.

As regards scavenging, more and more districts are taking the scavenging arrangements into their own hands, instead of contracting for it, and in some fresh districts public scavenging is being adopted. The replacement of fixed receptacles by moveable ash-bins is progressing, though slowly.

The County Council have no Sanitary Inspectors, though one is badly needed; and this work is done entirely by the District Councils.

Schools.—

All Schools in the County, except those in Mansfield, Retford and Newark, are under the control of the Education Committee of the County Council. A full report has already been issued.

FOOD.

The administration of the Dairies, Cowsheds and Milk Shops Order is in the hands of the District Councils, and the County Medical Officer has no control.

Milk (Mothers and Children) Order, 1918.—

The work under this Order has been carried out by the Infant Welfare Centres under the Maternity and Child Welfare Committee, and is described in that part of the Report.

Sale of Food and Drugs Acts.—

The work under these Acts is carried out by a separate Committee, by whom the County Medical Officer is usually not consulted.

NOTIFIABLE INFECTIOUS DISEASES.

SMALL POX.

The following table gives the number of cases which have been notified each year since 1895, and the number of deaths.

	SMALL POX.		
	Cases.	Deaths.	Case Fatality. per cent.
1895	4	...	...
1896	1	...	...
1897	...	...	...
1898	...	...	...
1899	...	...	...
1900	...	...	...
1901	6	1	16·6
1902	2	...	...
1903	183	8	4·37
1904	101	3	2·97
1905	92	3	3·25
1906	2	...	...
1907	...	...	...
1908	...	...	...
1909	...	...	...
1910	4	1	25·00
1911	...	...	...
1912	1	...	...
1913	...	...	...
1914	...	...	...
1915	...	...	...
1916	...	...	...
1917	1	...	...
1918	...	...	...
1919	...	...	...
1920	1	1	100·0

On account of the numerous outbreaks of Small Pox in various parts of England and Scotland during the last two years; and more recently the outbreaks at Long Eaton and Nottingham all the local Authorities possessing Small Pox Hospitals have been warned to keep them in readiness for use.

The District Councils provided with Small Pox Hospitals are shewn on Tables VIII and IX..

It should be clearly understood that the Small Pox Hospitals in the County do not belong to the County Council, and the District Councils have the responsibility of isolating and treating Small Pox.

In view of the inadequacy of some of the numerous small existing Small Pox Hospitals, it is a real misfortune that it has not been possible to replace them by one, or perhaps two, central hospitals to serve the whole County. The use of Motor Ambulances would render such a plan comparatively simple.

The real preventive of Small Pox is Vaccination. Unfortunately the infant vaccination has been reduced to 30 or 40 per cent. of the births. But taking into consideration the vaccinated ex-soldiers and the many older persons who have been vaccinated some years ago, it would be reasonable to estimate that perhaps one half of the population has been vaccinated. This is a very great protection, and possibly explains the less serious spread of the recent cases than was expected. Nevertheless it cannot be too generally understood that no adult need have Small Pox unless he neglects the ordinary precaution of getting vaccinated and re-vaccinated. The protection afforded by vaccination gradually wanes and those who are likely to come into contact with Small Pox should be periodically re-vaccinated.

At the time of writing in October 1921, there had only been three cases in the County area.

MEASLES.

The seriousness of this disease is gradually being realised It was made notifiable in a modified degree from January 1st, 1916. Only the first case in a family was notifiable by the doctor, but a good many cases were notified by parents. In this way 1,319 cases were notified in 1919, compared with 4,437 cases in 1918. It is probable that the remarkable fall in the notifications was a fair index of the general fall in the prevalence of the disease, as the deaths also fell from 74 in 1918 to only 12 in 1919.

INFECTIOUS DISEASES.

TABLE VIII. NOTTINGHAMSHIRE. Cases of Infectious Disease notified during the Year 1920.

BOROUGHS AND URBAN DISTRICTS.

BOROUGHS AND URBAN DISTRICTS.	Acute Poliomyelitis.	Small Pox.	Diphtheria (including Membranous Croup).	Erysipelas.	Scarlet Fever.	Enteric Fever.	Puerperal Fever.	Cerebro-Spinal Fever.	Encephalitis Lethargica.	Ophthalmia Neonatorum.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Chicken Pox.	Dysentery.	Trench Fever.	Pneumonia.	Malaria.	Whooping Cough.	Mumps.	TOTAL.	Whether there is any Isolation Hospital for Infectious Diseases?	Total available Beds.	Number of Diseases that can be concurrently treated.
MANSFIELD (Borough) ...	...	...	54	15	74	4	7	2	2	44	47	25	...	6	...	29	22	...	...	384	Yes	18 16 12 4	Small Pox Scarlet Fever Diphtheria Other Cases
NEWARK (Borough) ...	...	...	10	4	106	...	1	...	1	6	26	6	78	...	...	10	5	30	1	284	Yes	32	Scarlet Fever Diphtheria Small Pox
EAST RETFORD (Borough) ...	2	...	6	25	53	...	...	...	...	1	30	9	...	1	1	52	20	...	...	200	Yes	12 8	Scarlet Fever Small Pox
ARNOLD ...	...	...	6	...	9	...	1	...	1	3	2	2	...	...	...	7	3	11	...	45	* ‡	...	...
BEESTON ...	...	...	12	5	58	1	...	...	...	2	17	...	...	...	...	27	7	...	...	129	*	...	...
CARLTON ...	...	...	30	19	53	1	...	...	...	7	42	4	10	...	...	7	15	...	...	189	* ‡	...	...
EASTWOOD ...	...	...	4	...	8	...	...	...	...	...	1	1	...	...	...	1	...	...	...	15	‡	...	...
HUCKNALL ...	...	...	18	4	44	...	...	...	...	2	21	6	...	...	...	39	9	...	...	143	‡Yes	30	Small Pox
HUTHWAITE ...	...	...	1	2	3	1	...	...	...	...	2	...	...	...	...	5	...	...	...	15	Yes	12	Small Pox
KIRKBY-IN-ASHFIELD ...	...	...	6	15	64	1	5	...	...	4	21	10	...	...	...	12	2	...	...	141	Yes	10	One disease
MANSFIELD WOODHOUSE	...	...	11	2	15	...	...	...	1	5	11	4	...	...	...	1	7	...	...	57	†	...	...
SUTTON-IN-ASHFIELD ...	...	...	26	4	20	2	...	...	...	15	10	4	...	...	...	11	5	...	...	99	Yes	10	Small Pox
WARSOP ...	...	...	23	2	14	...	3	...	...	1	4	...	...	...	...	...	...	...	...	47	§	...	...
WEST BRIDGFORD ...	...	...	16	5	28	...	...	...	1	1	3	...	...	...	...	4	4	...	...	62	‡	...	...
WORKSOP ...	...	...	11	6	7	...	3	...	...	1	10	...	...	1	...	19	4	...	...	62	*** Yes	16	Small Pox
TOTAL ...	2	...	234	108	556	10	20	2	6	92	247	71	88	8	1	224	103	41	1	1,872		180	

† There is an arrangement with the Mansfield Corporation to admit cases of Small Pox into their Isolation Hospitals.

* These districts contribute to the Joint Small Pox Hospital at Hucknall.

‡ These districts have an agreement with the Basford Rural District Council by which cases of Scarlet Fever and Diphtheria may be received into the Basford Sanatorium.

*** Cases of Scarlet Fever, Diphtheria, and Enteric Fever are sent to the Joint Hospital situated in the Blyth and Cuckney District.

§ Arrangements have been made with the North Derbyshire Hospital Board to receive cases of Infectious Disease.

TABLE IX. **NOTTINGHAMSHIRE.** **Cases of Infectious Disease notified during the Year, 1920**

RURAL DISTRICTS.

RURAL DISTRICTS.	Dysentery.	Small Pox.	Diphtheria (including Membranous Croup).	Erysipelas.	Scarlet Fever.	Enteric Fever.	Puerperal Fever.	Cerebro-Spinal Fever.	Poliomyelitis.	Ophthalmia Neonatorum.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Chicken Pox.	Encephalitis Lethargica.	Pneumonia.	Malaria.	Whooping Cough.	Mumps.	TOTAL.	Whether there is any Isolation Hospital for Infectious Diseases?	Total available Beds.	Number of Diseases that can be concurrently treated.
BASFORD ...	1	...	57	18	112	...	5	...	...	2	35	11	...	...	25	9	...	...	275	Yes	28	Enteric Fever Scarlet Fever Diphtheria
BINGHAM ...	...	...	32	6	31	...	...	...	...	4	12	2	...	...	18	6	...	...	111	‡	...	...
BLYTH AND CUCKNEY ...	...	...	4	...	4	...	...	...	...	...	5	...	...	...	7	...	...	...	20	Yes	16	Scarlet Fever and Diphtheria or Enteric Small Pox is sent to Wrksp
EAST RETFORD	...	...	23	8	14	...	...	...	1	2	10	5	...	2	7	2	...	...	74	§	...	...
LEAKE	...	...	8	...	2	...	1	...	...	...	2	...	...	...	...	1	...	...	14	†	...	...
MISTERTON ...	...	...	...	...	7	...	1	...	...	...	...	...	...	...	1	...	...	...	9	Yes	11	Scarlet Fever or Diphtheria and Small Pox
NEWARK ...	...	1	43	3	47	...	...	...	...	2	17	...	18	... =	7	2	1	...	141	**	...	...
SKEGBY ...	...	...	6	1	10	...	...	...	...	1	10	3	...	...	2	2	...	...	35	No.	...	...
SOUTHWELL ...	...	...	12	1	29	...	1	...	...	1	23	...	27	...	5	3	8	24	134	Yes	13	Scarlet Fever or Diphtheria and Small Pox.
STAPLEFORD ...	...	...	2	6	21	1	...	...	...	1	15	3	...	...	5	5	...	...	59	*	...	...
NOTTS. PARISHES administered by SHARDLOW ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	***	...	...
TOTALS...	1	1	187	43	277	1	8	...	1	13	129	24	45	2	77	30	9	24	872		68	

‡ An arrangement has been made with the Basford Rural District Council to take cases of Scarelt Fever, Diphtheria, or Enteric Fever into their Isolation Hospital.

† There is an arrangement with the Borough of Loughborough whereby cases of Enteric Fever and Diphtheria may be sent to Loughborough Isolation Hospital.

* This district contributes to the joint Small Pox Hospital at Hucknall; and has also made arrangements with the Draycott Isolation Hospital, in Derbyshire.

** The Newark Borough Isolation Hospital is situated in the Rural District, and is available for patients from the Rural District.

*** An arrangement has been made with the Shardlow Joint Hospital at Draycott to take cases from this district.

§ There is a temporary arrangement with the Borough of Retford to admit a limited number of cases of Scarlet Fever into their Hospital.

Year.	Deaths from Measles.	Year.	Deaths from Measles.
1895	35	1908	31
1896	230	1909	98
1897	47	1910	140
1898	62	1911	112
1899	142	1912	123
1900	67	1913	40
1901	105	1914	106
1902	77	1915	210
1903	42	1916	54
1904	50	1917	56
1905	177	1918	74
1906	7	1919	12
1907	147	1920	134

From January, 1920, the Order for the notification of Measles has been rescinded.

This was unfortunate, because the fact of the disease being considered sufficiently important to justify the expense of notification impressed the parents and led to more precautions being taken and to more care being taken about nursing.

The home visitation of cases of Measles by the School Nurses, together with the home nursing of serious cases by the District Nurses and the staff of the District Councils has been advocated as strongly as possible ; and would appear to have been very successful. The four years since notification give a smaller record of deaths than any similar period since 1895.

As a result, there were a large number of children unprotected by a previous attack, and the 1920 epidemic took a heavy toll of deaths. Nevertheless, the diminished prevalence in the previous four years probably saved many lives, as the mere postponement of an attack until the age of 7 years or older, is a great advantage as the fatality of the disease in children under 7 is so much greater than in older children.

SCARLET FEVER.

	SCARLET FEVER.			
	Notified Cases	Deaths.	Case Fatality per cent.	Attack Rate of cases per 1,000 of the Population.
1895	540	26	4·8	2·17
1896	833	30	3·6	3·30
1897	824	29	3·5	3·21
1898	732	24	3·2	2·80
1899	1,693	44	2·6	6·36
1900	1,485	45	3·0	5·48
1901	1,080	21	1·9	3·91
1902	829	13	1·5	2·90
1903	870	15	1·7	2·95
1904	984	20	2·03	3·24
1905	1,559	33	2·1	5·01
1906	1,468	28	1·9	4·59
1907	937	23	2·4	2·87
1908	793	23	2·9	2·36
1909	726	9	1·23	2·13
1910	815	13	1·59	2·40
1911	1,221	18	1·47	3·53
1912	1,000	12	1·2	2·81
1913	1,392	17	1·2	3·8
1914	1,956	20	1·02	5·3
1915	1,077	14	1·49	3·03
1916	690	5	0·72	2·00
1917	433	3	0·69	1·25
1918	438	2	0·45	1·29
1919	687	6	0·87	1·80
1920	833	9	1·08	2·18

There is little fresh to be said about Scarlet Fever. There was a definite increase both in cases and deaths during 1920; but at the present time Scarlet Fever has ceased to add much to the death-rate or to permanent invalidity. How soon the former virulent type may return can not be foreseen.

DIPHTHERIA AND MEMBRANOUS CROUP.

These diseases are caused by the same organism, and are now classified together under the head of Diphtheria. It should be understood that Membranous Croup is almost invariably Diphtheria affecting the larynx or wind-pipe.

The considerable increase in this disease, which began in 1913, reached its maximum in 1914 as regards the number of cases, and in 1916 as regards the number of deaths.

	DIPHTHERIA & MEMBRANOUS CROUP.			
	Notified Cases	Deaths.	Case Fatality per cent.	Attack Rate of cases per 1,000 of the Population.
1895	88	35	39·7	0·35
1896	142	38	26·7	0·56
1897	137	35	25·5	0·53
1898	119	26	21·8	0·45
1899	157	27	17·2	0·59
1900	182	32	17·5	0·67
1901	186	41	22·0	0·67
1902	209	29	13·4	0·73
1903	272	35	12·8	0·92
1904	447	63	14·1	1·47
1905	442	54	12·2	1·42
1906	447	53	11·8	1·39
1907	412	44	10·6	1·25
1908	526	60	11·4	1·57
1909	469	41	8·7	1·37
1910	358	31	8·6	1·05
1911	381	39	10·2	1·10
1912	373	35	9·3	1·05
1913	517	53	10·2	1·42
1914	613	63	10·2	1·67
1915	489	61	10·4	1·38
1916	562	64	11·3	1·63
1917	338	31	9·1	0·97
1918	283	34	12·0	0·83
1919	363	28	7·7	0·95
1920	421	49	11·6	1·15

During 1920 there was again an increase both in the number of cases, and in the deaths. This increase has affected a large portion of England. The means of combating the disease, with the exception of hospital isolation, have never been so generally available.

Every doctor residing and practising in the County now has the opportunity of obtaining a bacteriological report upon any suspected case of Diphtheria, at the cost of the County Council. The number of swabs examined was 795.

Diphtheria Antitoxin is also supplied free of cost by most of the District Councils in necessitous cases, so that no case need be without the means of diagnosis and treatment at the earliest moment. This is of the utmost importance where every hour's delay in commencing antitoxin treatment increases the risk of a fatal result.

ENTERIC FEVER.

	ENTERIC FEVER, including "Continued."			
	Notified Cases	Deaths.	Case Fatality per cent.	Attack Rate or cases per 1,000 of the Population.
1895	300	44	14·6	1·21
1896	395	58	14·9	1·56
1897	277	41	14·8	1·07
1898	431	63	14·6	1·65
1899	343	46	13·4	1·29
1900	388	51	13·1	1·43
1901	257	34	13·2	0·93
1902	160	22	13·7	0·56
1903	187	31	16·5	0·63
1904	187	31	16·5	0·61
1905	206	36	17·4	0·66
1906	334	36	10·7	1·04
1907	215	29	13·4	0·65
1908	152	22	14·4	0·45
1909	116	20	14·2	0·34
1910	83	15	18·0	0·24
1911	186	23	12·3	0·53
1912	119	10	8·4	0·33
1913	68	11	16·1	0·18
1914	81	15	18·5	0·22
1915	40	9	22·5	0·11
1916	63	9	14·3	0·18
1917	41	11	26·5	0·11
1918	56	15	26·7	0·16
1919	29	3	10·3	0·07
1920	11	3	27·2	0·02

The above is a remarkable example of the value of publishing statistics for a lengthened continuous period and not only for single years.

Enteric Fever has almost disappeared as a serious cause of death in a well ordered civil community.

From a maximum of 431 cases in the year 1898, the prevalence of the disease has fallen to 11 cases in 1920—a period of only 22 years. During the same period the deaths fell from 63 to only 3. This is a triumph of general sanitary administration due to the persistent work of the District Councils and their Medical Officers of Health.

It must not be imagined that the disease has ceased to exist. It caused hundreds of deaths during the Great War, when its ravages were kept in check by the universal inoculation of anti-typhoid cultivations. In civil communities the above results have been obtained by sanitation without the aid of inoculation, except that the large admixture of ex-soldiers and nurses protected by inoculation has no doubt helped.

PUERPERAL FEVER.

	PUERPERAL FEVER.		
	Notified Cases.	Deaths.	Case Fatality. per cent.
1895	24	11	45·8
1896	18	2	11·1
1897	21	9	42·8
1898	12	5	41·6
1899	28	14	50·0
1900	21	18	85·7
1901	23	18	78·2
1902	20	9	45·0
1903	16	9	56·2
1904	17	14	82·3
1905	20	6	30·0
1906	12	7	58·3
1907	21	8	38·0
1908	29	11	37·9
1909	16	10	62·5
1910	12	7	58·3
1911	14	8	57·2
1912	21	8	38·1
1913	9	6	66·6
1914	12	5	41·6
1915	19	4	21·1
1916	17	12	70·5
1917	8	6	75·0
1918	5	4	80·0
1919	19	21	100·0
1920	28	20	71·4

This term is retained because it was used in the tables issued by the Local Government Board, and it is, also, the term employed in the Infectious Disease (Notification) Acts. The Local Government Board directed that for the purposes of classification in the tables issued by them the terms Puerperal Fever shall be held to include :—" Pyaemia. Septicaemia, Sapraemia, Pelvic Peritonitis, Peri-Metritis and Endo-Metritis, occurring in the Puerperium.

The preceding table gives the number of *notified* cases and deaths during the past twenty-six years.

The above deaths do not include the deaths from " other accidents and diseases of pregnancy and parturition," which in 1920 amounted to 25.

It is difficult to explain quite satisfactorily the increased number of deaths from Puerperal Fever during 1919 and 1920.

There has been a rapid increase of births after the War associated with great overcrowding, and consequent want of cleanliness in the homes. And there is a very serious dearth of skilled midwives leading to many of the popular midwives being overworked, and to the increasing employment of the quite untrained ' handy woman.' The latter is only allowed to act *under supervision*, but no supervision can replace skill, training and cleanliness.

WHOOPING COUGH.

The following table shows the number of deaths from Whooping Cough.

Year.	Deaths from Whooping Cough.	Year.	Deaths from Whooping Cough.
1895	61	1908	76
1896	51	1909	75
1897	129	1910	67
1898	40	1911	98
1899	37	1912	40
1900	109	1913	47
1901	71	1914	85
1902	71	1915	73
1903	88	1916	29
1904	107	1917	38
1905	86	1918	130
1906	61	1919	24
1907	86	1920	30

Much the same may be said of Whooping Cough as of Measles, but it is even less under control, and is more fatal to infants.

DIARRHOEA.

This disease is mainly of importance in connection with infant life, and in hot, dry seasons assumes the characteristics of a specific epidemic disease. The year 1920 was unfavourable to the spread of Diarrhoea.

Year.	Deaths from Diarrhœa in Children under 2.	Year.	Deaths from Diarrhœa in Children under 2.
1895	201	1908	128
1896	88	1909	76
1897	166	1910	98
1898	240	1911	396
1899	233	1912	75
1900	158	1913	173
1901	205	1914	178
1902	85	1915	125
1903	123	1916	89
1904	242	1917	59
1905	116	1918	77
1906	223	1919	64
1907	119	1920	72

A contrast of the years 1916-1920 with the number of deaths in 1911, 1906, and 1899 will shew the importance of the work being done for infant welfare. The above table gives only the deaths in children under 2 years of age.

CEREBRO-SPINAL FEVER.

During 1920 the Consultant (Dr. Jacob), appointed by the County Council, was called in five cases and suspected cases. Of these, two recovered, and three proved not to be cerebro-spinal fever.

INFLUENZA.

It will be seen from the table that the epidemics of 1918 and 1919 did not extend seriously into 1920.

In the Spring of 1920 a fresh series of leaflets were distributed; and those members of the Medical Profession who desired it were supplied with prophylactic Vaccine, but only nine doctors took advantage of it.

Year.	Fatal Cases of Influenza.	Year.	Fatal Cases of Influenza
1900	152	1911	38
1901	23	1912	35
1902	47	1913	42
1903	45	1914	55
1904	44	1915	71
1905	47	1916	98
1906	31	1917	74
1907	84	1918	1,522
1908	69	1919	357
1909	47	1920	61
1910	38		

TUBERCULOSIS.

The most important and encouraging fact in connection with the tuberculosis report for 1920 is the continued diminution in the number of deaths from Pulmonary Tuberculosis commonly known as Consumption. This is a much more reliable way of estimating the prevalence of the disease than the notifications of new cases, of which more is said later. The deaths in 1920 numbered 262 or 23 fewer than in the previous year, and 59 fewer than in 1918. That is a tangible result for much expenditure.

Our records for this County only go back to the year 1895. They show a small though rather irregular fall in the number of deaths from year to year, due allowance being made for increase of population, until the first year of the War, 1914; and thereafter a somewhat rapid increase which was not only common to the whole of England, but was much more marked in the rest of Europe. The increase was entirely due to War conditions which need not be again enumerated. In 1919 and 1920, with the cessation of anxiety and strain, more abundant food, and very largely increased facilities for institutional and other forms of treatment, the improvement as shown by the diminution in the deaths, has been most striking; and there is much hope of its continuance.

The Notification, especially of early cases, has always been a difficulty but is improving. It is a complex social and administrative problem, as well as a medical one.

TUBERCULOSIS.—Year 1920.

URBAN DISTRICTS.	Post-card Notifications.			Notifications per 1,000 population.	Deaths from Pulmonary Tuberculosis.	Number of Notifications to each Pulmonary death.	Deaths from *other* Tuberculous Diseases.	Death-rate per 1,000 of the population from Pulmonary Tuberculosis.	Death-rate per 1,000 of the population from *other* Tuberculous Diseases.	Death-rate per 1,000 of the population from *all* Tuberculous Diseases.	Patients admitted into Ransom Sanatorium.
	Pulmonary.	Other Tuberculous Diseases.	Total.								
Mansfield	47	25	72	1·55	26	1·80	10	0·56	0·21	0·77	39
Newark	26	6	32	1·89	13	2·00	9	0·76	0·53	1·30	16
Retford	30	9	39	2·93	11	2·73	4	0·82	0·30	1·12	4
Arnold	2	2	4	0·30	6	0·33	3	0·45	0·22	0·68	2
Beeston	17	...	17	1·34	12	1·41	2	0·95	0·15	1·11	8
Carlton	42	4	46	2·46	21	2·00	7	1·11	0·37	1·49	12
Eastwood	1	1	2	0·39	1	1·00	2	0·19	0·39	0·58	3
Hucknall	21	6	27	1·58	11	1·91	4	0·64	0·23	0·88	12
Huthwaite	2	...	2	0·34	3	0·66	3	0·51	0·51	1·02	2
Kirkby-in-Ashfield ...	21	10	31	1·82	13	1·61	6	0·76	0·35	1·11	4
Mansfield Woodhouse...	11	4	15	1·09	8	1·37	3	0·58	0·21	0·80	7
Sutton-in-Ashfield ...	10	4	14	0·58	22	0·45	6	0·92	0·25	1·17	15
Warsop	4	...	4	0·57	4	1·00	...	0·55	...	0·55	5
West Bridgford ...	3	...	3	0·19	5	0·60	1	0·32	0·06	0·38	4
Worksop	10	...	10	0·44	27	0·37	3	1·18	0·13	1·32	8
Aggregate Urban Districts ...	243	71	314	1·26	183	1·32	63	0·73	·25	0·98	141

TUBERCULOSIS.—Year 1920.

RURAL DISTRICTS.	Post-Card Notifications.			Notifications per 1,000 population.	Deaths from Pulmonary Tuberculosis.	Number of Notifications to each Pulmonary death.	Deaths from *other* Tuberculous Diseases.	Death-rate per 1,000 of the population from Pulmonary Tuberculosis.	Death-rate per 1,000 of the population from *other* Tuberculous Diseases.	Death-rate per 1,000 of the population from *all* Tuberculous Diseases.	Patients admitted into Ransom Sanatorium.
	Pulmonary.	Other Tuberculous Diseases.	Total.								
Basford	35	11	46	1·04	27	1·29	11	0·61	0·24	0·86	15
Bingham	12	2	14	1·02	6	2·00	5	0·43	0·36	0·80	6
Blyth and Cuckney ...	5	...	5	1·05	1	5·00	...	0·21	...	0·63	4
East Retford ...	10	5	15	1·03	9	1·11	7	0·62	0·48	1·10	2
Leake	2	...	2	0·51	2	1·00	2	0·51	0·51	1·02	2
Misterton	...	...	...	0·28	2	...	3	0·54	0·81	1·35	2
Newark	17	...	17	1·99	6	2·83	1	0·70	0·11	0·82	8
Skegby	10	3	13	1·61	5	2·00	2	0·62	0·24	0·86	7
Southwell	23	...	23	1·23	12	1·91	3	0·64	0·16	0·80	10
Stapleford	15	3	18	1·63	8	1·87	3	0·72	0·27	1·0	7
Kingston and Ratcliffe on-Soar ...	...	...	...	...	1	...	...	2·45	...	2·45	1
Aggregate Rural Districts ...	129	24	153	1·16	79	1·63	37	0·60	0·28	0·90	64
Whole County ...	372	95	467	1·22	262	1·42	100	0·68	0·26	0·95	205

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912,

and Public Health (Tuberculosis) Regulations (No. 2), 1918.

Summary of Notifications during the period from the 4th January, 1920, to the 1st January, 1921. in the County of Nottinghamshire.

Age-periods	Notifications on Form A.													Notifications on Form B.					Number of Notifications on Form C.	
	Number of Primary Notifications.												Total Notifications on Form A.	Number of Primary Notifications.				Total Notifications on Form B.		
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards.	Total Primary Notifications.		Under 5	5 to 10	10 to 15	Total Primary Notifications.		Poor Law Institutions.	Sanatoria.
Pulmonary Males ...	...	7	11	18	16	18	27	22	16	8	2	145	146	...	5	1	6	6	...	6
,, Females ...	1	4	17	23	25	30	40	19	9	2	4	174	174	...	1	...	1	1	1	3
Non-Pulmonary Males	1	4	7	5	7	2	5	...	2	...	...	33	33	...	...	...	...	...	...	...
,, ,, Females ...	3	6	4	10	5	1	5	3	2	...	...	39	39	...	2	1	3	3	...	...

H. HANDFORD, M.D.
COUNTY MEDICAL OFFICER OF HEALTH.

The amount of Institutional treatment both for early and for advanced cases has been greatly increased. In the place of 170 admissions to the Ransom Sanatorium in 1918, there were 209 in 1920. In addition, 26 advanced cases were admitted into the Small Pox Hospital, Barnby Road, Newark, making a total of 235.

A full report of the work at the Ransom Sanatorium will be found in the Nineteenth Annual Report of that Institution, which deals with the year 1920, and which is published separately.

The Small Pox Hospital at Newark, which had not been used for Small Pox for several years, was opened as a temporary Tuberculosis Hospital for advanced cases on August 5th, 1919, preference being given to Newark cases. The admissions required the approval of one of the Tuberculosis Officers, but the administration and the treatment of the patients were under the charge of Dr. Galbraith, the Medical Officer of Health for Newark and the three adjoining Rural Districts. The arrangement had many drawbacks, and on July 18th, 1920, the patients were removed at an hour's notice, some to their homes, and the rest to the Newark Workhouse, for the admission of a case of Small Pox. The Ministry of Health expressed to the County Council their disapproval of tuberculous patients being moved to the Workhouse Infirmary even in an emergency arising from Small Pox. The Hospital was reopened for a short time in 1920: but after much correspondence it was decided to discontinue sending patients to Newark, and concentrate upon the preparation of the new beds at the Ransom Sanatorium. No more patients were sent and the hospital was closed as a Sanatorium in the Spring of 1921.

The 26 cases admitted to the Newark Small Pox Hospital during 1920 were discharged as follows :—

MUCH IMPROVED.	IMPROVED.	UNCHANGED.	WORSE.	DIED.
1	2	10	6	7

There were in addition 12 patients remaining in the Hospital on the 31st December 1919. They were discharged as follows :—

MUCH IMPROVED.	IMPROVED.	UNCHANGED.	DIED.
2	3	5	2

Thus out of a total of 38 patients 15 were discharged unchanged in a highly infectious state to die at home, and 6 were worse and would presumably die at home spreading infection. The admission of these two categories, forming more than half the total, cannot be said to have done much good. The 9 cases which died in the hospital presumably saved the great risk of spreading infection at home. It will readily be understood that it is during the last two or three months of life, when the patient is becoming increasingly helpless, that infection is most readily spread.

The 8 cases which improved quite justified their admission.

At the Ransom Sanatorium, great developments are taking place. A new Nursing block, a Dining Room, a Recreation Room, an X-Ray Room, resident Medical Officers' Rooms, and a Medical Superintendent's House have reached the stage of being roofed, and the extension of the kitchens is nearly completed. The wards for 40 children, and for 40 advanced cases have made much progress, but have been delayed by various unavoidable circumstances. They are not likely to be ready for occupation until late in 1922 at the earliest.

It is probable that much of the glandular and joint tuberculosis in children which now must either be sent to Institutions outside the County or treated at home, may be dealt with in the children's block.

It is most important that it should be more widely understood that the greater part of the glandular and joint tuberculosis in children under 15 is of Bovine Origin, and the infection is derived from tuberculous cows' milk. It is difficult by building Institutions like the above for the purpose of treating the established disease to keep pace with the fresh infection from tuberculous cows.

Deaths from Tuberculosis.

Year.	Deaths from Pulmonary Tuberculosis.	Deaths from other Tuberculous Diseases.	Deaths from Tuberculous Meningitis.
1895	287	...	...
1896	233	...	...
1897	308	...	...
1898	303	...	...
1899	266	...	...
1900	256	184	...
1901	238	153	...
1902	229	173	...
1903	262	150	...
1904	256	167	...
1905	281	140	...
1906	267	160	...
1907	281	143	...
1908	242	140	...
1909	245	120	...
1910	261	166	...
1911	233	186	...
1912	234	130	...
1913	237	110	...
1914	252	119	...
1915	261	114	...
1916	282	100	...
1917	303	112	...
1918	321	109	...
1919	285	62	41
1920	262	57	45

Death-rate from Pulmonary Phthisis per 1,000 of the Population

	Whole County.	Urban Districts.	Rural Districts.
1900	·93	·95	·90
1901	·86	·92	·77
1902	·80	·75	·86
1903	·88	·80	1·01
1904	·84	·79	·92
1905	·90	·93	·86
1906	·83	·84	·82
1907	·85	·88	·81
1908	·72	·72	·71
1909	·71	·72	·70
1910	·77	·83	·66
1911	·67	·73	·58
1912	·65	·68	·62
1913	·65	·64	·67
1914	·68	·70	·65
1915	·73	·68	·84
1916	·81	·86	·72
1917	·87	·86	·90
1918	·94	·89	1·05
1919	·77	·81	·71
1920	·68	·73	·60

Death-rate from all OTHER Tuberculous Diseases (excluding Tuberculosis of the Lungs) per 1,000 of the Population.

	Whole County.	Urban Districts.	Rural Districts.
1900	·67	·76	·54
1901	·55	·64	·42
1902	·60	·65	·53
1903	·50	·53	·46
1904	·55	·59	·48
1905	·45	·48	·40
1906	·50	·51	·48
1907	·43	·46	·39
1908	·41	·47	·32
1909	·35	·36	·33
1910	·48	·59	·31
1911	·53	·61	·40
1912	·36	·40	·30
1913	·30	·39	·14
1914	·32	·39	·20
1915	·32	·32	·31
1916	·28	·36	·15
1917	·32	·31	·34
1918	·32	·33	·35
1919	·27	·28	·25
1920	·26	·25	·29

Death-rate from ALL Tuberculous Diseases (including Tuberculosis of the Lungs) per 1,000 of the Population.

	Whole County.	Urban Districts.	Rural Districts.
1900	1·60	1·71	1·45
1901	1·41	1·57	1·20
1902	1·40	1·41	1·39
1903	1·39	1·34	1·48
1904	1·39	1·38	1·40
1905	1·35	1·41	1·27
1906	1·33	1·35	1·30
1907	1·29	1·35	1·20
1908	1·14	1·20	1·03
1·09	1·07	1·09	1·04
1910	1·26	1·42	0·98
1911	1·21	1·34	0·98
1912	1·02	1·08	0·93
1913	0·95	1·03	0·82
1914	1·01	1·1	0·85
1915	1·06	1·01	1·15
1916	1·10	1·23	0·88
1917	1·20	1·17	1·25
1918	1·26	1·22	1·35
1919	1·06	1·14	0·98
1920	0·95	0·98	0·90

TUBERCULOSIS DISPENSARIES.

There were five Dispensaries in regular use during the year 1920. The following list gives the situation with the days and hours of opening :

TOWN.	STREET.	DAY.	HOUR.
Nottingham	..Goldsmith Street	..Wednesday	..10 a.m.
Mansfield	..Church Street	..Monday	.. 2 p.m.
,,	.. ,,	..Thursday	..10 a.m.
Newark	..11, Carter Gate	..Tuesday	..10 a.m.
Retford	..Bridge Gate	..Saturday	..11 a.m.
Worksop	..Potter Street	..Friday	.. 3 p.m.

The Dispensaries are centres for diagnosis and treatment and especially for consultation in the very numerous doubtful cases. This part of the work has grown very largely and the large number of cases sent for an opinion by the private practitioners in the neighbourhood afford some measure of the success of the work.

From the dispensaries also, the home visiting of patients, both by the Health Visitors and by the Tuberculosis Officers, is arranged.

The provision of " Extra Nourishment " in the form of milk when necessary is decided at the dispensaries, as well as the provision of Malt and Cod Liver Oil.

One of the most valuable uses of the Dispensaries is to act as a " Clearing House " where suitable cases are selected for the Sanatorium and other cases are allotted "domiciliary treatment."

The following table gives the attendances at the five dispensaries for 1920, and also the number of new Cases.

TUBERCULOSIS DISPENSARIES. ATTENDANCES & NEW CASES.

	1920.			New Cases for Year 1920.		
	Insured.	Uninsured.	Total.	Insured.	Uninsured.	Total.
Mansfield ..	1271	1408	2679	133	254	387
Nottingham	812	562	1374	115	99	214
Newark ..	447	545	992	86	34	120
Retford ..	163	197	360	18	25	43
Worksop ..	202	140	342	12	15	27
	2895	2852	5747	364	427	791

SHELTERS.

Fifteen shelters were in use during 1920, and they were occupied by 19 patients.

In addition four shelters belonging to the Nottingham and Notts. Association for the Prevention of Consumption, were used by County patients. Two of the patients died during the year.

The shelters were disinfected and moved to a fresh locality for other patients. The cost of moving is considerable, but a contract is always obtained where possible. The majority of the shelters have needed painting or repairs, and this has been carried out where necessary.

A large proportion of the requests for shelters are made by patients who have no suitable accommodation for them. A certain amount of open ground is needed not too distant from the house. In many instances of overcrowding where it has not been possible to find a separate bed room for the patient, the provision of a shelter has been most valuable in affording isolation and preventing infection.

HOME VISITING.

Four well qualified and experienced Health Visitors have been constantly employed and have made 5,214 home visits. They have also carried on the non-medical work of the 5 dispensaries.

In the course of the year 78 patients left the County, and whenever possible the Medical Officer of Health of the District to which they were going, was notified.

CARE COMMITTEE.

The Nottingham and Notts. Association for the Prevention of Consumption, who have been engaged in after-care work since 1902, have continued to act as an unofficial Care Committee for the County. There is daily communication between the Association and the Public Health Department at the Shire Hall, either by telephone or personally. The Chairman of the Public Health Committee, the County Medical Officer and the Tuberculosis Officer are members of the Notts. Association Committee. and the Chairman of the Notts. Association Committee is a member of the Sub-Committee for the Management of the Ransom Sanatorium which was given to the County by the Association. The work done for the County has been very considerable, and is detailed in the Association's Annual Report. Negotiations have been in progress for the past two years, with the object of increasing the amount of the Care work undertaken, by means of a grant of £100 from the County Council towards the clerical and establishment expenses, and so leaving more of the Association's income free for direct remediable work. Difficulties have hitherto delayed the completion of the promise.

EXTRA NOURISHMENT.

This takes the form of two pints of Milk daily, and during 1920, the Insurance Committee granted extra nourishment to 56 insured patients at a total cost of £308 14s. 2d.

In addition, the Notts. Association have made grants of milk to many persons, chiefly children, in the County suffering from, or suspected to be suffering from tuberculosis. The details are given in their Annual Report.

Since the transfer of the administration of tuberculosis from the Insurance Committee to the County Council in May, 1921, Extra Nourishment has been continued by the County Council in suitable cases.

VENEREAL DISEASES.

The Regulations of the Local Government Board upon this subject were issued July 16th, 1916, and require County Councils to make provision for the diagnosis and treatment of Venereal Diseases.

After visiting all the possible centres in the County and conferring on many occasions with the Committees and honorary Medical Staffs of the Hospitals in Nottingham, Mansfield, Newark, Worksop, and Retford, the County Medical Officer prepared in September, 1916, an Outline Draft for a scheme for the Diagnosis and Treatment of Venereal Diseases in Nottinghamsbire.

The draft scheme above referred to was put into legal form and approved by the County Council at their meeting on January 30th, 1917. It received the approval of the Local Government Board a few weeks subsequently.

The scheme was published in full on pages 79 and 80 of my Annual Report for 1917-18, published October, 1918.

As explained in my Annual Report for 1916-17, page 62, and continued in my Annual Report for 1917-18, pp. 80, 81, very many negotiations were entered into without result.

None of the general hospitals in this County, contrary to the practice in the greater part of England, would establish a Venereal Disease clinic in their out-patient departments, even though the whole expense would be guaranteed. Consequently it became necessary for the County Council to equip what are termed " ad hoc " clinics for Venereal Diseases only in any buildings they could find. This was a most difficult task, and it has been accomplished both in the City and in the County with most gratifying success, as the statistical tables on page 53 will show. The Ministry of Health repay to the County Council 75% of the expenditure, and therefore the whole of the administration is carried out under their direction and control.

The V.D. Clinic at 35, North Church Street, Nottingham was opened by the City in 1917. From the table on page 53, it can be seen that in the year 1920 as many as 402 individual patients came from the County and made 11,531 attendances. The cost of these cases is repaid to the City by the County Council. Dr. Buckley, who is also specialist Venereal Diseases Medical Officer for the County, is in charge of the City Clinic, aided by a large staff.

On the 18th January, 1918 a Clinic was opened by the County Council at Mansfield in rooms temporarily placed at their service by the Board of Management of the Mansfield General Hospital. Dr. Buckley, assisted by the staff of the General Hospital, was in charge, and the work soon quite outgrew the accommodation available. Eventually a suitable house was obtained adjoining the hospital and Westhill House was purchased, adapted at considerable expense and equipped. The table on page 53 shews that in 1920 there were 348 County patients who made 8,848 attendances.

At Westhill House, the staff consists of Dr. Buckley, Dr. Houfton, a resident Orderly, a caretaker, and a whole time Nurse. The Centre is open for men on Tuesday at 10 a.m., and Thursday at 7 p.m., and for females on Tuesday at 2 p.m. and Friday at 7 p.m. The irrigation department is open for men under the supervision of the orderly every day from 10 to 12 noon, and from 6 to 8 p.m.

Two beds have been provided for any cases of sudden illness arising during treatment amongst male patients. At present no cases have arisen. The General Hospital has promised to take in any similar cases arising in women patients.

In addition, the provision of 6 or 8 beds for the in-door treatment of severe cases of venereal disease is under consideration, but the expense would be out of proportion to the small number of cases benefited. It would make the Centre more complete.

At Newark a treatment Centre was opened at 11, Carter Gate on May 9th, 1919, and has been continued to the present time. It is under the charge of Dr. Buckley, assisted by the members of the surgical staff of the Newark General Hospital, where cases of emergency can be sent for in-door treatment.

The Centre is open on Fridays: Men at 10 a.m., and Women at 11.30 a.m.

In March 1920, an irrigation clinic was opened for men on three evenings a week, and is under the charge of an Orderly.

An experienced Nurse has been appointed and gives part of her time to the Mansfield Clinic and the rest to School Work.

With the object of inducing a larger number of women to attend, a special evening was set apart for them, and a lady doctor was appointed. The attendance did not improve, and the special appointment was discontinued.

The table shews that a total of 98 patients made 1,729 attendances at the Newark Centre.

Finally, 20 patients have had an aggregate of 203 railway fares repaid, amounting to £30 15s. 11d.

Abstract relating to persons treated at the Venereal Diseases' Treatment Centres during 1920.

	MANSFIELD.		NOTTINGHAM.	NEWARK.		
	Notts. Cases.	Other Districts.	County Cases only.	Notts. County Cases.	Other Districts.	Total.
A. Number of persons dealt with for the first time, and found to be suffering from—						
Syphilis	175	16	153	34	1	379
Soft Chancre	7	...	4	...	...	11
Gonorrhœa	145	19	193	48	2	407
Conditions other than Venereal ...	21	2	52	16	...	91
Total	348	37	402	98	3	888
B. Attendances	8848	1710	11531	1729	45	23863
C. Aggregate In-patient Days	70	...	...	...	...	70
D. Number of doses of Salvarsan Substitute — Out-patients	1353	130	1621	219	40	3363
D. Number of doses of Salvarsan Substitute — In-patients	1	...	...	...	...	1

The assistant medical staff both at Mansfield and Newark are supplied with Salvarsan substitutes for the treatment of private cases; but only three or four other doctors in the County are qualified according to the regulations to receive Salvarsan substitutes, and they have been supplied.

All the laboratory work has been carried out at the City Laboratory, 17, Park Row, Nottingham, by arrangement with the City Corporation.

During the year 1920 there were 1,578 Wassermann tests carried out. There were 178 microscopic examinations for the detection of Spirochoetes and 1,375 examinations for the detection of Gonococci. The scale of fees for each specimen is fixed by the Ministry of Health, and the total cost amounted to £673 10s. 6d.

A comparison of the figures in the previous table shews that while the attendances have increased from 13,019 to 23,863, and the number of doses of Salvarsan Substitute have increased from 2,580 to 3,363 the number of new cases has fallen from 999 to 888. This is in many respects satisfactory as indicating a lessened prevalence of the disease, and a much more intensive treatment of the cases that come to the Centres. The two points in which the work is imperfect are the small proportion of women who attend; and the fact that a considerable number of men attend only a few times and absent themselves before their cure is complete, often indeed before they cease to be infectious. These drawbacks are common to the whole of the kingdom, and are not more prevalent in Notts. than elsewhere. On the contrary they are probably less common. The centres in the City of Nottingham and at Mansfield are reputed to be among the very best in England.

V.D. CLINICS. TIME TABLE.

NOTTINGHAM. 35, North Church Street.

Males.		Females.	
Monday	10.0—12.0 noon	Tuesday	5.0—7.0 p.m.
Wednesday	6.0— 8.0 p.m.	Wednesday	10.0—12.0 noon
Thursday	6.0— 8.0 p.m.	Thursday	10.0—12.0 noon
Saturday	10.0—12.0 noon	Friday	6.0— 8.0 p.m.

MANSFIELD, West Hill House.

Tuesday	10.0—12.0 noon	Tuesday	2.0— 4.0 p.m.
Thursday	7.0 p.m.	Friday	7.0 p.m.

MANSFIELD IRRIGATION CLINIC (MALES).

Daily, 10.0 a.m.—12.0 noon. 6.0 p.m.—8.0 p.m.

NEWARK. 11, CARTER GATE.

MALES.		FEMALES.	
Friday	..10.0—11.30 a.m.	Friday	..11.30—12.30 p.m.

IRRIGATION CLINICS (MALES).

Monday	.. 6.0—8.0 p.m.
Wednesday	6.0—8.0 p.m.
Saturday	.. 6.0—8.0 p.m.

ADMINISTRATION OF THE MIDWIVES' ACTS, 1902 AND 1918.

The following tables will show that the work under the above Acts is constantly growing both in volume and in importance. It has been carried out, as heretofore, by Dr. Rose Hudson, assisted by two Inspectors, and under the general active supervision of the County Medical Officer. Originally both Inspectors occupied part of their time as School Nurses, but the rapid increase of work required first one, and, before the end of the year, both Inspectors to confine their work entirely to Inspection of Midwives.

Every Midwife is inspected at least once a quarter and some are visited much more frequently. It is the object of the Inspectors to act as the best friend and adviser of the Midwives, as well as their official Inspector ; and this attitude is much appreciated.

In addition to the routine inspections, detailed enquiries are made in all cases of rise of temperature, still-birth, inflammation of the eyes, death of the child or of the mother before the arrival of a doctor, and liability of the midwife to be a source of infection.

During the year 1920 as many as 687 routine visits and 899 special visits were made.

It will be noted that the untrained Midwives are rapidly dying out. Of 179 Midwives who notified their intention to practise in the year 1920, as many as 124 had been fully trained, and only 55 received their certificates because they were in bona fide practice before July, 1901.

There is scope for more trained Midwives, but they are very difficult to obtain, and for that reason the formation of a training school in the County in connection with a Maternity Hospital has been advocated.

It is only in the populous centres that a midwife is able to obtain a livelihood, and that none too good. In the small villages in Rural Districts they must depend upon a salary or upon part-time work, or be subsidised by the County Council.

This serious dearth of Midwives and of District Nurses is tending to revive and to render more excusable the employment of the untrained "handy woman." The doctor alone, without a trained monthly nurse or the midwife cannot adequately cope with the situation.

To endeavour to meet this great difficulty a special meeting was recently held with the Notts. Nursing Federation, and arrangements have been made for periodical meetings.

A largely increasing number of Nursing Associations are applying through the Notts. Nursing Federation, to the County Council for grants to enable them to pay the much larger salaries which alone will enable them to retain the services of well-trained Nurse Midwives. In the year 1920 the following grants were made through the Federation to the following newly-established District Associations:— Plumtree, £20 for maintenance; Misterton, £20 for maintenance; Dunham, £15 for maintenance; Bingham and Saxondale £20 for equipment and maintenance.

The payment of the fees of Doctors called in by Midwives in accordance with Section 14 of the Midwives Act, 1918, has been steadily growing. A new scale of fees was recently issued by the Ministry of Health, and the procedure though somewhat complex is now working quite smoothly.

Forms of claim are sent to each Doctor summoned to her aid by a Midwife directly the Midwife's duplicate notice has been received. In all 1,011 forms of claim were sent out in 1920, and only 319 were returned by 74 doctors for fees amounting to £454 3s. 0d. From this it is clear that about two thirds of the patients pay their doctors' fees directly and not through the County Council. This is most satisfactory

for the recovery of the fees paid by the County Council from the patients as authorised by the Act is a slow and tedious business although in the end much the larger portion is recovered.

The serious outbreak of Pemphigus Neonatorum, which was so fatal in 1919, has not returned, and only one or two sporadic cases have occurred.

The Central Midwives Board have issued a new and improved set of Rules, which received the approval of the Privy Council in June, 1921, and came into operation on July 1st, 1921. A copy has been sent to each Midwife in the County, who has notified her intention to practise.

The number of Midwives who, in compliance with Section 10 of the Midwives Act, have notified to the Local Supervising Authority their intention to practise in this County each year is shown in the following table :—

Year.	Number of Midwives
1903	40
1904	39
1905	184
1906	181
1907	183
1908	177
1909	195
1910	203
1911	217
1912	220
1913	202
1914	197
1915	178
1916	191
1917	175
1918	171
1919	174
1920	179

MATERNITY CASES ATTENDED BY CERTIFIED MIDWIVES. WITHOUT A DOCTOR.

Year.	Number of Cases.	Percentage of Total Births.
1907	4,150	46·3
1908	4,290	43·0
1909	4,166	42·0
1910	4,120	43·1
1911	4,339	45·9
1912	5,264	57·1
1913	6,339	67·6
1914	5,487	57·4
1915	5,072	57·3
1916	5,201	60·7
1917	5,004	65·9
1918	4,838	62·4
1919	5,098	67·9
1920	7,098	72·1

Out of 7,098 maternity cases, medical help was summoned in 1,129, or about 15·9 per cent., compared with 14·4 per cent in 1919, 9·7 per cent. in 1918, 8·8 per cent in 1917, 8·0 per cent. in 1916 and 6·7 per cent. in 1915. Thus the frequency of the summoning of medical help has more than doubled since 1915.

This increasing readiness to call in medical help is a most valuable and important advance, and is a result of the increasing proportion of *trained* midwives, who are in a better position to recognise danger and seek assistance.

This point is more clearly brought out when it is shown that 5,303 cases were attended by *trained* midwives, who called in medical assistance in 18·3 per cent., while 1,795 cases were attended by *untrained* midwives, who called in medical assistance in only 11·9 per cent.

Ophthalmia Neonatorum.—126 cases of discharge from the eyes in the new-born were notified by midwives in their records of sending for medical help; compared with 60 in 1919, 45 in 1918; 69 in 1917, 53 in 1916, and 32 in 1915.

Only 105 of these were notified to the Medical Officer of Health as Ophthalmia Neonatorum. Of these latter as many as 92 were notified from Urban Districts and only 13 from Rural. This is of great significance when it is

remembered that this disease is of Venereal (gonorrhoeal) origin. Every case reported is visited by one of the Inspectors of Midwives and enquiries are made whether efficient steps are being taken to treat the disease.

TABLE OF NOTICES RECEIVED BY THE NOTTS. LOCAL SUPERVISING AUTHORITY.

Year	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Records of sending for Medical help ...	44	177	282	282	340	321	365	466	534	416	421	344	421	441	474	735	1125
Notices of still-birth	3	68	123	100	101	106	113	142	110	147	129	107	111	107	112	126	161
Notices of death of child before arrival of doctor ...	0	12	19	15	21	36	26	14	16	12	8	8	13	7	16	19	17
Notices of death of mother before arrival of doctor ...	0	0	0	0	1	0	0	2	1	0	1	1	0	0	4	2	0
Notices of laying out the dead ...	0	0	0	0	0	0	0	35	64	29	23	16	27	16	22	21	16
Changes of address notified to the Central Midwives Board	0	51	35	45	55	54	67	55	85	40	20	14	6	9	19	17	28
Changes of name notified to the Central Midwives Board	0	0	0	5	4	5	5	4	2	4	0	0	4	0	5	3	1
Deaths of Midwives notified to the Central Midwives Board	0	0	0	0	3	3	3	0	4	0	0	0	2	2	0	0	1
Notices of Liability to be a Source of Infection ...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	10	33
Notices of Artificial Feeding ...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	72
	47	308	459	447	525	525	579	718	816	648	602	490	584	582	663	984	1454

CLASSIFICATION OF THE CAUSES FOR WHICH MEDICAL HELP WAS SOUGHT DURING THE YEAR 1920.

PREGNANCY—		
Abortion	46	
Excessive Sickness	3	
Puffiness of hands and face	9	
Dangerous Varicose Veins	2	
Purulent Discharge	4	
Other complications	12	
Deformity	3	
Haemorrhage	3	
Fits	1	
Sores on the Genitals	1	
		— 84
LABOUR—		
Fits or Cunvulsions	9	
Malpresentation	64	
Where no presentation could be made out	7	
Excessive bleeding	54	
Placenta retained for more than two hours	42	
Ruptured perinæum	115	
Delay in labour	243	
By patient's wish	8	
Placenta Prævia	7	
Uterine Inertia	24	
Other Complications	9	
		—582
LYING-IN—		
Rise of Temperature	48	
Pain and swelling of breasts	4	
Abdominal swelling and tenderness	2	
Other conditions	37	
		— 97
THE CHILD—		
Convulsions	14	
Malformation	29	
Dangerous feebleness	70	
Inflammation of eyes	126	
Prematurity	77	
Still birth	28	
Jaundice	3	
Rash	3	
Skin eruptions	11	
Injuries received during birth	1	
		—362
		1,125

MATERNITY AND CHILD WELFARE.

The Scheme approved by the Local Government Board was printed in full on page 24 of my Annual Report for 1916-17.

All the seven undertakings have now been carried out; and with the aid of the District Councils who are directing their own schemes, the whole County is covered.

The Special Area in which this work is carried out directly by the County Council, comprises two Urban Districts, namely, Carlton and West Bridgford, and eight Rural Districts, namely, Bingham, Blyth and Cuckney, Retford, Leake, Misterton, Newark, Southwell, and Stapleford.

This special area has a population of 113,244, with 2,498 births, and a birth-rate of 22·0 per thousand of the population. There were in the year 1920 only 175 deaths of infants under one year of age, giving an Infantile Mortality rate of 70·0 per 1,000 births.

This compares very favourably with the rate of 75 for the aggregate Rural Districts, and 89 for the aggregate Urban Districts; especially as the Special Area contains two Urban Districts and one Rural District, Stapleford, with Urban Characteristics and a very high death rate namely, 123. Stapleford is the only district where the Infant Welfare Work has not produced much effect. The home conditions are not satisfactory, the building where the Centre is held is not well adapted for the purpose, but the County Council have been unable to obtain a house of their own, and local interest appears to be entirely wanting.

The Welfare Work is supervised by Dr. Rose Hudson, who has been assisted by eight whole-time highly-qualified Health Visitors, and eleven part-time District Nurse Health Visitors.

The District Nurse Midwives act as assistant part-time Health Visitors, chiefly in the thinly-populated agricultural portions of the County, where they attend nearly all the confinements, and are accustomed to continue to visit the infants afterwards under the general supervision of the staff of the Health Department, to whom they report every month.

The Notification of Births is not carried out very efficiently except by the Midwives; but nothwithstanding this drawback the Health Visitors seldom fail to gain early information of new births.

Notification is made to the Medical Officers of Health of the District Councils and not direct to the County Medical Officer.

In the following table are given the places where, and the hours at which Welfare Centres are in operation in the County Special Area.

TABLE OF WELFARE CENTRES.

Address.	Day of Opening.	Hour.
CARLTON, 375, Main Street	Monday ...	2—6 p.m.
(First opened October 31, 1917)	Tuesday ...	2—4 p.m.
	Wednesday	2—6 p.m.
School Clinic	Thursday	2—4 p.m.
(First opened Nov. 15, 1919)		
STAPLEFORD, Church Institute ...	Friday ...	2—4 p.m.
(First opened Nov. 29, 1917).		
*SOUTHWELL, King Street	Thursday	2.30—4.30 p.m.
(Transferred and re-opened June 26, 1918)		
School Clinic	Wednesday	2—4 p.m.
(First opened March 17, 1920)		
BINGHAM, Market Street	Thursday	10—12 noon.
(First opened October 4, 1918)		
School Clinic	Friday ...	2—4 p.m.
(First opened April 23, 1920).	(fortnightly)	
RADCLIFFE-ON-TRENT, Wesleyan Chapel	Thursday	2—4 p.m.
(First opened Nov. 27, 1919.)		
MISTERTON, Temperance Hall ...	Monday ...	2—4 p.m.
(First opened December 1, 1919.)		
PLUMTREE	Tuesday ...	2.30—4 p.m.
(First opened Jan. 6, 1920)	(fortnightly)	
BALDERTON, near Newark	Friday ...	2.30—5 p.m.
(Taken over March 20, 1920.)		
EDWINSTOWE	Tuesday ...	2.30—5 p.m.
(First opened July 13, 1920.)	(fortnightly)	
OLLERTON	Tuesday ...	10—12 noon.
(Opened August, 1921.)	(fortnightly)	

In the following table is given an abstract of the number of home visits made in the years 1919 and 1920. The great increase of work becomes at once apparent :—

	YEAR. 1919.	1920.
Number of First Home Visits to Infants and Children	1,800	3,357
Number of Re-visits	7,185	17,245
Number of Visits to expectant Mothers ..	413	1,487
Other Visits	210	920
Total ..	9,608	23,009

* This centre had been open about two years previously as a Voluntary Centre, At first it was very successful, but was afterwards closed.

No department of Public Health Work has shown such brilliant results as Child Welfare. Twenty years ago, in the year 1900, of every thousand infants born, 160 died within the year. Last year in 1920, after just twenty years' work, the 160 deaths have been reduced to 85, or little more than half. This is no accidental change, but the fall has been steady and consistent.

It is generally acknowledged that by far the most important part of the work is the Medical Supervision, and the Medical advice given directly to the mothers at the Welfare Centres.

It requires little imagination to realize that one woman doctor cannot adequately advise patients in ten Welfare Centres scattered all over the County and supervise the work of 18 nurses. That the results have proved as good as the statistics shew is remarkable.

It is also agreed that this kind of work among infants and mothers is best done by women doctors. The Child Welfare section of the Ministry of Health has a Medical Staff exclusively of lady doctors. In the latter part of 1920, the Ministry of Health expressed the wish that the County Council should take over the administration of the Child Welfare Work in two small Urban Districts and one large Rural District where the results had hitherto not been good. It was pointed out that to continue the previous imperfect system under the same staff at the expense of the County Council would be to court failure. To effect any improvement it would be necessary to appoint a second lady doctor and additional Health Visitors. In the face of the financial crisis the County Council decided not to make any new appointments; and consequently the Ministry of Health have postponed their requests.

Subsequently in 1921 a similar request has been made by the Ministry of Health concerning the Basford Rural District. This has not yet been decided, but exactly similar reasons for and against are applicable.

It is true the County Council have great advantages in carrying on Child Welfare Work, inasmuch as they have a large staff and can apportion the work with less difficulty than smaller Districts. They are already doing similar work for children over 5 years of age in connection with the Schools. And in the case of infants the County Council being the local

Supervising Authority under the Midwives' Acts are in close and constant touch with the Midwives all over the County, upon whom so much of child welfare necessarily depends. They are also in touch with most of the District Nurses through the Notts. Nursing Federation.

A most valuable part of the work of the Welfare Centres consists in the opportunity they offer of supplying dried milk and Glaxo, for infants and children under 5 years of age; and also for pregnant women and nursing mothers. By far the greater part of the milk goes to the children.

This was carried out under the "Order" issued by the Ministry of Health; and the local authorities were instructed to make the privileges thereby conferred as widely known as possible.

In the early part of 1921 the above Order was rescinded and new regulations were issued an account of which will be given in next year's report.

The quantity of milk, &c., supplied in 1920 was not excessive, the distribution was closely supervised, and great benefit resulted to the mothers and babies.

The greater part of the dried milk and Glaxo, namely, 5,650 lbs., was supplied at cost price. Very few of the mothers are able to give the children the quantity needed, if called upon to pay more than the cost price.

The quantity sold at half-price was 230 lbs., and the quantity given free, after full enquiry as to means, was 3,261 lbs. In every case the certificate of the Medical Officer of the Welfare Centre is required.

The total cost of the *free* milk for the year was £380. This is a small sum for supplying the urgent needs of a population of 113,244.

The quantity of Virol distributed at cost price to the Children under 5 years was 907 lbs. This has proved of the greatest benefit as shown by the marked improvement in the children's health.

The average attendance at the Welfare Centres has grown considerably.

At Carltón the average attendance per week was 92; at Stapleford 35; at Southwell 17, with sometimes as many as 26; Bingham, commencing with one or two, and then reaching 4, now averages 20.

At Carlton regular weekly lectures and demonstrations are given; and at the other smaller Centres instruction upon infant-feeding, infant clothes, general healthy modes of life, etc., is given as a rule once a fortnight.

The mothers most in need of instruction and advice will not attend Welfare Centres regularly and in large numbers in the same way as better class mothers. It is for the poor and careless mothers that regular *home-visiting* is all-important.

One of the greatest difficulties has been the inadequacy of the buildings in which the work is conducted. Public rooms hired by the week have not proved an unqualified success. The financial difficulties of the Country prevent any hope of improvement at present.

LABORATORY WORK.

With the exception of a small laboratory at the Ransom Sanatorium, where a few hundred samples of sputum are examined by Dr. Weatherson for T.B., the County Council possess no laboratory.

In 1918 an arrangement was made with the Corporation of the City of Nottingham that not only the Venereal Disease samples, but also other bacteriological specimens should be examined at the City Bacteriological Laboratory, 17, Park Row, at a suitable payment per specimen.

An account of the V.D. laboratory work is given on page 54.

The results of the general laboratory work are given on page 66.

The inconvenience of not having a Chemical Laboratory for the County in Nottingham is much felt.

Return of Specimens for Bacteriological Examination submitted during the year 1920.

(The examination for Spirochoetes, Gonococci and Wasserman tests are given under Venereal Diseases on p. 54).

	Diphtheria.	Enteric Fever.	Tubercle.	Cerebro Spinal Fever.
Mansfield (Borough) ...	1	5	29	4
Newark (Borough)	401	—	58	—
East Retford (Borough) ...	56	1	17	—
Arnold	7	1	4	—
Beeston	9	—	10	—
Carlton	13	—	15	—
Eastwood ...	1	—	13	—
Hucknall	15	—	42	—
Huthwaite ...	—	—	3	—
Kirkby-in-Ashfield ...	—	—	7	—
Mansfield Woodhouse	—	—	11	—
Sutton-in-Ashfield ...	2	1	5	3
Warsop	3	—	16	—
West Bridgford ...	50	—	16	—
Worksop	24	—	21	—
Basford	45	—	3	—
Bingham	56	4	12	—
Blyth & Cuckney ...	3	—	—	—
East Retford ...	10	—	11	—
Leake	4	—	1	—
Misterton	—	—	3	—
Newark	33	—	6	—
Skegby	—	—	—	—
Southwell ...	59	1	18	—
Stapleford... ...	2	—	2	—
Shardlow ...	1	—	—	—
By Tuberculosis Officers ...	—	—	504	—
Total ...	795	12	827	7
Grand Total ...	1641			

It should be noted that all practitioners in the County are enabled to have specimens examined at the laboratory free of cost to themselves. The work is of the greatest value to the public health. During the year 1920, the number of samples examined increased from 526 in 1919 to more than three times the number, namely 1,641.

HOUSING.

The condition of housing at the present time is so difficult and uncertain that little that is useful can be written which would take the matter further than the statements in my Report for 1919-20, which gave information up to the end of June, 1920.

The actual progress of the different Schemes can best be obtained from the Annual Reports of the Medical Officers of the 25 Districts in the County ; but at the time of writing eight of these have not been received. Consequently no tabulation of results can be prepared. If it should be thought necessary a special report can be prepared at a later date, or a fuller account given in next year's report.

The County Medical Officer has been asked by the Housing Commissioner for his observations on the Survey of Housing Needs, Form D.89, in reference to twenty-four of the twenty-five Urban and Rural Districts. These observations have been freely given, and the Housing Commissioner has been good enough to say they have afforded him valuable assistance and information.

The relations of the County Medical Officer with the Housing Commissioner have been thoroughly friendly, and the County Medical Officers for this Housing District (Leicestershire, Rutland, Derbyshire, Lincolnshire and Nottinghamshire) have been invited to meet at monthly intervals at the office of the Housing Commissioner, where they have received most valuable aid and assistance, both from the Housing Commissioner and from the medical representative of the Ministry of Health.

These meetings were continued until nearly the end of 1920, but have been discontinued during 1921, as their utility has ceased with the completion of the earlier stages of the housing schemes.