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Northamptonshire County Council.

# Annual Report

OF THE

# Medical Officer of Health,

FOR THE YEAR 1923,

INCLUDING BRIEF

ABSTRACTS FROM THE ANNUAL REPORTS OF THE DISTRICT MEDICAL OFFICERS OF HEALTH

BY

CHARLES E. PAGET,

County Medical Officer of Health,

TOGETHER WITH

SUPPLEMENTARY REPORTS BY THE TUBERCULOSIS OFFICER,

DAVID DEMPSTER, M.C., M.B., D.P.H.,

AND THE

LADY MEDICAL OFFICER, LILA S. GREIG, M.B., D.P.H.

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## NORTHAMPTONSHIRE COUNTY COUNCIL

# ANNUAL REPORT

OF THE

## MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1923.

HAVE the honour herewith to present the Twenty-seventh Annual Report of the Medical Officer of Health to the County Council of Northamptonshire, in which are included brief abstracts from the Annual Reports of Medical Officers of Health for the several Boroughs and Districts within the Administrative County. The report has been drawn up on lines similar to those of its immediate predecessors. Supplementary reports are appended, which relate to Dispensary and other Treatment of Tuberculosis, and to the carrying out of the Council's scheme for Maternity and Child Welfare work, and these have been compiled by the Medical Officers in charge of those duties under the Public Health Department of the County Council.

During the year, there were two Local Inquiries held by Officers of the Ministry of Health in respect of loans for Public Health purposes, particulars of which are set out herewith:—

Date.	District.	Subject.	Result.
1st March	Towcester Rural	Sanction to borrow £1,200 for works of water supply in the Parish of Lichboro'	Sanctioned.
30th November	Daventry Rural	Sanction to borrow £4,000 for works of sewerage and sewage disposal for the Parish of Byfield.	Under Consideration. (Since Sanctioned)

Consideration was given by the Special Sub-Committee, appointed for the purpose, to various questions connected with the subject of Co-ordination of Health Services during the year. One of the chief of these had reference to the advisability of establishing facilities with the medical profession within the County for co-operation in matters relating to public health; to this end the Sub-Committee conferred with representatives of the local branch of the British Medical Association, and, on the report of such conference, the Public Health, &c., Committee ultimately resolved as follows:—

- (i.) That where any Doctors within the County or the local branch of the British Medical Association wish to make representations to the County Council on matters of Public Health they shall, if possible, communicate through a Special Committee who are willing to confer with the Council (through the Public Health, &c., Committee) and any such Committee shall be given audience by the Council (through the Public Health, &c., Committee).
- (ii.) That, where the Council (through the Public Health, &c., Committee) desire the official opinion of Doctors in the County on matters of Public Health, this Special Committee shall undertake, when asked, to confer with the Public Health, &c., Committee.
- (iii.) That the County Medical Officer of Health be authorised to confer with this Special Committee when he wishes.

The establishment of this channel of communication with the medical profession is likely to prove on occasion of considerable administrative value.

In connection with the question of transference of the duties of the County Council's Health Visitors to District Nurses of the Northamptonshire Nursing Association, as to which the two-year experiment in this direction in the Brackley area had been extended till the 31st March, 1923, the Sub-Committee made further recommendations, and it was reported to the Council, at their meeting on the 17th May, that the Public Health, &c., Committee had resolved—

- (i.) That the arrangement whereby the District Nurses of the Northamptonshire District Nursing Association undertake the health visiting services in the Brackley area be continued for a further period but that after the 1st June, 1923, such services be subject to the supervision of the officers of the County Council.
- (ii.) That this arrangement be extended on the same terms and conditions with regard to expenditure, supervision, etc., to not more than two further health visitor districts of a rural character as and when vacancies occur in the office of Health Visitors, working in such districts or in consequence of vacancies occurring in urban districts to which Health Visitors from rural areas may be moved.
- (iii.) That if any vacancies arise in the staff of Health Visitors in addition to the two to be dealt with as outlined above, no steps be taken with a view to filling them without their first being brought before the Public Health, &c., Committee.

Certain other questions remained for consideration at a later date, as well as others arising on the investigation being carried out in this and other counties of grant-earning health services by officers of the Ministry of Health. The intention to consider these in the latter part of the year was interfered with by events arising out of the political situation, but they are now receiving attention.

In response to the proposal made by the Northamptonshire Insurance Committee, representatives of that body met others from the County Education and Public Health Committees, to consider the advisability of joint action being taken in respect of Health Week, which was observed in the month of October.

It was decided that the attitude of the County Council Committees should be in the direction of encouraging local efforts and assisting in them, rather than in instituting the celebration of Health Week in any locality. With the funds at their disposal, the Insurance Committee decided to limit their assistance during 1923 to such of the Urban Districts of the County as were prepared to set up suitable schemes for the effective keeping of Health Week. The Joint Committee of Representatives, in due course, considered the proposals which were put forward by several of the Urban Districts in the County, and ultimately special celebration of Health Week was carried out in the selected centres of Irthlingborough, Oundle, Rothwell and Rushden.

The Assistant Medical Officers of both the Public Health and Education Committees gave help in the demonstrations and lectures which had been arranged for, and the general impression was that an improved interest in public health matters had been evolved from the propaganda work undertaken.

## REPORTS OF MEDICAL OFFICERS OF HEALTH.

The preparation of my Annual Report has been much facilitated by so many of the District Medical Officers of Health affording me advance information of the contents of their reports, and I take the opportunity now afforded to tender my very grateful acknowledgement of, and thanks for their helpful action. There was no separate report for the new Urban District of Burton Latimer, which previous to the 1st October formed part of the Kettering Rural District, as the Ministry of Health approved of this District being dealt with as forming part of the last named District for the whole of the year.

The following table shows the date on, and the ultimate form in, which the respective Annual Reports were received:—

NAME OF DISTRICT.	DATE OF RECE	EIPT.	FINAL FORM.
Crick Rural	24th March, 1	924	 M.S.
Higham Ferrers Borough	8th April		 Printed
Daventry Rural	14th ,,		 ,,
Brackley Borough	22nd ,,		 "
Wellingborough Urban	22nd ,,		 ,,
Oundle Rural	22nd ,,		 ,,
Oxendon Rural	23rd ,,		 ,,
Daventry Borough	25th ,,		 ,,
Irthlingborough Urban	29th ,,		 ,,
Finedon Urban	1st May		 ,,
Kettering Urban	2nd ,,		 ,,
Brackley Rural	2nd ,,		,,
Middleton Cheney Rural	2nd ,,		 M.S.
Hardingstone Rural	2nd ,,		 Printed.
Northampton Rural	2nd ,,		,,
Desborough Urban	3rd ,,		 ,,
Towcester Rural	3rd ,,		 ,,
Rothwell Urban	5th ,,		 ,,
Gretton Rural	5th ,,		Typed.
Kettering Rural	7th ,,		 Printed.
Brixworth Rural	9th ,,		 ,,
Raunds Urban	12th ,,		 ,,
Easton-on-the-Hill Rural	16th ,,		 Typed
Rushden Urban	20th ,,		,,
Wellingborough Rural	20th ,,		 Printed.
Oundle Urban	11th June		 ,,
Potterspury Rural	Not received		
Thrapston Rural	,,		

## AREA AND POPULATION.

Area. No change took place in respect of the total area of the Administrative County during the year. As already indicated however, an internal change occurred through the

constitution of an additional Urban District—Burton Latimer—which formed previously part of the Kettering Rural District. There are thus now thirteen Urban Districts having a total area of 42,788 acres, and sixteen Rural Districts of 538,891 acres, making a total area for the County of 581,679 acres.

Population. The estimate of the Registrar-General, for death-rate purposes for the year 1923, gave the civilian population of the Administrative County as amounting to 214,331, or an increase of 991 persons on the immediately preceding year. For the purpose of calculating the birth-rate, the Registrar-General has estimated an increase of 489 persons over the population for death-rate calculation. This increase is due, as stated in my last report, to the existence of the military station at Weedon, where the military unit is a changing one in respect of material but a specialised and practically fixed one in respect of age-group.

## BIRTHS.

There were 3,686 births registered during the year 1923, as against 3,875 in the year 1922—a decrease of 189, as compared with a decrease of 291 in the year 1922. The birth-rate was 17.15 per 1,000 of the population, as against 18.12 for the year 1922, and as against an average rate of 17.93 for the ten years 1913-22, the rates for England and Wales for the same periods being 19.7, 20.6, and 21.3 respectively. The birth-rate for the Administrative County for 1923 shows a decrease of 0.97 as compared with the year 1922, while for England and Wales the decrease was 0.9 per 1,000 of the population.

The Combined Urban Districts during the year 1923 had 1,642 births and the Combined Rural Districts had 2,044 births.

There was an excess of 132 male births over female births for the whole Administrative County as against male birth excesses of 93 and 121 for the years 1922 and 1921 respectively.

The average birth-rate of the whole Administrative County per 1,000 of population, and of the Combined Urban and Rural Districts respectively for the years 1914-23 is shown in the following table, together with, for purposes of comparison, the corresponding rates for England and Wales:—

Areas.	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Adminis- trative County	19.14	18.54	17.34	15.07	14.34	14.52	22.74	19.57	18.12	17.15
Urban Districts	18.84	18.64	17.31	14.83	13.12	14.11	21.50	19.35	18.37	16.62
Rural Districts	19.39	18.45	17.37	15.28	15.41	14.88	23.82	19.77	17.90	17.61
England & Wales	23.8	21.8	21.6	17.8	17.7	18.5	25.4	22.4	20.6	19.7

In two Districts the deaths exceeded the births, viz.:— Brackley Borough and Oundle Urban.

The birth-rates varied in the Urban Districts from 8.9 per 1,000 of the population in the Oundle District to 20.8 per 1,000 in the Finedon District, and in the Rural Districts the variation was from 15.3 per 1,000 in the Hardingstone District to 23.1 per 1,000 in the Easton-on-the-Hill District.

Arranged in the order of their birth-rates the Urban Districts stand thus:

	Per 1,000 of Population	Pe	er 1,000 of Population
Oundle	8.9		16.9
Desborough	13.6	Wellingborough .	17.2
Raunds	13.8	Brackley Borough .	17.4
Irthlingborough	13.9	Rushden	17.6
Burton Latimer	15.9	Higham Ferrers Boro	' 18.3
Rothwell	15.9	Finedon	20.8
Daventry Borough	16.2		

The position of the Rural Districts in respect of their birth-rates is as follows:—

		Per	1,000 of Copulation			Per 1,000 of Population		
Hardingston	e		15.3	Wellingboroug	h		17.2	
Potterspury			15.5	Brackley .			17.4	
Oxendon			16.2	Oundle .			17.7	
Kettering			16.4	Middleton Che	ney		18.3	
Crick			17.0	Northampton.			18.3	
Thrapston			17.1	Gretton .			19.9	
Towcester			17 1	Daventry .			20.9	
Brixworth			17.2	Easton-on-the-	Hill		23.1	

### DEATHS.

General Mortality. The total number of deaths allocated to the Administrative County for the year 1923 was 2,475—or less by 32 than the number for the year 1922—of which 1,082 belonged to the Combined Urban Districts, and 1,393 to the Combined Rural Districts.

The female deaths exceeded the male deaths by ten in the Combined Urban Districts, while in the Combined Rural Districts there was a male excess of seven deaths, or for the whole Administrative County a female excess of three deaths over male deaths.

The general mortality rate for the whole Administrative County for the year 1923 was 11.54 per 1,000 of the population, which is 0.21 below the rate for the year 1922, and 0.99 lower than the average rate for the ten years 1913-22. The rate for England and Wales for the year 1923 was 11.6, as against 12.9 for the year 1922, and as against an average rate of 13.9 for the above mentioned ten-year period. The rate for the Administrative County for the year 1923 was thus fractionally lower than that for England and Wales, and for the ten years 1913-22 the average rate was lower by 1.4 per 1,000 of the population.

A new Table (Table II.) appears at the end of this report, showing Causes of Death at Different Periods of Life in the Administrative County for the year 1923, and in connection therewith it will be noted that the deaths under the headings of "Diarrhœa, etc.," and "Other Defined Diseases" respectively do not quite agree with the totals under these headings on Table I. The following extract from the Registrar-General's Memorandum of March 1st, 1924, is given therefore, to explain this seeming discrepancy:—

In tables classifying deaths by causes but not by age the return under Diarrhœa and Enteritis is by international agreement limited to children under two years of age. Where distinction of age is made this limitation is not required, as the deaths at this age are separately stated. The heading therefore includes more deaths in the tables for counties than in the totals of the tables for the districts in those counties, which should agree with the county figures for children under two years of age. The deaths at ages over two appear in the "Other Defined Diseases" line of the district tables, so the sum of these should exceed that of the county by the same amount as the "Diarrhœa and Enteritis" aggregate falls short of the county total.

The following table shows the general mortality rates for the Administrative County, England and Wales, and for the 105 large towns during the year 1914-23:—

Areas.	1914*	1915*	1916	1917	1918	1919	1920	1921	1922	1923
Administrative County	10.82	12.88	13.33	14.01	15.25	13.84	11.09	11.84	11.75	11.54
England & Wales	13.7	14.8	14.0	14.4	17.6	13.8	12.4	12.1	12 9	11.6
Large Towns in England & Wales	15.0	15.9	14.4	14.6	18.2	13.8	12.5	12.3	13,0	11.6

<sup>\*</sup> County death-rates standardized by the factor of the Registrar-General in these years.

The general death-rate varied in the Urban Districts from 7.7 per 1,000 of the population in the Desborough District to 17.8 per 1,000 in Brackley Borough, and in the Rural Districts the variation was from 9.6 per 1,000 in the Northampton District to 15.3 per 1,000 in the Crick District.

Arranged in the order of their general death-rates, the

Urban Districts stand thus :-

	Per 1,000 of Population		Per 1,000 of Population			
Desborough	7.7	Kettering	11.6			
Rothwell	8.1	Raunds	12.0			
Rushden	9.4	Higham Ferrers Bo	ro' 12.2			
Irthlingborough	10.0	Burton Latimer	13.6			
Wellingborough	10.5	Daventry Borough	14.2			
Finedon	10.6	Brackley Borough	17.8			
Oundle	11.2					

The position of the Rural Districts in respect of their general death-rates is as follows:—

		Per F	1,000 of			Per 1, Pop	000 of ulation
Northampton			9.6	Easton-on-	the-Hill		12.6
Brixworth .			10.2	Gretton			12.8
Thrapston .			11.1	Potterspur	y		13.4
Kettering .			11.4	Brackley			13.5
Wellingboroug	h		11.4	Middleton	Cheney		13.9
Hardingstone			11.5	Oxendon			14.2
Towcester .			12.0	Oundle			15.1
Daventry .			12.6	Crick			15.3

Infantile Mortality.—Though not quite so low as for the year 1922, the infantile mortality rate for the year 1923 is nevertheless a satisfactory one, and with the exception of the years 1920 and 1922, is lower than any other year on record, being 61 per 1,000 births, as against 58 for the year 1922, and as against an average of 73 for the ten years 1913-22; the rates for England and Wales for these periods were 69, 77, and 93 respectively, the rate for 1922 being the lowest on record. Infantile diarrhea accounted for 22 deaths in the Administrative County during the year 1923, as against 3 deaths in the preceding year.

The average infantile death-rate for the whole Administrative County per 1,000 births, and of the Combined Urban and Rural Districts respectively, for the years 1914-23, is shown in the following table together with, for purposes of comparison, the corresponding rates for England and Wales, and for the large towns taken from the Registrar-General's returns.

Areas	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Adminis- trative County	73	95	66	81	67	80	59	72	58	61
Urban Districts	81	96	72	81	71	94	63	83	65	71
Rural Districts	67	94	61	81	64	69	56	62	52	52
England & Wales	105	110	91	97	97	89	80	83	77	69
Large Towns in England & Wales	114	117	99	104	106	93	85	87	82	72

Arranged in the order of their infantile mortality rates the Urban Districts stand thus:—

	Per 1,000 Births		Per 1,000 Births.
Rothwell	28.1	Kettering	85.4
Desborough	34.4	Irthlingborough	86.9
Higham Ferrers		Daventry Borough	87.7
Borough	37.0	Brackley Borough	121.9
Rushden	49.3	Finedon	127.9
Wellingborough	50.4	Raunds	132.0
Burton Latimer	71.4		
Oundle	83.3		

The position of the Rural Districts in respect of their infantile mortality rates is as follows:—

		1	Per 1,000 Births		Per	1,000 Births
Gretton			0.0	Brackley		52.1
Crick			24.3	Towcester		52.6
Easton-on-t	he-Hill		30.3	Hardingstone		59.8
Brixworth			34.4	Kettering		60.9
Daventry			40.0	Northampton		63.8
Thrapston			44.6	Wellingborough		77.9
Oxendon			46.1	Potterspury		81.0
Oundle			51.7	Middleton Cheney		86.9

It will be noted that Gretton Rural District, as for the year 1922, was entirely free of infantile mortality.

Tuberculosis Mortality.—The total number of new cases of Tuberculosis notified during the year 1923 shews an appreciable decrease as compared with former years, there being 281 cases as against 305 in the year 1922, 312 in 1921, 345 in 1920, and 409 in the year 1919. Of the cases during 1923, 163 were in the Combined Urban Districts, and 118 in the Combined Rural Districts.

The deaths from all tuberculous diseases amounted to 197, of which 111 were in the Combined Urban Districts and 86 in the Combined Rural Districts. The mortality rate for the whole Administrative County was 0.91 per 1,000 of the population, which is the lowest rate—with the exception of the year 1922 when the rate was 0.88—for the last thirteen years. The average mortality rates for the five-year periods 1913-17 and 1918-22 were 1.28 and 1.09 respectively.

The following table shows the number of deaths from Tuberculosis, and the rates per 1,000 of the population for the whole Administrative County in the ten years 1914-1923:

Area.	Tubercu- losis.	1914	1915	1916	1917	1918	1919	1920	1921	1922	1
Adminis- trative	No. of Deaths.	228	261	302	284	289	235	204	218	189	
	Rate per 1,000	1.05	1.23	1.49	1.49	1.50	1.13	0.94	1.02	0.88	

#### PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications during the period from the 31st December, 1922, to the 29th December, 1923, in the County of Northampton.

							Not	IFICATI	ONS ON	FORM	Α.				Non	TIFICAT	IONS ON FORM	В.	Notifica	SER OF ATIONS ON EM C.
AGE PERIODS.					Numi	ER OF	PRIMAI	RY No	TIFICAT	TIONS.				Number of	PRIMA	RY No	TIFICATIONS.			
	0 to	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 Notifica- tions.	Total Notifications on Form A.	Under 5	5 to 10	10 to 15	TOTAL Primary Notifica- tions.	Total Notifications on Form B.	Poor Law Institutions.	Sanatoria.
Pulmonary Males		1	4	8	15	18	35	19	10	5	6	121	122		2		2	3		27
Pulmonary Females			6	9	33	26	22	6	9	2		113	114		1	2	3	3		24
Non-pulmonary Males			7	1		1	1	1	2			13	13							1
Non-pulmonary Females		4	4	7	5	3	3	1			1	28	28	1			1	1		1
TOTALS		5	21	25	53	48	61	27	21	7	7	275	277	1	3	2	. 6	7		53
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

The Primary Notifications on Form A. refer to Notifications by Medical Practitioners (other than School Medical Inspectors) of cases not previously notified. (Column 14 includes Primary and Duplicate Notifications.)

The Primary Notifications on Form B. refer to Notifications by School Medical Inspectors of cases not previously notified. (Column 19 includes Primary and Duplicate Notifications.)

The Notifications on Form C. refer to Notifications by Medical Officers of Poor Law Institutions and Sanatoria of patients who were notified before admission.

Particulars with regard to such of the insured, non-insured, and ex-service new cases as came under the notice of the County Tuberculosis Officer are given by him in his report, which is included as Appendix I. of this report.

I have furnished the Ministry of Health with a Summary of the notifications under the Public Health (Tuberculosis) Regulations, 1912, for the period 31st December, 1922, to 29th December, 1923, similar to summaries sent in previous years. This summary is included, therefore, in this report.

Arranged in the order of their Tuberculosis death-rates the Urban Districts stand thus :—

	Per	r 1,000 of Population			Per 1,	,000 of ulation
Daventry Borough		0.28	Finedon			1.21
Rothwell		0.67	Rushden			1.23
Wellingborough		0.91	Kettering			1.25
Desborough		0.93	Brackley !	Borough		1.27
Higham Ferrers Boro	,	1.01	Irthlingbo	rough		1.41
Oundle		1.12	Raunds			1.83
Burton Latimer		1.14				

The position of the Rural Districts in respect of their Tuberculosis death-rates is as follows:—

	Per 1,000 of Population		Per 1,000 of Population
Crick	0.00	Kettering	0.83
Middleton Cheney	0.39	Thrapston	0.86
Northampton	0.39	Towcester	0.90
Hardingstone	0.52	Oundle	0.91
Brackley	0.60	Brixworth	0.93
Wellingborough	0.63	Oxendon	0.99
Daventry	0.65	Potterspury	1.05
Gretton	0.71	Easton-on-the-Hil	1.40

The only District escaping mortality from Tuberculosis during the year 1923 was Crick Rural, Respiratory Diseases Mortality.—(Bronchitis and Pneumonia).—During the year 1923, 281 deaths occurred from these diseases, as against 278 in the year 1922, and as against an average of 321 for the ten years 1913-22. The average mortality for the first five of these years amounted to 352, and for the last five years 290. The mortality rate for 1923 was 1·31 per 1,000 of the population as against 1·30 in the year 1922, and as against an average of 1·54 for the ten years 1913-22. Of the deaths during the year 1923, 120 were in the Combined Urban Districts and 161 in the Combined Rural Districts. Three Districts escaped mortality from these diseases, viz.:—Burton Latimer Urban, Oundle Urban and Easton-on-the-Hill Rural.

The following table shows the number of deaths from the respiratory diseases, and the rate per 1,000 of the population for the whole Administrative County for the ten years 1914-23:—

Area.	Respira- tory Diseases	1914	1915	1916	1917	1918	1919	1920	1921	1922	
Adminis- trative	No. of Deaths	319	464	341	332	315	356	243	260	278	
County	Rate per 1,000	1.47	2.20	1.68	1.74	1.63	1.71	1.12	1.22	1.30	

Arranged in the order of their Respiratory death-rates the Urban Districts stand thus:—

	Per 1, Popt	,000 of ulation		Per 1	,000 of
Burton Latimer	0.	00	Rushden		1.01
Oundle	0.	00	Raunds		1.04
Higham Ferrers Box	ro' 0.	67	Wellingborough		1.11
Desborough	0.	70	Kettering		1.48
Daventry Borough	0.	85	Irthlingborough		2.42
Rothwell	0.	90	Brackley Borough		2.54
Finedon	0.	97			

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# CAUSES OF DEATH FROM CANCER AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON. 1914—1923

													_						
		-	1	AGGREG	ATE OF	URBAN	N DIST	RICTS.					AGGRE	GATE OF	RURA	L DIST	RICTS.		
Year.	Sex.	All Ages.	0-	1-	2-	5-	15-	25-	45-	65-	All Ages.	0-	1-	2-	5-	15-	25-	45-	65-
1914	M.	36						5	14	17	70						4	29	37
1914	F.	58					1	5	32	20	73						4	37	32
1915	M.	43						2	19	22	65						2	28	35
	F.	57			1			8	25	23	71				1		3	29	38
1916	M.	53				1		2	27	23	66						2	30	34
	F.	58						6	20	32	81						7	32	42
1917	M.	37	1			1			15	20	65				1	1	2	24	37
1011	F.	63				1		7	34	21	80					1	7	26	46
1918	M.	56					2	4	25	25	60						4	17	39
1010	F.	53						7	21	25	86						4	44	38
1919	M.	72						2	35	35	54						2	23	29
1010	F.	56						3	25	28	104					1	6	39	58
1920	M.	57						3	28	26	52					1	1	26	24
1020	F.	64						3	33	28	96						5	36	55
1921	М.	62						3	27	32	91				1		3	39	48
1021	F.	55				,	1	2	19	33	100				1	2	7	37	53
1922	М.	57						6	21	30	75						4	33	38
1022	F.	64						7	29	28	99			- 1	1		5	42	50
1923	M.	60					2	1	31	26	81					1	6	30	44
1828	F.	64					1	5	28	30	89						6	37	46
													,			1		1	

TOTAL ANNUAL MORTALITIES are shewn as follows in respect of each sex.

Sex.	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
M.	. 106	108	119	102	116	126	109	153	132	141
F.	131	128	139	143	139	160	160	155	163	153

The position of the Rural Districts in respect of their Respiratory death-rates is as follows:—

		Pe	r 1,000 of Population			Per 1 Pop	,000 of ulation
Easton-on-th	e-Hill		0.00	Oxendon			1.49
Hardingston	e		0.65	Wellingborou	gh		1.50
Gretton			0.71	Towcester			1.60
Kettering			0.83	Brackley			1.97
Thrapston			1.05	Northampton			$2 \cdot 21$
Brixworth			1.10	Middleton Ch	eney		2.38
Oundle			1.22	Crick			2.49
Daventry			1.30	Potterspury			2.52

Cancer Mortality.—In view of the greatly increased interest which is being expressed publicly at the present time relative to the extent to which Cancer prevails in the country, and as to the experimental research work which has been in progress now for some years past, it appears to be desirable to set out in tabular form the deaths, in age groups, that have occurred in this County during the period of ten years 1914-1923.

These County figures are not sufficient for the purpose of special deductions therefrom, but it may be noted that there was no marked general increase in the mortality among males till after the conclusion of the Great War. On the other hand, in regard to females, who were much more largely condemned to remain at home, it appears that the increase in number of deaths was gradual and progressive during the period of the War, and even more marked after the War than in the case These facts synchronise remarkably with the of the males. grave anxieties experienced under home conditions during the War and in the years following. This may be a mere coincidence or be no more than an expression of a physiological liability to impaired resistance against the insidious development of a tissue destroying disease, the origin of which has yet to be discovered; but this reflection may not be without value. It will be at least interesting to observe

if, with improving conditions of life generally, these synchronise with a decrease in the mortality from this disease. On the average in the County for the ten years 1913-22, the annual male mortality amounted to 117 as against 143 for females, and for the year 1923 the respective mortalities were 141 and 153. The aggregate rates of mortality during the same decennium were approximately 12·2 and 12·7 per 1,000 of the combined urban and rural populations respectively.

The age at which this disease shows its greatest fatality is from 45 years and upwards, and the rate of mortality for this age period in the County during the ten years 1914-1923 amounted to 92.9 per cent. of the whole recorded cancer mortality.

Although research work as to the causation of cancer is as yet, it is to be feared, far from completion, there are certain indications as to conditions which should not be overlooked or neglected in relation to cancer of the human body. In its early and curable stage, it may not give rise to pain or any marked symptom of ill-health; but, as liability to its development from apparently innocent conditions is usually recognisable by medical men, it is obvious that early treatment should be sought on the appearance of an abnormal state. Such things as a wart or sore occurring on the lower lip, a sore or swelling occurring on the tongue or inside of the mouth, bleeding from the bowels, warts or moles or other growths on the skin if exposed to constant irritation—particularly in those of 45 years or over—and abnormalities occurring at the climacteric period in women, should always be submitted for medical advice and treatment. To encourage attention being given to such matters, I have kept Midwives, Health Visitors. District Nurses and others informed with printed instructions as to their duties on these lines, and I am glad to know that Women's Institutes in the County have also given their attention to this important propaganda work.

General Zymotic Mortality.—The total number of deaths during the year 1923 from these diseases, viz.:—Small Pox, Scarlet Fever, Diphtheria, Enteric Fever, Puerperal Sepsis, Measles, Whooping Cough, and Diarrhœa and Enteritis (under two years of age) amounted to 68, as against 57, 87 and 88 in the years 1922, 1921 and 1920 respectively. Of the deaths during 1923, 33 were in the Combined Urban Districts and 35 in the Combined Rural Districts.

The mortality rate for the Administrative County was 0·31 per 1,000 of the population as against 0·26 for the year 1922, and as against an average rate of 0·55 for the ten years 1913-22. The rate for the year 1923 is, with the exception of that for 1922, the lowest of any year on record. Of the 68 deaths which occurred, Diarrhœa, &c. (under two years of age) was responsible for 22, and Measles 14. The Districts without mortalities during the year were Higham Ferrers Borough, Burton Latimer and Desborough Urban, Crick, Easton-on-the-Hill, Gretton, Middleton Cheney, Oundle, Oxendon, Potterspury and Towcester Rural.

The mortality rate for the chief **notifiable** zymotic diseases viz.:—Small Pox, Scarlet Fever, Diphtheria, Enteric Fever, and Puerperal Sepsis, was 0·11 per 1,000 of the population, which is higher only by 0·04 than the rate for the year 1922, but is much lower than any other year on record with the exception of the year 1910 when the rate was 0·10. The total number of cases of above-mentioned diseases, and inclusive of 66 cases of Erysipelas, was 1,170, giving a rate per 1,000 of the population of 5·45, as against 2·50 for the year 1922, the large increase being almost entirely due to Scarlet Fever, there being 966 cases notified as against 370, Kettering, Rothwell, and Wellingborough Urban Districts contributing 527 of this number. (See Table III. at end of Report). Of these notified cases, however, only 24 were fatal, as against 15 and 41 respectively in the years 1922 and 1921.

The following table shows the number of deaths from the general zymotic diseases, and the rate per 1,000 of the population for the whole Administrative County, for the ten years 1914-1923:—

Area.	General Zymotic Diseases	1914	1915	1916	1917	1918	1919	1920	1921	1922	11
Adminis- trative	No. of Deaths.	127	234	123	97	139	97	88	87	57	
County	Rate per 1,000	0.58	1.10	0.60	0.50	0.72	0.46	0.40	0.40	0.26	11

Arranged in the order of their death-rates for zymotic diseases the Urban Districts stand thus :—

	Pe	er 1,000 of Population		Per 1, Pop	000 of ulation
Burton Latimer		0.00	Wellingborough		0.24
Higham Ferrers	Boro'	0.00	Raunds		0.26
Desborough		0.00	Oundle		0.37
Irthlingborough		0.20	Kettering		0.39
Rushden		0.21	Brackley Borough		0.84
Rothwell		0.22	Daventry Borough	·	0.85
			Finedon		0.97

The position of the Rural Districts in respect of their deathrates for zymotic diseases is as follows:—

	Per 1,000 of Population				Per 1,000 of Population		
Crick			0.00	Brixworth			0.08
Easton-on-th	e-Hill		0.00	Kettering			0.25
Gretton			0.00	Northampton	n		0.26
Middleton Ch	neney		0.00	Brackley			0.30
0 11			0.00	Wellingboro	ugh		0.39
Oxendon			0.00	Thrapston			0.47
Potterspury			0.00	Hardingston			0.65
Towcester			0.00	Daventry			0.86

## SPECIAL ZYMOTIC DISEASES AND MORTALITY.

Small Pox. Inasmuch as there were notified in England and Wales 2,483 cases of small-pox during the year 1923, the inhabitants of the Administrative County were extremely fortunate to escape importation of the disease among them. Their gravely inadequate protection by vaccination prevents one regarding with unconcern the introduction of a case in their midst.

Notifications were received from Port Sanitary Authorities as to three persons who had been travelling on small-pox infected ships proceeding to places of destination in this County, and the information was promptly forwarded to the District Medical Officers of Health concerned.

Chicken Pox is included permanently as a notifiable disease in the Hardingstone Rural District, and was also made notifiable for varying periods in Daventry Borough, Finedon, Kettering and Oundle Urban Districts, and Daventry, Kettering, Northampton, Oundle and Potterspury Rural Districts, owing to risk that a mild case of small-pox should be mistaken for chicken-pox. In several instances, I was called in during the year for the purpose of assisting in determining the nature of the disease where the possibility of small-pox could not be readily set aside.

Scarlet Fever. There was a considerable increase in the number of cases of this disease in the year 1923 as compared with the year 1922, there being 966 cases against 370; this is the largest number of notifications since 1905, and is much in excess of the average number for the ten years 1913-22 which was 355. The total scarlet fever prevalence was equal to a sickness rate of 0.45 per cent. of the population as against 0.17 per cent. in 1922; in the Combined Urban Districts the rate was 0.67 per cent. and in the Combined Rural Districts 0.26 per cent. of their respective populations.

There were six deaths, giving a mortality rate of 0.62 per cent. of the notified cases, as against one death and a mortality rate of 0.27 for the year 1922. The Districts with the largest numbers of cases were Kettering Urban (270), Wellingborough Urban (155), Rothwell Urban (102), Desborough Urban (88), Kettering Rural (68), Potterspury Rural (56) Hardingstone Rural (48), Wellingborough Rural (40) and Daventry Rural (39). The Districts entirely free from this disease were Brackley Borough, Burton Latimer and Oundle Urban, Brackley, Easton-on-the-Hill, Gretton and Middleton Cheney Rural.

The most evident features in respect of the manifestation of this disease in the County during the year were that, in its general prevalence, it was of a mild type—not readily detected in the earlier stages—and that a larger number of adults than is usually the case were affected.

Diphtheria and Membranous Croup. I am glad to report that there was only a very slight increase in the number of cases of these diseases during the year, there being 105 cases as against 98 cases in the year 1922. The number of cases during the year 1923 was, however, very considerably below the average for the ten years 1913-22, which was 350, and was lower than any one of the 15 years 1908-22, with the exception of the year 1922. The Combined Urban Districts had 23 cases and a sickness rate of 0.23 per 1,000 of the population, and the Combined Rural Districts with 82 cases had a sickness rate of 0.70, while the rate for the whole Administrative County was 0.48 per 1,000 of the population. Nine deaths occurred, two in the Combined Urban Districts and seven in the Combined Rural Districts. The comparative severity of the cases, as indicated by the mortalities, is shewn by the death-rates of 8.57 per cent. of the cases for the whole Administrative County as against 8.16 per cent. in the year 1922; in the Combined Urban Districts of 8.69 per cent. against 16.66 per cent. and in the Combined Rural Districts of 8.53 per cent. as against 5.40 per cent.

The Districts with the largest number of cases were Thrapston Rural (34) and Daventry Rural (17). The Boroughs of Brackley and Higham Ferrers, Burton Latimer, Raunds and Rothwell Urban Districts, Brackley, Crick, Gretton, Middleton Cheney, Oundle, Oxendon and Potterspury Rural Districts escaped visitation by these diseases.

Enteric Fever. Twenty-eight cases were notified during the year 1923. This is an increase of 24 on the year 1922, and of 17 on the average of the five years 1918-22, but is lower by four than the average for the five years 1913-17. Northampton Rural District had eight cases, Brackley Rural District five cases, Brixworth and Thrapston Rural Districts three cases each, Towcester Rural District two cases, and there were single cases in seven other Districts.

There were three deaths, one each for Kettering Urban District and Brixworth and Thrapston Rural Districts.

Of the total number of cases recorded for the County, two were directly imported ones (the single cases in the Wellingborough Urban and Daventry Rural Districts).

The five in the Brackley Rural District occurred in one house and were traceable to a well on the premises which was polluted through soakage from a defective house drain. The infection was believed to be due to an unsuspected "carrier" who came to stay in the house. There was no need for anyone to use the well for drinking purposes, as there was a public supply of wholesome water. In the small outbreak which occurred at the Berrywood Asylum in the Northampton Rural District, at least one "carrier" also was discovered. This outbreak was brought quickly well under control, as a system of routine examinations and inoculations was at once established in particular wards.

The death credited to Kettering Urban District occurred at a Mental Hospital outside the area.

Puerperal Fever. Five cases were notified—the same number as in each of the years 1922, 1921 and 1920. Three were in the practice of midwives, of which one was fatal.

There were six deaths from Puerperal Sepsis, as against five deaths in the year 1922.

A detailed report on the midwives' cases appears in the Lady Medical Officer's Report on the Inspection of Midwives (Appendix II).

Erysipelas. Sixty-six cases were notified as against fifty-seven in the year 1922, and as against an average of 98 for the ten years 1913-22. As stated in my last Annual Report, Erysipelas does not now appear under the heading of "Causes of Death" on the list furnished by the Registrar-General, consequently, I have no information as to mortality from this cause.

Measles. There was an increase in the number of outbreaks of this disease as compared with the year 1922, prevalences being reported from the Boroughs of Brackley and Higham Ferrers, Desborough, Finedon, Oundle and Wellingborough Urban Districts, and from certain parishes in Brackley, Brixworth, Crick, Daventry, Hardingstone, Kettering, Northampton, Oxendon, Potterspury, Thrapston, Towcester and Wellingborough Rural Districts; one case was also reported from a parish in Oundle Rural District.

There were fourteen deaths, as against six deaths in the year 1922, and as against an average of eighteen deaths for the five years 1918-22.

It is to be regretted, in view of the increased prevalence of Measles, as mentioned above, that no application was received during the year for the services of a nurse to be supplied under the arrangements which exist between the County Council and the Northamptonshire Nursing Association.

It may be well to set out again in detail the particulars as to these arrangements, which have been previously notified by me as follows:—

The notification by letter, telephone, or telegram of Measles cases to be nursed must be made to me by the Medical Officer of Health for the District in which the outbreak occurs, and I will then at once notify the Superintendent of the Association to make arrangements for the cases to be attended.

Accommodation for the emergency nurse in the place where the outbreak of Measles has occurred is to be found by the Medical Officer of Health of the District in conjunction with the Superintendent.

All cases of Measles are eligible for special nursing whether the patients are members of a local Nursing Association or not, but where possible in the case of non-members, payment for treatment may be collected by the County or Local Association.

Whooping Cough. There was a considerable diminution in the number of cases of this disease as compared with the year 1922. The prevalences were in the Wellingborough Urban District and in certain parishes in Brackley, Daventry, Kettering, Potterspury and Thrapston Rural Districts, and one case was reported from Oundle Urban District. The number of deaths also shewed an appreciable decrease, there being eight as against 23 in the year 1922, and as against an average of 25 for the five years 1918-22.

Chicken Pox. As stated in my remarks on Small Pox earlier in this Report, this disease was notifiable in certain Districts during the year, and consequently more information is to hand than would otherwise be forthcoming. The notifications were Kettering Urban 89, Daventry Rural 38, Finedon Urban 25, Kettering Rural 24, Oundle Rural 17, Daventry Borough 14, Hardingstone Rural 11, Northampton

Rural 6, Oundle Urban 2. Prevalences were also reported from Wellingborough Urban District, and from certain parishes in Brixworth Rural District; there were a few cases in Thrapston Rural District.

Diarrhœa and Enteritis. (Under two years of age). Twenty-two deaths occurred during the year 1923—twelve in the Combined Urban Districts and ten in the Combined Rural Districts—as against thirteen deaths in the year 1922, and as against an average of fourteen deaths for the five years 1918-22.

Influenza. The prevalences of Influenza during the year 1923 were about equal to those for the year 1922, the Districts affected being Desborough, Oundle and Rothwell Urban, and certain parishes in Brixworth, Daventry, Gretton, Hardingstone, Kettering, Northampton, Potterspury, Thrapston and Towcester Rural, with a few cases also reported from Finedon Urban District.

The mortality showed a very considerable reduction, there being only 37 deaths as against 77 in the year 1922, and as against an average of 185 for the five years 1918-22. Of the deaths during 1923, 16 were in the Combined Urban Districts, and 21 in the Combined Rural Districts.

Pneumonia. (Acute Primary and Acute Influenzal). There was a decrease in the number of notifications, 159 cases being notified in the year 1923, as against 200 cases in 1922; of the cases in the year 1923, 67 were in the Combined Urban Districts, and 92 cases in the Combined Rural Districts. The only Districts without any notified cases were Oundle Urban and Brackley, Gretton and Middleton Cheney Rural.

The deaths from all forms of Pneumonia amounted to 115,—59 in the Combined Urban Districts and 56 in the Combined Rural Districts—as against 114 in the year 1922, and as against an average of 131 for the five years 1918-22.

Burton Latimer and Oundle Urban Districts and Easton-onthe-Hill and Gretton Rural Districts had no mortality from Pneumonia.

Acute Poliomyelitis. Only one case was notified, which recovered, in the Oxendon Rural District—as against four cases in the year 1922, and as against an average of two cases for the five years 1918-22.

Encephalitis Lethargica. Six cases were notified—(Kettering Urban 3, Desborough Urban 2, and Wellingborough Rural 1)—as against five cases in 1922, nine cases in 1921 and as against two cases in each of the years 1920 and 1919. One of the Kettering cases and both of the Desborough cases proved fatal.

Cerebro Spinal Fever. Two cases were notified and both proved fatal—one each in Wellingborough Urban and Middleton Cheney Rural Districts—as against two cases in the year 1922, and as against an average of three cases for the years 1918-22.

Ophthalmia Neonatorum. Fourteen cases were notified, as against twenty cases in the year 1922, and as against an average of eighteen cases for the five years 1918-22. Eleven cases were in the practice of midwives, of which ten made a good and rapid recovery, and one was under treatment for three months, nystagmus without opacity resulting. Further reference to the whole of the cases is made by the Lady Medical Officer in her report on the Inspection of Midwives (Appendix II).

Mumps. There is nothing to report under this heading except that there was some prevalence throughout the Towcester Rural District, and in certain parishes in Crick Rural District.

#### VACCINATION.

I can only repeat my annual regret at the continued disregard in the County of the means which are afforded through vaccination against an attack of small-pox. The indifference which prevails is remarkable in the present condition of prevalence of the disease in so many counties with which this is in daily intercourse, and adjacent to some. In the accompanying table, the latest available figures are for the year 1922, and these show only a slight increase of 1.7 per cent. of the births for certificates of successful vaccination as compared with the year 1921, an achievement which is exactly 2.0 per cent. below that recorded for the year 1919. This is disappointing when it is remembered that special efforts were made in 1922 to bring about a better state of affairs in this respect. I regret to find no encouraging records in the reports of the District Medical Officers of Health in respect of the year 1923, and must again voice my warning that the county is very ill-prepared to face the importation of small-pox infection.

# VENEREAL DISEASES.

The treatment of Venereal Diseases in the County has been continued during the year at the Treatment Centre of the Northampton General Hospital, and has proved to be of great service. It was found necessary, after strict investigation, to grant assistance with regard to travelling expenses to fifteen persons, in order that their full courses of treatment at the Centre might be carried out and completed. It will be seen from the annexed table that there has been a slight increase in the number of new County cases dealt with during 1923, as compared with the year 1922, the total figures being 111, as against 101. Of the 111 who attended the Centre for the first time, only one was found to be suffering from conditions other than Venereal. The increase over the year 1922 is not large, but bears out the anticipation expressed in that respect in my last annual report.

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Unners in the Course of Northerston.				" Success	ertificates of ended Vaccio	soution."									"Conscient	ertificates of entires Obj (Col. 1)	pection."									By assessed (Col. 10	and for,										iving Unv	engineed of E.						CHENTY OF NORTHANDERS
	1899-91	2000	1900- 1 1907 1	1966. 1962	1913-	inte	1999	1121	1921	1922	1918-	1809-	1965- 1967	1912	1913	1918	1919	1924	1921	1100	1905	1800-07	2 1806- 1903	1905-	1912	2003- 2007	3939	1919	1424	1021	1103	1919-	1103-07	0 1808- 1902	1905-	1908- 1912	1963- 1967	1010	1959	1100	3103	1921	2918- 2012	
BLACKLEY	29.1	31.3	68.9	30,0	23.7	11.8	31.1	10.1	9.3	9.0	12.4	10.7	13.6	42.4	60.6	87.0	69.7	63.3	95.3	66.1	68.1	41.2	30.6	8.2	16.7	11.1	12.0	15.1	20.0	- 88	16.6	13.2	49.3	41.6	22.8	64.1	71.5	75.4	84.8	25.8	88.7			BRACKLEY
BRIXWORTH	42.0		58.6	29.3	26.2	22.2	10.2	11.0		11.1	15.4	14.4	29.3	55.6	62.5	44.3	58.1	10.3	79.0	72.8		00000		12.0	5.3	3.7	4.7	20.0	14.8			10000	10000	1000	33.9	56.7 58.4	86.2	72.8	18,7	85.0				DAYENTRY
DAVENTRY	31.1		64.3	25.6	15.0	18.5	1000	10.0				8 80000	41.0	65.7	26.0	22.5	13.0	15.0				10000		4.3	2.4	2.3	0.3	1.0				3 70	1000000		45.3	71.0	79.2	77.0	84.0					HARDINGSTNE
RETTERING	10000		28.5	13.2	4.8		2,7					0.00000	51.0	76.9	83.8	81.0	92.5		-	10000		0 1000		10.2	2.6	1.7	13	2.1	1.0			000	10000		62.1	79.4	88.5	88.0	62.8	81.2	81.3		40.0	KETTERING
SCOTHAMPTON	3.7		28.8	17.2	11.1	11.3	22.5					0.000000	56.4 3.2	25.0	54.9	99.9	20.0	65.0		53.2 53.5		0000		6.5	5.0	8.2	16.6	8.7		7.5		400	10000		11.7	40.0	63.2	99.5	79.5	60,7	99.3			OUNDAR
OUNDLE	84.0		77.4	32.4	STA					10.2	30.3	8.1	4.4	25.5	12.2	53.7	81.8	45.4				1000		10.2	6.3	4.7	1.0	4.0			2.3	-	100000	1000	14.8	61.4	51.0	92.6	92.2	64.7	68.9	86.1	30000	SPECIERORO!
POTTERSPURY		67.5	60.4	28.8			11.0					27.A 43.8	29.7	70.5	76.0	16.8	19.7	19.5		18.3		-		4.3	7.1	1.0	3.4	1.5				777	78.7		41.8	77.8	75.9	79.3	85.0	94.2	80.8	19,8	0220	THEAPSTON
THURAPSTON	10.5		45.5	35.0	20.1					1 10.3			25.0	65.8	70.5	13.0	42.0	85.5	76.9	79.6		1	16.2	12.5	2.6	2.8	2.1	12.4	2.3				1000000	43.6	42.1	69.5	75.4	75.4	76.6	81.0	90.0	85.3	79.8	TOWCESTER
WELLINGBOROUGH -	A.I		40.5	19.5	8.8	13	1.3	8.6	6.4	4 13	1.5	22.4	45.5	71.0	82.8	92.6	94.3	83.3	95.3	64.2	81.9	82.5	58.8	5.0	2.5	3.8	6.5	2.6	2,4	2.1	2.1	2.0	86.4	79.2	51.2	72.5	85.0	97.0	96.5	85.7	85.8	86,9	20.2	WELLINGBORD
Means	25.7	35.4	46.1	26.3	17.7	10.0	15.0	33.3	12.3	11.9	14.3	21.5	27.0	62.8	78.0	16.0	28.8	79.6	79.5	18.6	25.9	58.4	33.2	8.7	4.9	4.4	7.0	0.0	2.5	4.2	3.3	4.7	62.8	12.0	45,7	67.5	76.5	18.2	78.8	82.1	82.7	81.7	80-6	Means.

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In connection with the Council's propaganda scheme, two addresses were given during Health Week at Kettering in February, one to Infant Welfare Centre mothers of whom there were 100 in attendance, and the other, illustrated by films, to a mixed audience of about 600 persons.

At the end of the year 1923 there were eleven medical practitioners in the County, inclusive of the two Medical Officers of the Treatment Centre, who were qualified to receive free supplies of salvarsan substitutes, and supplies were sent to them in respect of five cases. The number of medical practitioners so qualified in the year 1922 was nine.

The following table supplies information as to new cases and attendances, &c., during the three years 1921-1923:—

		19	21	19	22	19	23
		Males	Females	Males	Females	Males	Females
1.	No. dealt with at or in con- nection with the Out- patient Clinic for the first						
2.	Total attendances of all persons at the Out-patient	82	36	61	40	72	39
3.	Clinic No. discharged after com-	1,271	755	1,227	806	1,668	746
	pletion of treatment	4	3 (1 died)	_	4	3	6
4.	No. who ceased to attend without completing treat-						
	ment	71	35	44	14	13	2
	No. of In-Patients No. of persons treated with	6	12	5	11	9	7
	Salvarsan substitutes	151	93	155	85	145	86

I am glad to be able to make note that the rate of self discharges after treatment at the Centre for the year 1923 was a great improvement on those for the years 1922 and 1921, the rates respectively being 2.2 per cent. as against 11.5 per cent. and 23.6 per cent.

By the end of the year the following pathological examinations had been made at the Pathological Laboratory of the Hospital, and numbered 414, as against 431 in the year 1922:

Nature of Tests.	No. of Tests.		
For Detection of Spirochetes	For Treatment Centre		8
	For Practitioners		1
For Detection of Gonococci	For Treatment Centre		106
	For Practitioners		29
For Wassermann reaction	For Treatment Centre		183
	For Practitioners		86
Other Examinations	For Treatment Centre		1
	For Practitioners	• • •	0
	Total		414

### ISOLATION HOSPITALS AND DISINFECTION.

There has been no advance during the year in regard to the provision made for the isolation of cases of the more ordinary infectious diseases. There has been progress, however, in respect of provision for cases of small-pox in several of the Districts of the Administrative County. The Rural District of Towcester has been definitely provided with accommodation for eight patients, two Army Huts having being acquired one set apart for patients and having two wards for four beds each, and the other converted for administrative purposes only. Arrangements were also made provisionally between the Brixworth, Daventry and Northampton Rural Districts, whereby the isolation hospital of the first-named area should be reserved for small-pox cases occurring in the three Districts and accommodation for other infectious diseases from the Brixworth District should be given in the isolation hospital of the Daventry District. The effect of these proceedings was to secure reasonable provision for small-pox cases for the western half of the county, with the exception of the three areas on the extreme south-west boundary-Brackley

Borough, and Brackley and Middleton Cheney Rural Districts. These areas have decided, however, to deal locally with cases of small-pox should they arise. This decision was arrived at subsequent to a Conference, with reference to the hospital accommodation available throughout the County for the treatment of small-pox, convened by the Public Health, &c. Committee of the County Council to which delegates from all the Local Sanitary Authorities were invited. The Conference was held at the County Hall on the 10th November, 1923, and was numerously attended, and the question of whether adequate provision, where needed, should be made by such local authorities by agreement among themselves, or, alternatively, through the provision by those authorities jointly of one or more central small-pox hospitals to serve their possible requirements was freely discussed.

Information was laid before the Conference showing that nine of the twenty-nine areas in the County were without any such provision, and that in six others such partial or emergency provision as had been made was inadequate. At the Conference it was announced that provision had been made for one of these areas and that negotiations for such provision for another area was being made with conveniently placed authorities in a neighbouring county. In respect of the remaining thirteen areas, as has been already noted, three on the south-west boundary of the county have made their decision subsequent to the Conference, and negotiations were also initiated among some of the remaining ten areas in the central and northerly portion of the County without conclusions having been arrived at by the end of the year. The Conference achieved its first purpose in bringing representatives of the various local sanitary authorities together for open expression of their views, as well as to ensure discussion of the question subsequently by their respective Councils. and the eventual attitude of the Public Health, &c. Committee will necessarily depend on the outcome of such discussions

With regard to the existing isolation hospitals, which have been kept in good repair and readiness for the reception of patients, their utility has been shown in practical fashion during the year.

The Daventry Rural Isolation Hospital was more or less in use during the whole of the year, and dealt with 68 cases, of which 55 belonged to the Rural District, 3 came from Daventry Borough, 2 from Weedon Barracks, and 8 from the Southam Rural District in Warwickshire: 18 of the cases were diphtheria, 3 from the Southam area were enteric-fever and the remainder were scarlet-fever.

In the Kettering Joint Isolation Hospital there were 216 cases treated, of which 204 were scarlet-fever, 11 diphtheria and 1 enteric-fever, as against a total of 46 cases in the year 1922. The Medical Officer of the Hospital Board discusses the question of the possibility of slightly increasing the accommodation available for patients. In this connection, it is to be noted that negotiations are proceeding in respect of the future isolation in this Hospital of infectious disease cases from the Urban Districts of Desborough and Rothwell.

At the Hardingstone Rural District Hospital there were 27 cases of scarlet fever treated, of which two belonged to the Northampton Rural District; 6 cases were isolated in the small hospital of the Brixworth Rural District—5 scarlet fever, 1 enteric fever; and 3 cases of scarlet fever were treated at the Oundle Joint Hospital, of which one was admitted from the Thrapston Rural District.

There were as many as 165 cases admitted during the year to the Wellingborough Urban Isolation Hospital, of which all but one—diphtheria—were cases of scarlet-fever. Of these cases, 153 came from the Urban District, 10 from the Rural, and one each from the Finedon and Irthlingborough Urban Districts.

### Tuberculosis Institutional Provision.

By resolution of the Council, at their meeting held the 17th May, 1923, the accommodation provided for the treatment of cases of non-pulmonary tuberculosis in special institutions from the area of the County was increased from two beds to three, and patients are now being sent for treatment to the Wingfield Orthopædic Hospital, Oxford.

In respect of the general working of the Rushden House Sanatorium during the year, the following particulars have been supplied by Dr. Crane, M.B.E., the Medical Superintendent:—

The general plan of the Sanatorium, with the accommodation for different sexes and classes of cases, is as stated in the annual report for last year. Heretofore, provision was made for the treatment of 50 patients from the area of the County, including ex-service men whose disease was admitted by the Ministry of Pensions to be due to, or aggravated by, service, the remaining 18 beds being available for paying patients from any area. During the year, sanction was obtained for the treatment of ex-service men in addition to 50 patients from the area of the County. All these beds have been kept fully occupied throughout the year. It is hoped during the coming year to obtain sanction to still further extend the accommodation for patients from the area of the County, so that 60 beds will be available for them, 5 beds for ex-service pensioners, and three beds for paying patients and for emergencies. This should curtail, to a large extent, patients being kept on the waiting list for long periods.

During the year, billiard cues, balls and a dart board have been secured for the male recreation room, and a piano for the female recreation room. A very useful collection of books has been got together for all the patients and several useful toys for the benefit of the children. All these have been secured from private sources. It is hoped to have wireless installed very shortly from the same source.

During the year an inspection was made by the Ministry of Health, who reported "that they were satisfied that the "Institution is efficiently and economically conducted."

Patients on admission are classified as heretofore, in accordance with Memo. 37/T (Draft) into Class A and Class B, Groups 1, 2, 3. The classification of immediate results on discharge is also in accordance with this memo.

#### CLASSIFICATION OF PATIENTS ADMITTED DURING 1923.

	Males.	Females.	Children.	Total.
*Class A —	 11	15	16	42
†Class B, Group 1	 1			1
Class B, Group 2	 10	6		16
Class B, Group 3	 17	11		28
Non-Pulmonary	 			
TOTAL	 39	32	16	87

<sup>\*</sup> Class A. Cases in which tubercle bacilli have not yet been demonstrated in the sputum; such cases are transferable to Class B if and when the bacilli are found.

The accompanying figures represent the occupations in which patients are stated to have been employed immediately prior to admission.

<sup>†</sup> Class B. Cases in which tubercle bacilli have been demonstrated. Grouped to indicate (1) slight, (2) marked, (3) profound, systemic disturbance.

Occupation.	Males	Occupation	Females
Boot and Shoe Operatives Farm Labourers	16	Boot and Shoe Operatives Nurse	13
Brewer's Labourer	1	Domestic Servant	1
Ironstone Labourers	2	No occupation	1
Miner's Labourer	1	Corset Factory	2
General Labourer	1	Machinist (Clothing fact'ry)	2
Gardener	1	Housewives	7
Gardener's Help	1	Grocer's Assistant	1
Carman	1	Belt Stitcher	1
Baker	1	Box Factory	1
Warehouseman (Clothing)	1	Tailoress (Clothing factory)	2
Grocers' Assistants	2	School Girls	8
School Teacher	1		
Engine Driver	1		-
Fireman	1		
Mechanics	3		
Butcher	1		
Electrician	1		
School-boys	8		
TOTAL	47	TOTAL	40

GRADUATED EXERCISES.—These are carried out in accordance with specially prepared work cards. Five grades of work have been prepared and each patient is provided with a card if fit for exercise. All work and exercise is carried out under the direct supervision of the Medical Superintendent.

Gardening and Agriculture.—There is excellent provision for the teaching and practice of these, there being two large gardens, two orchards and two hot-houses, where vegetables, potatoes, flowers, fruit, tomatoes, grapes, etc. are cultivated. The patients work directly under the supervision of the Medical Superintendent, and instruction is given by the gardener. During the year, demonstrations in pruning and spraying of fruit trees were given by the gardener, and a demonstration in grafting of fruit trees was given by the County Horticultural Superintendent. Enough vegetables and fruit have been grown to supply the needs of the Sanatorium, and enough potatoes to do for more than half the year.

Poultry and Pig Farming.—Instruction in these has been given by the gardener, and enough eggs have been obtained to supply the institution. An incubator and rearer are kept.

Boot Repairs.—A set of shoemaker's tools is kept and good use has been made of these by the patients, for carrying out repairs.

Joinery and Carpentry.—There is a workshop with sufficient equipment to enable the patients to assist in the necessary repairs of woodwork, painting, &c. in connection with the buildings. Assistance and instruction are given by the "handyman," and by any skilled patient who happens to be undergoing treatment. Work of a highly skilled character is not attempted. Much useful work has been done during the year.

School.—As previously, instruction has been given to the children by the Medical Superintendent, with some assistance from a schoolmaster patient. The majority of the children have obtained a good deal of benefit from the instruction.

The patients have again given great assistance with the upkeep of the grounds and repairs of buildings, and have taken a real interest in the welfare of the Sanatorium.

ANNUAL RETURN SHOWING EXTENT OF RESIDENTIAL TREATMENT DURING 1923. (Memo. 37/T (Draft)).

	In Institution on Jan. 1st.		Discharged during year.	Died in Institution.	In Institution on Dec. 31st
Number of Patients Children. Adults.	18	39	34	1	22
Pa PF.	18	32	30	2	18
Children.	7	8	- 8	_	7
THO F.	7	8	8	_	7

# ANNUAL RETURN SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF PATIENTS DISCHARGED DURING THE YEAR 1923. (Memo. 37/T (Draft)).

Class	Classification on Admission to Institution.				D	urati	on of	Res	ident	ial T	`reat	nent.			
Ac	lmission to	Condition at time of Discharge.		nder			to			to			ore t		
			M.	F.	C.	M.	F.	C.	M.	F.	C.	M.	F.	C.	Total.
		Quiescent				4		1	1	7	2		1	4	20
	Class A.	Much Improved				5			1	9	4		1	3	23
		No Material Improvement		3										1	4
		Died in Institution					•••								
TUBERCULOSIS.		Quiescent				1									1
COL	Class B.	Much Improved													
ERG	Group 1.	No Material Improvement													
TUE		Died in Institution													
PULMONARY		Quiescent				1									1
ION.	Class B.	Much Improved				2	1		5	3					11
ULM	Group 2.	No Material Improvement													
Д	Group 2.	Died in Institution													
	-	Caron in anomalou													
		Quiescent													
	Class B.	Much Improved		1		9			4	4			1		19
	Group 3.	No Material Improvement							1						1
	,	Died in Institution		1					1				1		3
														-	
		Quiescent													
>	Bones and														
AR.	Joints.	No Material Improvement													•••
MON	Joints.  Joints.  Joints.  Peripheral	Died in Institution													
PUL BERC		Quiescent													
NON	Peripheral	Much Improved													
	Glands.	No Material Improvement													
		Died in Institution													
			1							1			,	1	

# ANNUAL RETURN SHOWING EXTENT OF RESIDENTIAL TREATMENT DURING 1923 (Ex-Service Pensioners).

Disease Quiescent.	Much Improved.	No Material Improve- ment.	Died.	Still in Institution.	Total.
2	4	-	-	4	10

All patients on discharge are instructed to report to the Tuberculosis Officer at the Dispensary nearest their homes. It would appear that the majority of them have done so. Their discharge is notified to the Tuberculosis Officer, the Medical Officer of Health of their district, and the County Nursing Association. In addition, the admission and discharge of children is notified to the Local Education Authority. During the year, a great many of the discharged patients have either called or written to tell me of their progress and welfare since discharge.

J. H. CRANE, (Medical Superintendent).

### Schools.

I have reported on the Medical Inspection of Children in Schools to the Education Committee in my capacity as School Medical Officer, and gave the number of School Departments as having been closed during the year on account of the prevalence of disease at 113; this number is comparable with 141 in 1922 and 46 in 1921. Influenza was one of the most important causes of interruption of school-work in the earlier months of the year, and measles and whooping-cough had no inconsiderable influence in the same direction. The following tabulation shows the effects of monthly prevalence of disease on elementary school work during the year:—

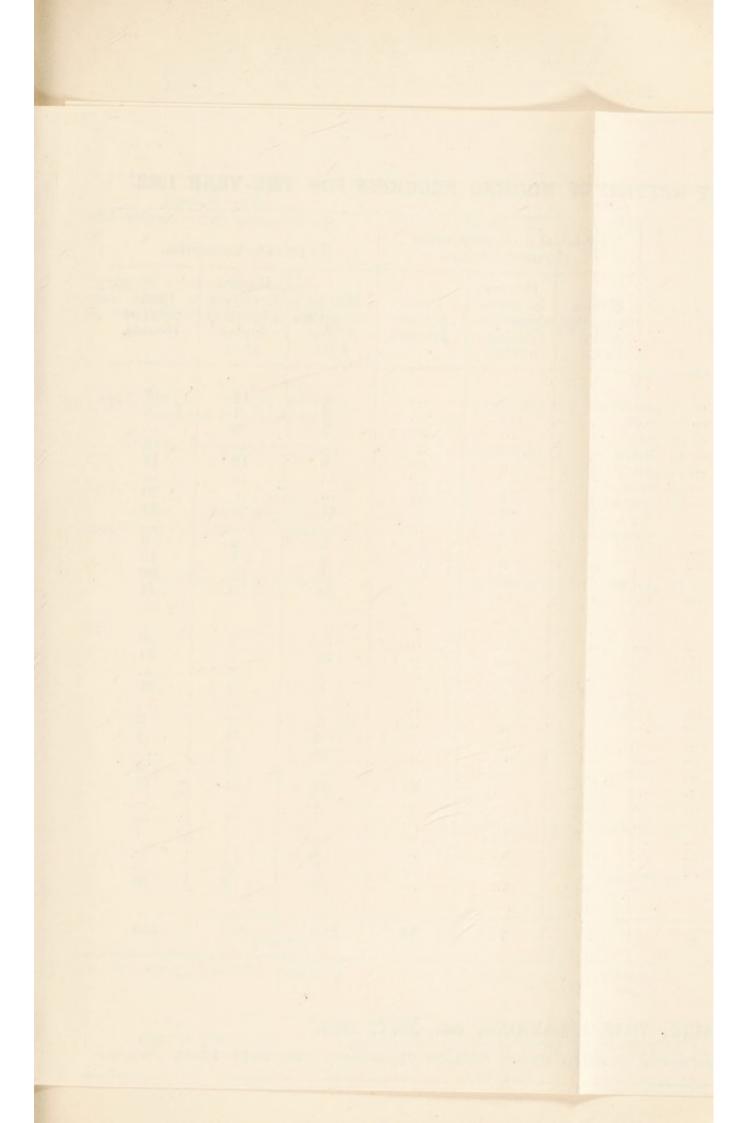
Schools Closed.	Months. January—February	Disease Prevalence. Measles, Whooping Cough.
36	February—March	Measles, Influenza, Whooping Cough, Diphtheria, Colds, Mumps, Chicken Pox, Scarlet Fever.
25	March—April	Measles, Influenza, Scarlet Fever, Whooping Cough, Colds.
8	April—May	Measles, Influenza.
8	May—June	Measles, Scarlet Fever, Diph- theria.
5	June-July	Measles, Mumps, Scarlet Fever.
4	July	Scarlet Fever, Chicken Pox.
4	September—October	Scarlet Fever, Measles, Whooping Cough.
2	October-November	Scarlet Fever.
1	November	6 115
2	December	Chicken Pox, Mumps.

The records in the reports of the District Medical Officers of Health show that watchfulness over the drainage, sanitary appliances and fittings at the elementary schools has been kept throughout the year, and that the offices have been found generally in a satisfactory condition.

## WATER SUPPLY.

The water supply of the County was generally satisfactory throughout the year and no serious shortage was experienced. The rainfall for the year was slightly above the average, and this, following the much heavier rainfall of the year 1922, served to restore conditions in respect of the deep-level sources of water which had been seriously affected by the exceptional drought of the year 1921.

During the year two new public water supplies were completed, namely, for the parish of Corby in the Kettering Rural District and for Lichborough in the Towcester Rural District. In the Borough of Brackley, the water is supplied by gravitation after being pumped from a deep well situated on high ground outside the town; but the supply has been in some jeopardy for a time owing to the danger of the pumping apparatus failing, and steps have been now taken to replace the worn mechanism. At Burton Latimer the water was



#### TABLE SHEWING DISTRICT RETURNS OF HOUSING PROGRESS FOR THE YEAR 1923.

							cal Authority ousing Scher	under me.	By Private Enterprise.					
	DISTR	ICTS	S.			Houses completed during 1923	Houses in course of erection during 1923	Prospective Houses.	Houses completed during 1923	Houses in course of erection during 1923	Pros- pective Houses,			
URBAN.														
Brackley Boros		***	***	***	244	***	***	***	2	10	3			
Daventry Boro			***	111	111	711	12	***	3	1	6			
ligham Ferren	Borou	gh	***	***	***	***	***	20	2	3	***			
Burton Latime	Г		***			***	***	***	***		3			
Desborough	***			444	200	4	***	10	9	13	14			
Finedon		***	***	111	****		***	***			***			
rthlingborough		***	***	***			8	12	***		20			
Kettering				111	***	-	24		44	67	54			
Dundle				***		1		***			***			
Raunds						333	10000		2	2	6			
Rothwell	***	***	***			100	***	***	5	8	10			
Rushden	***	***	***	***	***	***	30	***	13	22	50			
	***	***	***	***	***		73.0	***	1000	23	44			
Wellingborough		***		***	***	***	***	***	54	20	22			
RURAL.							,							
Brackley	***	ORDER OF	111	***		***	211		***	2	20			
Brixworth	***		***	***		***		***	28	5	21			
Crick	***	***	***	***	***			***	1	1	***			
Daventry			***			4.0		***	9	2	25			
Easton-on-the-	Hill	***		***	***		1				***			
Gretton	***		***					***	2	2	2			
Hardingstone								***	5	11	4			
Kettering						1 111		***	10	2				
Middleton Cher							100			2	8			
Northampton						1		32	30	21	13			
Oundle	***	***	***	***	***				4	100000				
Oxendon	***	***	***	***	***	4 000	***	***	42.070	4	***			
	***	***	***	***	***		***	***	****	10000	7			
Potterspury	***	***	***	***	***			***	9					
Thrapston	***	***	***	***	***		111	***	3	1	***			
Towcester	***	***	111	***	***	***	***	***	3	5	100			
Wellingboroug	1	***	***		***	***	***	***	9	3	10			
	Тот	ATO				78	74	74	238	210	320			

#### HOUSING, TOWN PLANNING, &c., ACT, 1909.

Houses in Rural Districts Notified under Section 69, during the Year 1923,

			No. of		Date of		Aution tolan and an eliting
DISTRIC	TS.		Houses	Representation	Closing Order.	Demolition Order.	Action taken and condition up till end of 1923.
BRACKLEY Culworth	:::		7	3 October	3 October		Appeal against Order to the Ministry of Health not yet
BRIXWORTH			Nil				decided.
CRICK Yelvertoft				23 October			
DAVENTRY Whilton		***	2	20 February	10 March		
EASTON-ON-THE	-HILL		Nil				10 10
GRETTON	***		Nil				
HARDINGSTONE			Nil				
KTTERING	***		Nil				
MIDDLETON CH	ENEY		Nil				
NORTHAMPTON	***	***	Nil		100		
OUNDLE Glapthorn			1	15 November	15 November		Further action pending.
OXENDON Clipston Clipston Stoke Albany			1 1 1	5 January 13 April 24 January			House now being put into repair Owner proposed to repair. Repaired.
Stoke Albany Stoke Albany	***	***	1	30 June 14 September			repaired.
Welford	***		1 1	29 March 12 May	11 December	***	Too dilapidated to repair.
Wilbarston Braybrooke			1 2	30 June 24 November	11 December		Now being put in order. Owner intends pulling these
POTTERSPURY			Nil				down.
THRAPSTON Stanwick			1		27 July		House put in proper repair b owner. Closing Order with
TOWCESTER			Nil		1 10 10		drawn by Council 13/12/23.
WELLINGBOROU Mears Ashby		***	1	15 August	12 September		House closed and remains unfi

shut off from the town nightly during January and February and a portion of November and December, and similarly from 5 p.m. to 7 p.m. at Pytchley in the Kettering Rural District during July until November. In the Desborough Urban District a new pumping plant was installed at the No. 2 station, and the provision of a mechanical filter will now permit of the utilisation of all the springs at the same station. In the Raunds Urban District, there was no need to restrict the supply at any time, although the wells are reported as having been much depleted during the last four months of the year. In addition to the new pumping plant for the Kettering Urban District, referred to in my last report, the Cransley water-works have been extended by the construction of a further bed and clear water tank, and the service reservoirs at Clover Hill have been enlarged to provide an additional capacity of about one million gallons of water.

It is a matter for some satisfaction, as indicative of the protective care taken by the local authorities concerned, that there was no evidence of water-borne disease through the medium of any public supply of water from shallow wells during the year.

# DWELLING HOUSES AND OVERCROWDING.

Reference to the shortage of dwellings is general throughout the reports of the Medical Officers of Health for the larger Districts within the Administrative County, and this shortage seems likely to continue while the present prices for building materials are maintained and dilution within the industry in respect of skilled operatives does not take place.

It will be seen in the attached tables what amount of progress towards the provision of housing accommodation in the County during the year 1923 has been achieved. It is satisfactory to know that private enterprise in the direction of house-building is more in evidence than for several years past; but there are no particulars given as to how many houses were built by persons for their own occupation or

speculatively for sale or tenancy. So far as schemes by Local Authorities were concerned, 73 houses were completed during 1923, of which 25 were in the Urban Districts of Desborough, Irthlingborough, Kettering and Rushden, and 48 in the Daventry Rural District. On the other hand, as many as 238 dwellings were completed during the year through private enterprise, of which 134 were in the Urban Districts and 104 in the Rural Districts. In addition, there were at the end of the year 210 houses in course of erection by private enterprise, as against 74 being supplied under housing schemes of Local Authorities. These figures appear to indicate that the subsidies given for the building of dwellings have proved to be of a stimulating character towards the return of private enterprise.

Unquestionably, there are dwellings in several of the Districts which await the erection of new dwellings before they are themselves condemned to be closed, and it is greatly to be hoped that the time for this procedure is not now so far off. During the year 1923, representations were made in respect of 23 dwellings in the Rural Districts, as against 29 in the year preceding. Closing Orders were made in fifteen cases; an appeal to the Ministry of Health in respect of seven of these has not yet been decided, and in one case the closing Order was withdrawn, the house having been put in proper repair. Repairs have also been, or are intended to be, carried out in four other cases in which application for Closing Orders was not deemed necessary.

SEWERAGE AND SEWAGE DISPOSAL (POLLUTION OF STREAMS).

Following on my last report, I am glad to say that the new sewage disposal works for Woodford-cum-Membris in the Daventry Rural District have been in course of construction during the year, and give promise of proving entirely successful in the production of a suitable effluent for discharge into the stream. As already noted, a further application for a loan to carry out a scheme of sewage disposal at Byfield in the

same District has been considered by the Ministry of Health, and, on sanction being obtained for this, it is intended to proceed forthwith in the execution of the scheme. It only remains to deal with the effluents at Charwelton to free this District from having part in the pollution of the River Cherwell or any of its tributaries. In the other areas of the County forming part of the watershed of this river,—the Brackley and Middleton Cheney Rural Districts,—a good deal has been done in dealing with village sewage and satisfactory effluents have been obtained during the last few years; but something remains to be done at Chacombe, while a scheme for Middleton Cheney is about to be put in hand, and action under the Rivers Pollution Act in respect of Kings Sutton is being considered by the County Council.

In the Borough of Higham Ferrers the sewer in the Midland Road was extended for a distance of 100 yards during the past year, and it is forecast that, owing to the wear of time, new distributors for the filter beds at the sewage disposal works will be required during the current year. New sewering is in hand at Corby in the Kettering Rural District, and a larger area of land for sewage irrigation purposes has been brought into use at Duston in the Northampton Rural District. In the Oxendon Rural District, septic tanks and filters have been constructed at Clipston, and the sewer outfall at Weston has been improved; new sewers have been laid at Braybrooke and Wilbarston, and a new one is proposed at Sutton Bassett.

# Dairies and Cowsheds.—Dairy Cattle.

Following on my last Annual Report, wherein I referred particularly to the importance of regular inspection of dairy herds by a veterinary surgeon, the Public Health, &c. Committee decided to direct the attention of the District Councils not providing for such service to that portion of the report, and to express the hope that they would obtain, if necessary in combination with neighbouring Local Authorities, a

periodical veterinary inspection of milch herds in addition to the inspection of cowsheds in their areas. Some slight increase in the amount of such inspection has resulted, but in the main the matter is still under consideration.

In his report to the Joint Committee for the Urban and Rural Districts of Kettering and the adjoining Urban Districts of Desborough and Rothwell, Mr. Trevor Spencer reports as follows in respect of the year ended December 31st, 1923:—

"I have made inspections and re-inspections of premises in the occupation of registered cowkeepers to the number of 379, and of all cows contributing to the public milk supply to the number of 3,730.

"Depending upon the sanitary conditions met with, and "the health of the milk-producing cows, the results are "classified under three headings, viz., Classes A, B and C.

"Class A are those in which the conditions have been found to be satisfactory and the health of the cows normal.

"Class B are those in which some minor defect is present either as regards the sanitary state of the sheds or the health of the animals.

"Class C are those in which sanitation is unsatisfactory or bad, or in which cows have been found to be giving milk likely to be harmful to consumers.

"Classified in this way the results are as follows:-

Class A ... 239 cowsheds containing 2433 cows.

Class B ... 126 ,, ,, 1211 ,, Class C ... 14 .. ,, 86 ..

Total ... 379 ,, ,, 3730 ,

"The main objectionable features in Class A were unsatisfactory drainage, dirty and ill-kept sheds, neglect of limewashing, accumulations of manure, overcrowding, and the
keeping of swine in too close proximity to the sheds.

"With regard to the health of the animals themselves, so far as this might have any deleterious effect on their milk, clinical evidence of Tuberculosis of the udder has been "detected in four cows, and these, on request, were "immediately removed from the herds and slaughtered.

"The use of milk from a few other cases of non-tubercular mastitis, udder eruptions, furunculus, etc., was temporarily stopped pending recovery and, in all cases, a readiness on the part of owners to carry out this precaution, was noticeable.

"So far as the powers which you possess enable you to "exercise any control over the purity and wholesomeness of the local milk supply, these results must be regarded as satisfactory and are not likely to be improved upon whilst those powers remain what they are."

Similarly, Mr. E. W. Parks, reporting to the Joint Committee of the Urban and Rural Districts of Wellingborough says:

"During the last twelve months, three inspections have been made of the premises in the occupation of the Registered Cowkeepers, and an individual examination of the dairy cows contained therein, special attention being paid to the udders.

"The general sanitary condition of the cowsheds still shows improvement, but there is room for more. It is necessary to exercise a strict supervision over limewashing and manure accumulations. The cleanliness of the floors, the milker's hands, and the cows' udders and extremities often do not receive sufficient attention.

"The general condition of the cows throughout the year with very few exceptions has been most satisfactory.

"The number of cows inspected, the condition of their udders receiving special attention, is 3316 of which 3278 or 98.85 per cent showed no clinical derangement. The udders found to be abnormal, whether from benign or serious affections, numbered 38 or 1.14 per cent., and were in a condition calculated to render the milk harmful for human consumption. Of these, 19, or .57 per cent. of the total number of cows were affected with tuberculosis, the

"remainder being cases of either acute or suppurative "mastitis.

"The Cowkeepers continue to display willingness to act on my suggestions and to abate the various nuisances when pointed out."

So also, Mr. Parks found three cases of mastitis among the cows in the Irthlingborough Urban District, while in the Borough of Higham Ferrers he found one cow with an induration forming in one quarter, and two cases of mastitis.

Mr. P. Thomson, for the Raunds Urban District, states that he made 448 inspections of cows and heifers, and found all the examined animals in good condition and without disease.

In the Rushden Urban District, with a quarterly average of 176 cows and heifers, one case of tuberculosis was found, three cases of mastitis, and induration of the udder in one animal.

In the Thrapston Rural District, the Veterinary Surgeon reported that he found the condition of the cows and heifers was very good, the udders all sound, and the milk fit for human consumption in each quarter of the year; in the third quarter he reported also that the condition of the cowsheds was steadily improving.

# FOOD INSPECTION AND ADULTERATION.

I am glad to note that the watchfulness over food supplies in the several districts of the County is well maintained, and that the practice of voluntary surrender of doubtful articles to the sanitary officers by vendors is now much more general. For several of the districts it is recorded that no action has been required during the year, and no prosecutions appear to have been necessary in any. For convenience of reference, the areas in which unsound food was dealt with are placed in alphabetical order and the quantities and kinds of food set out in detail.

DAVENTRY BOROUGH. On account of Tuberculosis, there were condemned and destroyed 420 lbs. of beef and 148 lbs. of pork, and on account of unsoundness 112 lbs. of fish and 8 crabs.

HIGHAM FERRERS BOROUGH. There was a total of 16 cwts., 3 qrs., 7 lbs. of meat and other foods surrendered and destroyed, together with 37 blown or defective tins of fish, fruit, &c.

Desborough Urban. Three carcases as well as 5 tons of potatoes, unfit for food, were surrendered and destroyed.

IRTHLINGBOROUGH URBAN. 42 tins of fruit, tomatoes, salmon and other kinds of fish and corned beef, 75 lbs. in all, were destroyed.

Kettering Urban. Early in the year, some 13 cases of food-poisoning came under notice and were traceable to corned beef purchased in every instance from the same consignment. The cases were characterised by vomiting and diarrhœa, and quickly recovered under treatment. The suspected meat was confiscated, though it appeared to be sound and normal and no definite result was arrived at on bacteriological investigation.

In my last annual report I referred to a scheme of mutual understanding between this District Council and the local butchers. In connection therewith the following remarks from the report of the Medical Officer of Health will be now found of interest:—

"The scheme whereby certain butchers undertook to give "notice of intention to kill has worked well, practically the "whole of the butchers doing their best to carry out their "part of the scheme. The result of this scheme has been "that a larger number of inspections have been made and a "still greater proportion of meat inspected than would other"wise have been the case. The insurance scheme inaugurated
"by the Butchers Association tends to ensure a better
"meat supply as a butcher does not object so much if a
"beast is confiscated knowing that compensation will be
"forthcoming."

The total quantity of food seized or surrendered, including 4 tons of potatoes disposed of for pig food, amounted to 12 tons, 17 cwts., 1 qr., 15 lbs.

RAUNDS URBAN. On request by a butcher, the carcase of a bullock was examined and found to be affected by a one-sided pleurisy; the affected quarter was destroyed.

Wellingborough Urban. Food surrendered and condemned for the year amounted to 3 tons, 15 cwts., 1 qr., 3 lbs., and included beef, pork, rabbits, fruit, vegetables and tinned foods.

DAVENTRY RURAL. 980 lbs. of meat were condemned and destroyed, having been voluntarily surrendered.

Oundle Rural. One carcase of a cow was found affected with tuberculosis and was destroyed.

Towcester Rural. 54 lbs. of unsound meat were surrendered.

SALE OF FOOD AND DRUGS ACTS, AND MILK AND CREAM REGULATIONS.

The following are the Annual Reports of the Public Analyst, appointed for the Administrative County, upon the articles submitted to him for analysis under the above Acts and Regulations during the year ended the 31st December, 1923:—

During the year 1923, 445 samples taken in the County have been submitted for analysis. Of these, 31, or just under 7 per cent. were reported as adulterated.

# The samples comprise the following:-

Milk				 	342
Skimmed and S	eparat	ted Mill	k	 	15
Evaporated Mil	k			 	1
Dried Milk				 	1
Condensed Milk				 	3
Cream				 	3
Butter				 	19
Margarine				 	6
Lard				 	5
Suet				 	1
Cocoa				 	5
Coffee				 	2
Vinegar				 	10
Sausages				 	5
Pork Pies				 	4
Fish Pastes				 	2
Baking Powder				 	4
Self-raising and	Cake	Flours		 	6
Scotch Whisky				 	1
Tinned Asparag	us			 	1
Ground Rice				 	1
Cane Syrup				 	1
D				 	1
Cinnamon				 	1
Nutmeg				 	1
Borax				 	2
Sweet Spirits of	Nitre			 	1
Camphorated O				 	1

MILKS. These included 13 "appeal to cow" samples taken in connection with cases of unsatisfactory samples. In two instances the percentage of fat in the milk was considerably below 3 per cent. 28 of the samples of Milk were reported as unsatisfactory, 20 being deficient in fat, and 8 in non-fatty solids. The average percentage of fat for the whole year amounted to 3.6.

The samples of condensed milk were all satisfactory and complied with the requirements of the Condensed Milk regulations.

Of the 3 samples of Cream, one not labelled as "Preserved Cream" contained boracic preservatives. One, a sample of Tinned Cream described as "pure thick cream without preservative," was found to be free from preservatives or added thickening, but contained only 24 per cent. of butter fat. The method of preparation of this Cream gave it the appearance and consistence of thick cream, rich in fat.

One of the samples of butter contained more than the maximum amount of water permitted, and 14 contained boracic preservatives, but in no case in excessive quantity.

The margarines also contained boracic preservatives.

4 samples of sausages contained boracic preservatives. Two contained boracic preservatives in excessive quantity, and 2 of the pork pies contained boracic preservatives, but in moderate amount.

The samples of cocoa and baking powder were free from arsenical contamination, but a sample of borax was unsatisfactory, containing 80 parts of arsenic per million.

The sample of tinned asparagus contained over 3 grains of metallic tin to the lb.

(Signed) E. W. VOELCKER, County Analyst.

# MILK AND CREAM REGULATIONS—COUNTY OF NORTHAMPTON, 1923.

# MILK-AND CREAM not sold as PRESERVED CREAM.

(a) Number of Samples examined for the Presence of a Preservative.	(b) Number in which Preservative was reported to be present, and Percentage of Preservative found in each Sample.					
Milk, 357	None	е.				
Cream, 2	1 Contained .12 per cent. Boric Acid.					
Tinned Cream, 1	Free from Preservat cent. Butter Fat.	tive, contained 24 per				
Cream sold as preserved Cream.	Percentage of pre- servative found.	Percentage of pre- servative stated on label.				
None.						

(Signed) E. W. VOELCKER,

County Analyst.

In respect of the samples taken by the Inspectors, and found to be unsatisfactory on analysis, the summarised information as to administrative action taken thereon has been supplied by Mr. Caulton, the Chief Inspector:—

	- P		
ARTICLE.		CERTIFIED AS:	ACTION TAKEN.
Milk		18 p.c. added water	Explanation of vendor accepted, Further sample taken and found to be genuine. Severe warning given.
"		10 p.c. added water	Proceedings. Case dismissed.
"		4 p.c. added water	Warning given. Two informal samples taken at source of supply and found genuine.
"		3 p.c. added water	Warning given. Source of supply changed.
"		25 p.c. deficient in fat	Sample was from milk of single cow. Two "appeal to the cow" samples were genuine. Warned.
.,		22 p.c. deficient in fat	Warning given.
,,		21 p.c. deficient in fat	Further sample taken.
,,		19 p.c. deficient in fat	This sample was taken in connection with the above, and six "appeal to the cow" samples were then taken, which proved on analysis to be satisfactory. The vendor was therefore warned.
,,		18 p.c. deficient in fat	therefore warned.
,,		17 p.c. ,, ,,	
,,		17 p.c. ,, ,,	
**		17 p.c. ,, ,,	
,,		16 p.c. ,, ,,	
**		15 p.c. ,, ,,	
,,		14 p.c. ,, ,,	To each of these cases and initial
,,		12 p.c. ,,	In each of these cases enquiries
,,		12 p.c. ,, ,,	were made, and in nearly every case further samples were
"		10 p.c	taken.
"		9 D.C	The vendors were warned in
"		8 n.c	every case.
"		8 p.c. ,, ,,	
,,		8 p.c. ,, ,,	
,,		7 p.c. ,, ,,}	

ARTICLE.	CERTIFIED AS:	ACTION TAKEN.
Mílk	5 p.c. deficient in solids not fat.	Warning given.
***	6 p.c. deficient in solids not fat, and 3 p.c. de- ficient in fat	Six "appeal to the cow" samples were taken, 4 were genuine, one low in solids and fat and one deficient in fat. Warning given.
,,	Slightly deficient in solids not fat.	Warning given.
Separated Milk	Slightly deficient in solids not fat.	Further sample taken.
Butter	Containing 16.5 p.c. water	Warning given to Vendor.
Asparagus	Containing metallic tin equal to 3 grains per pound.	Warning given.
Borax	Containing arsenic equal to 80 parts per million.	Warned.
Pork Pies Pork Sausage Veal & Ham Pie.	Containing boracic preservative.	The question of antiseptics in foodstuffs was considered by the Public Health Committee, and a report submitted in April as to what was being done by other County Councils. The Committee thereupon recommended and the County Council approved "That the Ministry of Health be urged to prescribe, pursuant to the powers vested in the Minister of Health by Section 1 of the Public Health (Regulations as to Food) Act, 1907, the limits of the amount of chemical preservatives sanctioned, and to regulate the conditions of sale of foodstuffs containing preservatives."

With reference to the Report of the Public Analyst in respect of samples submitted to him for examination under the Public Health (Milk and Cream) Regulations, it is satisfactory to be able again to report that no Preservative was found in any of the samples of Milk—numbering 357. In one or two samples of "Cream" a small amount of Preservative was found, but none was found in the sample of Preserved Cream which was taken for analysis. There is at present very occasional opportunity for the taking of samples of "Cream" in the County; it is rarely on sale to the public, being usually ordered specially for private consumption.

CHARLES E. PAGET,

County Medical Officer of Health.

County Hall,

Northampton.

May, 1924.

# LIST OF MEDICAL OFFICERS OF HEALTH AT COMMENCE-MENT OF 1924.

DISTRICT. URBAN:—	MEDICAL OFFICER OF HEALTH.	-	RESIDENCE.
Brackley (Borough)	G. N. Stathers, M.R.C.S., D.P.H.		Brackley
Daventry (Borough)			West Haddon,
Higham Ferrers			Rugby
	F. D. Crew, M.B.		Higham Ferrers
_ ' ' '	E. L. Warner, M.D., D.P.H.		Burton Latimer
	H. Gibbons, M.D., J.P.		Desborough
	A. Strachan, M.B.		Finedon
	W. F. Gibb, L.R.C.P.		lrthlingborough
	J. Allison, M.D., D.P.H.		Kettering
Oundle	B. R. Turner, M.D.		Oundle
Raunds	A. McInnes, M.B., D.P.H.		Raunds
Rothwell	J. More, M.R.C.S.		Rothwell
Rushden	O. A. J. N. Muriset, M.B.		Rushden
Wellingborough	J. Arthur, M.D.		Wellingborough
RURAL:—			
Brackley	G. N. Stathers, M.R.C.S., D.P.H.		Brackley
Brixworth	R. Winterbotham, M.R.C.S.		Brixworth
Criek	A. G. L. Smith, M.R.C.S.		Crick
Daventry	A. R. Darley, M.D.		West Haddon,
			Rugby
Easton-on-the-Hill	T. P. Greenwood, M.R.C.S.		Stamford
Gretton	J. E. O'Connor, M.D., D.P.H.		Kirby Muxloe,
			Leicester
Hardingstone	H. F. Percival, O.B.E., M.R.C.S.		Northampton
Kettering	L. W. Dryland, M.R.C.S., D.P.H		Kettering
Middleton Cheney	J. I. Johnson, L.R.C.P.		Culworth,
			Banbury
Northampton	H. F. Percival, O.B.E., M.R.C.S.		Northampton
Oundle	A. F. Elliott, M.B.		Oundle
Oxendon	C. T. Scott, M.B.		Market Harboro'
Potterspury	A. H. Habgood, D.S.O., M.D.	•••	Stony Stratford
	E. H. Hogg, M.R.C.S.		Thrapston
Towcester	C. Simpson, M.B.	•••	Towcester
Wellingborough	J. Arthur, M.D.	•••	Wellingborough

### APPENDIX I.

# ANNUAL REPORT OF THE TUBERCULOSIS OFFICER FOR THE YEAR 1923.

I beg to submit my report on the work of the Tuberculosis Department for the year 1923.

During the year the work has been carried out on the usual lines; no outstanding events fall to be recorded and there have been no changes in the staff.

The general scheme of previous reports has again been adopted to facilitate comparison of the figures.

## DISPENSARY WORK.

County Tuberculosis Dispensaries.

- (1) NORTHAMPTON ... 18, Guildhall Road, Northampton (Administrative Centre)
- (2) Kettering ... Lower Street, Kettering.
- (3) Wellingborough 108, Midland Road, Wellingborough.

Tuberculosis Officer-

D. Dempster, M.C., M.A., M.B., Ch.B., D.P.H.

TABLE I.

		-	-		10	
Number of Attendances made by Patients at the Dispensaries during 1923.		Total	663	2,032	2,415	5,110
		Ex- Service Patients	202	298	730	1,230
umber of	Dispensar 19	Female Service Patients	243	1,174	1,002	2,419
ZI		Male	218	560	683	1,225 1,461
S		Total	259	366	009	1,225
more time	Ex-	Service Patients	44	19	09	155
one or 1923	-	Both	121	121	294	536
Number of Patients who attended one or more times at the Dispensaries during 1923.  Insured. Non-Insured. Ex-	on-Insure	Female	74	77	186	337
	Male	47	44	108	199	
Patien at the I	Insured.	Both	94	194	246	534
a a Insured.		Insured.	Female	45	113	128
Z		Male	49	81	118	248
DISPENSARIES.			Northampton	Kettering	Wellingborough	TOTALS 248

VISITS MADE BY THE TUBERCULOSIS OFFICER TO PATIENTS IN THEIR OWN HOMES.

148
27
79
47
32
42
19
23
). VISITS
T.0

Table I. shows in detail the general work done at the Dispensaries during the year. 1,225 patients visited the three Dispensaries and made a total of 5,110 visits or an average of 4·1 visits per patient. Of the 1,225 patients attending, 534 or 43·5 per cent. were insured persons, 536 or 43·7 per cent. were non-insured persons and 155 or 12·6 per cent. were ex-service patients. The total number of patients attending the Dispensaries during the year was practically the same as for the previous year but the total number of visits made by patients was considerably less than last year's figure. This was again due to the intervals between visits made by patients who were not receiving actual treatment at the Dispensaries being longer than formerly.

TABLE II.
NEW PATIENTS.

			Insured.			Non-Insured.			Ex-	
			Male	Female	Both Sexes	Male	Female	Both Sexes	Service Patients	
Pulmonary Tubero	ulosis		55	38	93	9	36	45	14	11
Other Forms of Tu	bercul	osis	1	1	2		1	1	1	
Suspects			15	18	33	16	16	32	3	(
Non-Tuberculous			12	16	28	11	14	25	3	1
TOTAL			83	73	156	36	67	103	21	28

Table II. shows that 280 new patients presented themselves for examination at the Dispensaries for the first time during 1923. Of these, 152 or 54·2 per cent. were found to be suffering from Pulmonary Tuberculosis, 4 were found to be suffering from other forms of Tuberculosis, 68 or 24·2 per cent. were suspected cases of Tuberculosis, and 56 or 20 per cent. revealed no evidence of Tuberculosis.

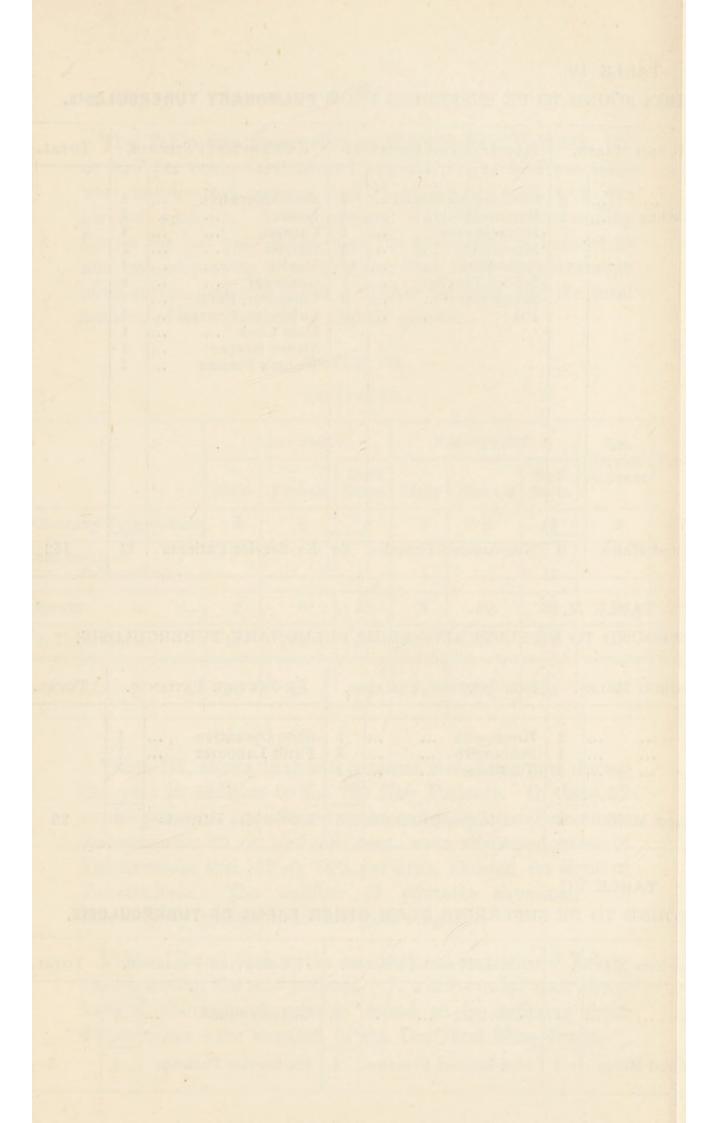


TABLE IV.

OCCUPATIONAL INCIDENCE OF THE 152 NEW PATIENTS FOUND TO BE SUFFERING FROM PULMONARY TUBERCULOSIS.

INSURED MALES.	Insured Females.	Non-Insured Males.	Non-Insured Females.	Ex-Service Patients.	TOTAL.
Shoe Operative 26 Bricklayer 2 Bricklayer 2 Butcher 1 Carpenter 1 Clerk 2 Currier 1 Drapery Manager 1 Engineer 3 Engine Cleaner 1 Engine Driver 1 Grocer's Assistant 1 Gardener 2 Labourer, Farm 4 ,, Ironstone 1 Painter & Decorator 1 Ry. Porter 1 Sewing Mach. Mech. 1 Stud Groom 1 Wood Last Maker 1	Shoe Operative        20         Cardboard Box Maker       1         Clerk           Clothing Machinist        5         Corset Machinist        1         Domestic Servant        6         Laundress        1         Nurse        1         Shop Assistant        1         Waitress        1	Schoolboy 8 School Teacher 1	Clothing Machinist	Shoe Operative        4         Baker        1         Carman        1         Currier        1         Dealer        1         Gardener        1         Labourer, Farm        1         Labourer, General        1         Male Cook        1         Stores Keeper        1         Tailor's Presser        1	
Insured Males 55	Insured Females 38	Non-insured Males 9	Non-insured Females 36	Ex-Service Patients 14	152

INSURED MALES.	Insured Females.	Non-Insured Males.	Non-Insured Females.	Ex-Service Patients.	TOTAL.
Shoe Operative 1 Brewer's Labourer 1 Rough Carpenter 1	Shoe Operative 4 Corset Machinist 1	Infant 1 Printer 1 Schoolboy 5	Housewife 1 Schoolgirl 3 Tailoress 1	Shoe Operative 1 Farm Labourer 1	
Insured Males 3	Insured Females, 5	Non-Insured Males 7	Non-Insured Females 5	Ex-Service Patients 2	22

# TABLE VI. OCCUPATIONAL INCIDENCE OF THE 5 PATIENTS FOUND TO BE SUFFERING FROM OTHER FORMS OF TUBERCULOSIS.

INSURED MALES. INSURED FEMALES.		Non-Insured Males.	Non-Insured Females.	Ex-Service Patients.	TOTAL.
Shoe Operative 1 Wheelwright 1		Schoolboy 1	Schoolgirl 1	Unascertained 1	
Insured Males 2	Insured Females	Non-insured Males 1	Non-insured Females 1	Ex-Service Patients 1	5

The Table also shows that of the 280 New Patients, 156 or 55.7 per cent. were insured persons, 103 or 36.7 per cent. were non-insured persons, and 21 or 7.5 per cent. were exservice patients. A comparison with the corresponding figures for last year shows that the proportion of insured to non-insured persons is less this year than last: the percentage of ex-service patients shows a further decrease, and the total number of new patients is slightly greater.

TABLE III. CONTACTS.

- attention and a first	Insured.			N	on-Insure	d.	Ex-	TOTAL
The state of the s	Male	Female	Both Sexes	Male	Female	Both Sexes		TOTAL
Pulmonary Tuberculosis	3	5	8	7	5	12	2	22
Other forms of Tuberculosis				1		1		1
Suspects	2	8	10	8	20	28	2	40
Non-Tuberculous	18	30	48	55	79	134		182
TOTAL	23	43	66	71	104	175	4	245

Table III. shows that 245 contacts were examined during the year in addition to the 280 New Patients. Of these, 22 or 8.9 per cent. were found to be suffering from Pulmonary Tuberculosis, 40 or 15.9 per cent. were suspected cases of Tuberculosis, and 182 or 74.2 per cent. showed no signs of Tuberculosis. The number of contacts examined was considerably greater than last year's figure.

Tables IV and V show the occupational incidence of Tuberculosis among the new patients. It will be noted that about half of the insured persons found to be suffering from Tuberculosis were engaged in the Boot and Shoe Trade. Table VI shows the occupational incidence in the case of contacts found to be suffering from Tuberculosis.

### HOME VISITATION BY TUBERCULOSIS NURSES.

During the year the three Tuberculosis Nurses made 5,634 visits to the homes of tuberculous patients. Of these, 4,224 were made to the homes of insured and non-insured patients and 1,410 to the homes of ex-service patients.

### LABORATORY WORK.

During the year 317 specimens of sputum were examined for the presence of Tubercle Bacilli. Of this number, 93 were positive for tubercle bacilli and 224 negative. In addition, 335 specimens of sputum were examined for albumen. In 116 of these, albumen was present and in 219 absent. Although the latter test is by no means specific for tuberculosis it is, in my opinion, of considerable value and well worth carrying out.

### SHELTERS.

The number of shelters occupied by tuberculous patients during the year was 20. All of these are the property of the County Council. Five of the shelters were transferred to different parts of the County during the year.

### CLASSIFICATION OF TUBERCULOSIS DEATHS OCCURRING IN THE ADMINISTRATIVE COUNTY DURING THE YEAR 1923.

Taken from Returns of Registrars of Deaths.

ni ganona		TOTAL	 	87	74	161
Other Forms			 	1		1
Joints			 			
			 	1		1
Spinal Column	1		 	2	2	4
Peritoneum a		ntestines	 	1	3	4
			 	7	4	11
Lungs			 	Male.	Female.	TOTAL 140

### INSTITUTIONAL TREATMENT.

All county patients suffering from Pulmonary Tuberculosis who were recommended for Institutional Treatment were treated at Rushden House Sanatorium, and patients suffering from non-pulmonary forms of the disease were sent to other Institutions.

TABLE VII.
SANATORIUM TREATMENT.

SANATORIA		Insured.		Non-Insured			Ex- Service	Total
	Male	Female	Both Sexes	Male	Female	Both Sexes	Patients	
Rushden House	45	39	84	15	27	42	11	137
R.S.B.H., Margate   Surgical)	1		1					1
Shropshire Orthopædic Hos- pital (Surgical)	2		2				1	3
Wingfield Ortho- pædic Hospital (Surgical)		- 1	1					1
Gt. Ormond St. Hosp. (Surgical)				1		-1		1
TOTAL	48	40	88	16	27	43	12	143

Table VII. shows that 143 patients received treatment in residential institutions during the year. Of this number 88 were insured persons, 43 were non-insured, and 12 were ex-service patients. The total number of patients receiving Institutional Treatment was slightly greater than last year.

TABLE WIII.
IMMEDIATE RESULTS OF INSTITUTIONAL TREATMENT.

	TOTAL.	137	1	63	1	- 1	143
In Sanatoria at end of Year.	Female	25	:	:	1//	:	26
In Sar at end	Male	29	:	-1	÷	1	31
Died in anatoria.	Female	63	:	:	:	:	67
Died in Sanatoria	Male	1	:	:	:	:	1
No material Improvement	Female	co		:	:	:	က
No ma Impro	Male	23	:	:	:	:	23
Much Improved.	Female	25	:	:	:	:	25
MImpi	Male	30	:	63	:	:	32
Quiescent.	Female	10	:	:	:	:	10
Quies	Male	10	1	:	. :	:	11
	SANATORIA.	RUSHDEN HOUSE	R.S.B.H., MARGATE (Surgical)	SHROPSHIRE ORTHOPAEDIC HOSPITAL (Surgical)	WINGFIELD ORTHOPAEDIC HOSPITAL (Surgical)	GT, ORMOND ST. HOSPITAL (Surgical)	TOTAL

Table VIII. sets out in detail the immediate results of Institutional Treatment and is self-explanatory.

The average period of treatment of patients discharged from residential Institutions during the year was 199 days, the longest period being 505 days and the shortest 2 days.

### EX-SERVICE PATIENTS.

Tables IX., X, and XI. deal with ex-service patients as distinct from civilian patients.

TABLE IX.

EX-SERVICE PATIENTS ATTENDING DISPENSARIES.

Dispensaries,	Total No. of Ex-Service Patients who attended one or more times at the Dispensaries.	Total No. of Attendances made by Ex- Service Patients at the Dispensaries.
Northampton	 44	202
KETTERING	 51	298
WellingBorough	 60	730
TOTAL	 155	1,230

Table IX. shows that 155 ex-service patients attended at the three Dispensaries and made a total of 1,230 attendances, or an average of 7.9 visits per patient. A number of these patients received actual treatment at the Dispensaries, but the majority attended for examination on behalf of the Pensions Authorities and for recommendation as to treatment.

Table X. shows that 21 new ex-service patients presented themselves for examination during the year. Of these, 14 were suffering from pulmonary tuberculosis, 1 was suffering from non-pulmonary tuberculosis, 3 were suspected cases of tuberculosis and 3 were not suffering from tuberculosis. 25 of the contacts who were examined were ex-service men.

CLASSIFICATION OF EX-SERVICE PATIENTS,

TOTAL	16	1	19	တ	25
acts r the	01	:	63	:	4
Sont	:	:	:	:	1
Classification of Ex-Service Contacts who attended the Dispensaries for the first time during 1923.	ulosis	Other Forms of Tuberculosis	:	:	1
tion of E	ry Tubero	rms of Tu	:	erculous	TOTAL
Classifica who atter	Pulmonary Tuberculosis	Other For	Suspects	Non-Tuberculous	T
ents r the	14	1	co	es	21
Pati s fo	:	:	:	:	
Ex-Service Patients: Dispensaries for the during 1923.	losis	erculosis	:	:	:
n of Estime du	fubercu	of Tub	:	lous	:
Classification of Ex-Service Patients who attended the Dispensaries for the first time during 1923.	Pulmonary Tuberculosis	Other Forms of Tuberculosis	Suspects	Non-Tuberculous	TOTAL

Table XI. sets out the immediate results of Institutional Treatment in the case of 12 ex-service men so treated. This figure again shows a decrease on that of the previous year.

TABLE XI.

SANATORIUM TREATMENT OF EX-SERVICE PATIENTS,

SHOWING IMMEDIATE RESULTS.

Sanatoria	Quiescent.	Much Improved.	No material Improve- ment.	Died in Sanatoria.	Still in Sanatoria.	Total
Rushden House	1	5			5	11
SHROPSHIRE ORTHOPÆDIC HOSPITAL (Surgical)	•••				1	1
TOTAL	1	5			6	12

# D. DEMPSTER,

Tuberculosis Officer.

### APPENDIX II.

# REPORT ON MATERNITY AND CHILD WELFARE WORK FOR THE YEAR 1923.

# (a) Inspection of Midwives.

The following inspections were made during the year :-

By the Superintendent of the Northamptonshire Nursing

Association ... ... 108

By the Lady Medical Officer ... 360 (Special 32, Routine 328)

Total ... 468

Of the total births in the County (3686) 2016, 54.7 per cent., were attended by midwives (as against 49 per cent. in 1920, 51 per cent. in 1921, and 51.9 per cent. in 1922). Of these births, 623 or 30.9 per cent. were attended by bonâ fide midwives.

The position as regards midwifery service was as follows:— Notified intention to practise ... 165 (Trained 145—9 County Council Scholars—others 20) In practice at end of 1923 ... ... 107 12 Left the County Died ... 32 ... Temporary Acted in emergency ... Ceased to practise ... 8 Names removed from Midwives Roll

In May, three cases were taken before the Central Midwives Board for offences of negligence. These having been investigated by the Board, the certificates of two of the midwives in question were cancelled, and action in respect of the third midwife was deferred pending further reports on the conduct of her practice at the end of three months and six months respectively. The name of this midwife has been removed from the Midwives Roll during the current year.

Puerperal Fever. Five cases were notified, and four others were reported from Northampton General Hospital. Three of the notified cases were midwives' cases, a doctor having delivered the first (forceps), the second having been attended by nurse throughout until the rise of temperature, and the third having had a torn perinaeum. In the first case no fault was found with nurse; in the second, there was failure to notify liability to be a source of infection; in the third case, the conduct of the midwife was reported to the Central Midwives Board, a report on her work having been asked for. Two cases recovered; the last died. The two doctors' cases both recovered.

Of the four cases reported from hospital, two died and two recovered. Nurse-midwives were concerned in all four—two midwifery (1 death, 1 recovery) and two maternity (1 death, 1 recovery). In addition to these, several cases of minor septic troubles directly following labour were seen with doctors under whose care they were.

It is extraordinarily difficult to assign a cause for the sepsis in most of these cases. Two were probably the result of complete rupture of the perinaeum with insufficient care of the consequent raw surfaces. One was apparently a toxaemia of pregnancy. An analysis of the cases gives the following information.

Prolonged labour (one a difficult transverse) occurred three times. Three had torn perinaeum; one showed slight albuminuria (?vaginal discharge—not a catheter specimen)

clearing up before labour, had a history of cystitis after the last labour and had violent Post-partum haemorrhage necessitating manual removal of the placenta by nurse before the doctor could arrive. One was normal throughout labour and ante-natally so far as the doctor concerned could discover and the same holds good for one nurse's case.

It is hoped that closer ante-natal supervision, with stricter attention to pyorrhoea, &c. will lead to a diminution in the number of these cases. To persuade a patient that a septic condition of the mouth can have any risks for herself at confinement or for her offspring during suckling is still a very difficult matter, but patience and an improved dental service (could this be had) should bear fruit. Expense is often given as the excuse for want of treatment, but when a mother will spend (as in a recent case) 25/- on each of two dolls, and cannot afford a guinea for a dentist, the only conclusion one can come to is that she does not realise the importance of dental treatment.

Many doctors seem still to be unaware of the arrangement whereby a special nurse can be supplied to a case of Puerperal Fever or a case of Ophthalmia Neonatorum. If a doctor makes a request for a special nurse, through the local Medical Officer of Health, the County Medical Officer of Health applies to the Northamptonshire Nursing Association for such provision under an agreement which has been in force for some years, and there has never been any delay in such provision.

OPHTHALMIA NEONATORUM. Fourteen cases of Ophthalmia Neonatorum were notified. Eleven of these were in midwives' practices. Ten made a good and rapid recovery (in several cases 3 days), one was under treatment for 3 months and nystagmus without opacity resulted. One, unnotified, was sent to hospital and now also suffers from nystagmus. Of the doctors' cases, one was still under treatment and two had recovered.

It will be seen that as regards the occurrence of Puerperal Fever, no advance appears to have been made. The figures for the last five years are herewith compared. They are as follows, for Ophthalmia Neonatorum and Puerperal Fever:—

Year	Ophthalmia Neonatorum.			uerperal Fever.
1919		17		1 mileon la limit
1920		27		5
1921		15		5
1922		20	i sili.	7 (including 2 reported from N'ton. General Hospital).
1923		14		9 (including 4 reported from N'ton. General Hospital).

In respect of Ophthalmia, the cases have been often of the slightest with rapid recovery, and few are missed through want of notification as proved by the condition of the children when visited subsequently. In this connection, the Kettering Urban Authority co-operates admirably in notifying anything found amiss by their Health Visitors.

The most serious aspect is that in no case have I been able to ascertain that the parents sought treatment, even where the source of infection could be clearly ascertained.

STILLBIRTHS. The midwives' annual report includes 68 still-births (3.37 per cent. of births attended).

FEEDING OF INFANTS. The figures for feeding during the puerperium are:

Of 1978 live infants, 21 died before feeding, the remaining 1957 were: Breast fed 96.2 per cent., partly breast and partly artificially fed 1.2 per cent., artificially fed 2.6 per cent.

The reasons for arti	ficial	feeding	during	g the	puerpe	rium
were given by the midw	rives	concerne	d as fo	llows:		
Insufficient (7) or no bre	east r	milk (4)			1	11
Mother refuses to feed						3
Mother going to work						3
Death of mother						2
Retracted nipples		•••				2
Eczema of breasts						1
Double Mastitis						1
Illnesses:—(Gastritis 1, and P.P.H. 1, mo advice 2, dislocation	other	not str	rong 2	doc	tor's	
breast 1)						9
						32
						-

Seven deaths of mothers took place in midwives' practices, a doctor being in attendance in each case.

Medical aid was summoned as follows:—
Mothers.

# PREGNANCY-

Abortion or threatened abortion	 	23
Albuminuria	 	3
Ante-partum haemorrhage	 	6
Varicose veins	 	3
Œdemia	 	4
Severe pains, 7th month	 	1
Sickness and Diarrhœa	 	1

41

11				
Labour-				
Ruptured perinæum			62	
Prolonged labour		/	89	
Abnormal presentation			10	
Post-partum hæmorrhage			5	
Rectal hæmorrhage and collapse			1	
Deformity			1	
Fits			3	
			171	
Lying-in-				
			12	
Rise of temperature	•••	•••		
Swelling and tenderness of breasts Abdominal tenderness			2 1	
			1	
White leg Offensive lochia				
		•••	1	
Bronchitis	•••	•••	2	
Chill on 7th day			1	
Hysterical condition of patient	•••	•••	2	
Exhaustion	•••	•••	3	
Unsatisfactory condition of patient		•••	1	
			00	
			26	200
Infants—				238
Inflamed and discharging eyes			36	
Feebleness			33	
Stillbirths			2	
Deformities			5	
Asphyxiated			2	
Persistent sickness			1	
Not sucking well			1	
Slight jaundice			1	
Skin eruptions			2	
Spina bifida			1	
			84	
			-	84

Mothers and Infants—		
(Mother) General debility, (Infant) inflamed		
eyes	1	
(Mother) Cough, (Infant) Congenital debility	1	
	2	
	-	2
MIDWIFE—Illness of, unable to attend patient		1
	-	
		325

Provision for cases outside midwifery areas was asked for from the Northamptonshire Nursing Association in three cases.

A new midwifery area was started at Mears Ashby in 1922, and three others, Gretton, Denton and Woodford Halse were added during 1923.

The Association of Inspectors of Midwives held their Annual Conference in May, to which the Lady Medical Officer was sent. A most useful revision of modern midwifery was gone through by means of lectures and demonstrations at various London Hospitals, and much helpful discussion took place.

# (b) Mental Defectives.

During the year 18 mental defectives were examined and reported on, four children were examined with a view to finding out whether or not they were mentally defective, and two visits of enquiry were paid. Forty-one cases were under supervision by Health Visitors and six-weekly reports on these were presented. Two cases were certified and removed to certified institutions, a Health Visitor being supplied to travel with one to her destination.

# (c) HEALTH VISITING.

From January to June, the health visiting was done by whole-time Health Visitors working directly under the Council

# Summarised Statement of the Health Visitors' Work during the Year 1923.

TABLE 1. DISTRICTS.

							D. KO.	iciozo.									
No. of Visits Paid to:	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.	No. 7.	No. 8.	No. 9.	No. 10.	No. 11.	No. 12.	Totals.	No. 7.	No. 12.	No. 13.	Totals.
Expectant Mothers first	10	11	8	23		- 9	1	11	1	52	17	19	162		***	69	69
Expectant Mothers sub- sequently	14	21	5	32		11	***	29	6	67	31	3	219			220	220
TOTALS	24	32	13	55		20	1	40	7	119	48	22	381			289	289
New Cases, 1st time New Cases, subsequently	150 589	197 1267	289 1173	297 1270	305 890	207 1354	74 165	194 961	182 634	223 999	285 1005	111 181	2464 10488	66 273	62 171	232 501	360 945
Previous Year cases on Cards (1922) 2847 (Brackley Area 178)	667	921	1263	1269	895	1204	421	812	528	986	1148	621	10735	162 709	241 1289	834 2733	1237 4731
Infants over 12 months Still-birth enquiries Visits to Infant Welfare	1459	1069	1131	1449	908	870	726	1620	1148	1663	1463	585	63	2	8	3	13
Centres Special Cases (under 1 yr.) Do. (over 1 yr.) Special Visits re Free Milk	* 2 2	17 5 1	4 2 1	13 13 6	59 2 	3	4	6 5	7 2 4	12 16	41 18 6		74 41				
or Medical Fees Social Work Mentally Defectives	3	48 18 22	49 6 26	9 4 22	12 8 28	 8	5 3 3	12 7 2	27 2 14	28 16 12	23 22 33 49	14  3 15	236 86 176 64	12	11 18	33	14 56 18
Totals	2889	3571	3901	4362	3119	3695	1403	3625	2548	3959	4099	1537	38708	1226	1804	4344	7374
Total Number of Visits	2913	3603	3914	4417	3119	3715	1404	3665	2555	4078	4147	1559	39089	1226	1804	4633	7663

<sup>\*</sup> No Centre.

TABLE 2.

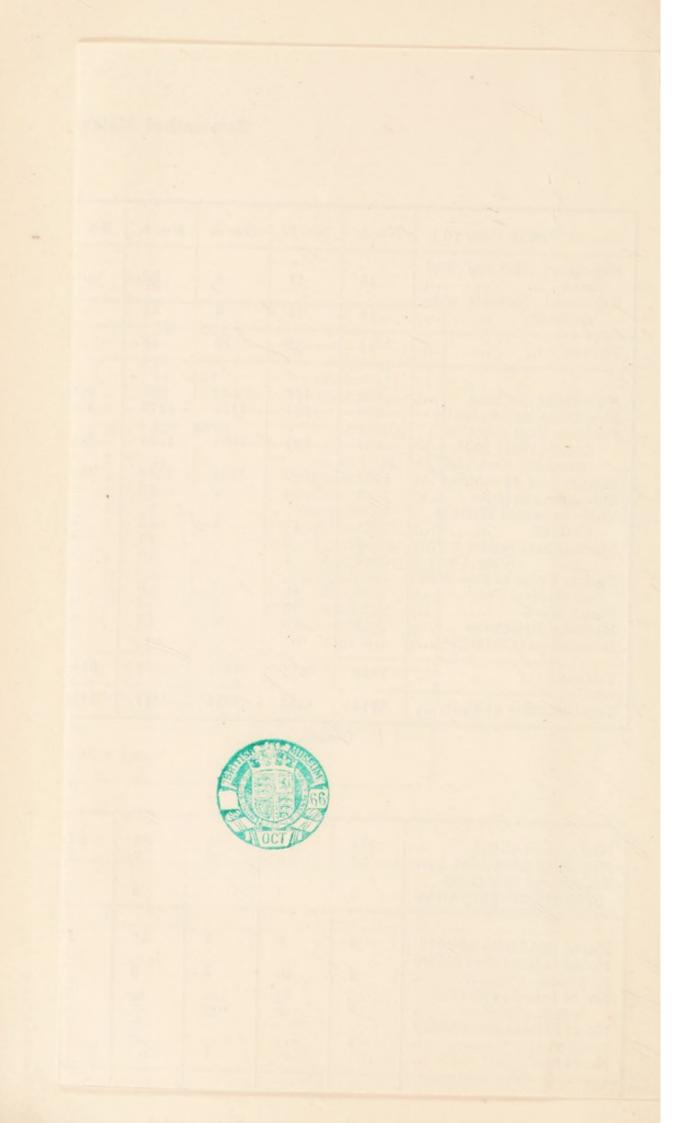
New cases notified New cases unnotified	137 29	137 78	213 29	312	313 22	191 11	68 13	180 17	158 33	180 32	285 23	123 2	2297 296	54 15	62 13	193 44	309 72
Transferred new cases (from other County areas)	6	3	8	5	2	11	1	15	2	26	19		103	3	3	10	16
No. of still-births notified	8	9	7	12	12	6	2	6	3	4	6	4	79	1	8	6	15
No. of Infants died before visited	4	10	3	6	7		1	2	.3	2	11	5	54	1	4	1	6
No. of Infants removed before visited	3	2		3	3			1	4	2	11	3	32	2	1	3	6
No. of Infants unnecessary to visit No. of ineffectual visits	7		1	6	14 1			5 4	1	7	11 3	2	57 10			5	10
No. of Women attended by:										00	89	19	864	24	20	89	133
Medical Practitioner Medical Practitioner and Midwife	25 52	105	43 78	96	133 28 144	153	37 15 22	31 39 116	69 62	92 40 81	82 107	24 68	517 920	9 33	16 26	30 113	55 172
Trained Midwife Untrained Midwife (bond	72	43	104	113				7 1	9	10	7		160				
Handy Woman  Illegitimate Births			-														
(included in above)	3	7	5	4	10	2		5	5	6	8	5	60	3	2	3	8

TABLE 3.

	Health of Mother.					Condition of Infants at Birth.				Cases re- to ti	ported se	cal ance d for	cal ance d for	under ar.	Ower
DISTRICTS.	Good	Fair	Bad	Dead	Totals.	Good.	Fair.	Weakly	Totals.	Local Sanitary Authority:	N.S.P.	Medical Attendance Advised for Infant,	Medical Attendance Advised for Mother.	Deaths under 1 Year.	Deaths over 1 Year
1. Oundle	163 214 238 184 166 52 151 151	26 30 19 46 106 35 21 39 29 49 41 12	 4 5 13 15 6  4 2 7 9		150 197 239 297 305 207 74 194 182 223 285 111	147 168 210 225 237 194 60 168 163 162 230 99	1 22 20 51 62 11 13 21 17 52 48 9	2 7 9 21 6 2 1 5 2 9 7 3	150 197 239 297 305 207 74 194 182 223 285 111	3 1 9 8  6 3 1 1 1 8 3	 2 1 4  	13 50 18 122 58 20  37 43 78 37 6	8 19 10 46 31 30 2 21 6 30 6	3 4 11 9 6 1  1 4 2 8 	2 1 2 2 8 1 1  4 1 3 2
TOTALS	1942	453	67	2	2464	2063	327	74	2464	44	8	482	211	49	27
7. †Market Harborough 12. †Towcester 13. Brackley	48	11 14 20			66 62 232	61 51 218	5 10 14	ï	66 62 232			14 12 15	9 1 6	1 2 8	 4
TOTALS	315	45			360	330	29	1	360		***	41	16	11	4

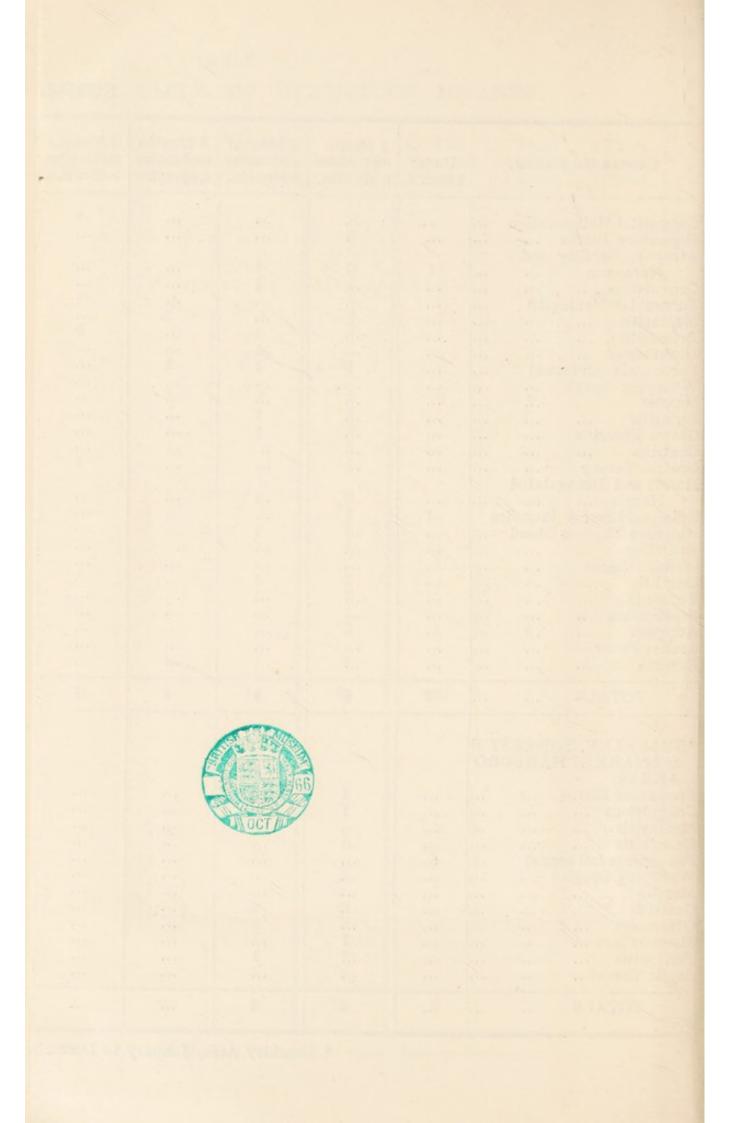
<sup>§</sup> From January to June.

<sup>†</sup> From July to December.



CAUSES OF DEATH,	Under 1 Month	1 Month and under 2 Months.		3 Months and under 4 Months.					Total Deaths under 1 Year.	1 Year and under 2 Years.	2 Years and under 3 Years,	3 Years and under 4 Years.	4 Years and under 5 Years.	Total Deaths over 1 and under 5 years.	Grand Total.	CAUSES OF DEATH.
Congenital Malformation Premature Births					2				2						2	Congenital Malformation Premature Births
Atrophy, Debility and		1		***	***		***		1	***	***	***	***	***	2	Atrophy, Debility and
Convulsions		- 1	1		***			ï	3 2	1				1	4 3	Marasmus Convulsions
Tubercular Meningitis Meningitis	0.000			***	1				1		1			1	2	Tubercular Meningitis
Bronchitis		***	1	1	3	ï	***	1	2 5	4		100	***	4	6	Meningitis Bronchitis
Diphtheria			***			***					1			i	1	Diphtheria
Pneumonia (all forms) Whooping Cough		3	1	1		1	1	4	11	5	1			6 2	17	Pneumonia (all forms)
Measles		***					2	1	3	1 3	1		***	4	7	Whooping Cough Measles
Enteritis	0.000		1	***			1	î	3				1	1	4	Enteritis
Gastritis	0.0000		2	***			···		2						2	Gastro-Enteritis Gastritis
Gastric Tetany					1				1		***			***	i	Gastric Tetany
Hernia and Strangulated Hernia							1	1	2							Hernia and Strangulated Hernia
Enlarged Liver & Jaundice	1	1				***			2		***				2	Enlarged Liver & Jaundice
Enlarged Thymus Gland			1						1	***				***	1	Enlarged Thymus Gland
Dentition		***	***			***	***	1		ï		***		1	11	Dentition Cœliac Disease
Cellulitis	4 1 00000		1						1				***	***	1	Cellulitis
Toxæmia	10000				***		ï	1	1				***		1	Toxæmia Septicæmia
Accident		2							2	1	2		***	3	5	Accident
Scarlet Fever			***						"	1				1	1	Scarlet Fever Eczema
									-					***	1	
TOTALS	. 2	8	9	2	7	2	8	11	49	19	7		1	27	76	TOTALS
*BRACKLEY, TOWCEST'F	1															
and MARKET HARBORO AREAS. Premature Births Convulsions Meningitis Bronchitis Preneumonia (all forms) Whooping Cough Measles Gastritis Ottorrhea Hæmorrhage Peritonitis Septic Throat		1 1 	   2 1			 1  	 1 1 		1 1 2 1 1 1 1 1	 1  2  1 				 1  2  	1 1 1 2 2 1 1 1 1 1 1 1	*BRACKLEY, TOWCEST'R & MARKET HARBORO' AREAS. Premature Births Convulsions Meningitis Bronchitis Pneumonia (all forms) Whooping Cough Measles Gastritis Ottorrhea Hæmorrhage Peritonitis Septic Throat

\* Brackley Area, January to December; Towcester and Market Harborough areas, July to December.



staff, except in the case of the Brackley Area where it was done by District Nurses. In June, two more areas were handed over to part-time nurses, namely Market Harborough and Towcester.

The supervision of the Brackley Area and the Inspection of Midwives were deputed to the Superintendent of the Northamptonshire Nursing Association up to 31st March, after which date all supervision again came under the County Council staff with the assistance of the Superintendent of the Northamptonshire Nursing Association.

FREE MILK. The sub-committee appointed to deal with this matter granted milk as follows:—

URBAN DISTR	ICTS.		RURAL DIST	ISTRICTS.				
		lbs.			lbs.			
	Pts.	(dried)		Pts.	(dried)			
Brackley Borough	28	-	Brackley	8				
Daventry ,,	126	-	Brixworth	130	2 24			
Higham Ferrers,,	12	_	Crick	26	1 -			
Burton Latimer	448	-	Daventry	60	5 30			
Desborough	_	-	Easton-on-the-I	Hill 35	2 -			
Finedon	1089	-	Gretton	8	4 -			
Irthlingborough	288	-	Hardingstone	135	6 24			
Oundle	-	-	Kettering	42	6 18			
Raunds	826	12	Middleton Chen	ey 2	8 –			
Rothwell	372	-	Northampton	67	1 89			
Rushden	288	24	Oundle	36	5 12			
Wellingborough	378	-	Oxendon	215	2 6			
			Potterspury	113	2 -			
				1389	9 -			
			Towcester	1449	9 -			
			Wellingborough	94	6 -			
	-							
9	8855	36		9642	2 203-			

STILLBIRTHS. Stillbirths were reported on by the Health Visitors in 76 cases and from the information so obtained the following conclusions are arrived at. In 32 cases the death appeared to have been intra-natal, the subjoined abnormalities having presented themselves:—

Prolonged and difficul	t lab	our	 	6
Placenta praevia			 	2
Malpresentations			 	8
Malformation of foetu	S		 	2
Deformed pelvis			 	2
Hydramnios			 	1
Large child			 	2
Eclampsia			 	2
Infant, hæmorrhage o	f bra	in	 	1
Cæsarian section			 	2
Forceps delivery			 	1
Strangulated by cord			 	1
Unknown			 	2
				32
				ALC: UNKNOWN

In 24 cases the death appeared not to have been intranatal. In 20 cases the death was unaccountable.

OCCUPATION. Sixty-four of the seventy-six cases occurred among women who did their own housework, nine among factory workers, two among charwomen, and one was in domestic service. It will be seen that women's labour does not come into this question at all, but reference to the table shows that ante-natal care has a prospect of reducing the number of these stillbirths.

Six of the above cases were illegitimate.

### INFANT WELFARE CENTRES.

Name of Centre.	Average No. of infants attending per session.			of I	rerage la consultions per Doctor's tendance	ta- er s	Attenda by Doc	Sessions,		
Burton Latin	ner	17			5		9		20	
Daventry .		20			13		12		24	
Desborough .		10			10		11		23	
Irchester		20			3		12		20	
Long Buckby	7	16			6		12		16	
Rothwell .		17			7		12		23	
Wellingborou	gh	23			5		16		39	

Thrapston Centre was closed in February.

BOARDED OUT CHILDREN. The visitation of boarded-out children for the Potterspury Guardians was, with the consent of the Guardians, handed over to the part-time nurses; that for the Daventry Guardians is still done by the Health Visitor living at Daventry, who attends meetings of the Guardians when required and makes reports direct.

FEEDING OF INFANTS. The percentages of infants wholly or partly breast fed and wholly artificially fed are as follows:—

	Breast fed.	Artificially fed.
Health Visitors' areas	88.3 per cent.	11.7 per cent.
Nurse-midwives' areas	87.2 ,, ,,	12.8 ,, ,,

The partly breast fed infant may have only an occasional biscuit or rusk, or may have a supplementary feed after each breast feed, but its diet is chiefly breast milk. In the case of supplementing breast feeding by means of an artificial feed just after the breast feed, this is used as a temporary measure if the flow of milk is, or is supposed to be, too poor. If it works successfully, the flow is soon re-established: if not,

artificial feeding is soon complete. In either case it is a transitory arrangement.

# Hand feeding by :-

Boat shaped bottles	 	 	892
Medicine bottles	 	 	34
Cup and Spoon	 	 	35
Long tubed bottles	 	 	7

Course of Lectures. In March, the County Council arranged with the Central Council for Infant and Child Welfare to organise a course of lectures on subjects connected with infant welfare. The Borough Council lent a hall and paid their health visitors' expenses for the course, the Northamptonshire Nursing Association paid for their nurses' tickets and travelling expenses to the lectures, the Kettering Urban District Council paid their health visitors' expenses, and the County Council organised locally and gave their health visitors permission to attend. The course was a great success and paid its way.



LILA S. GREIG,

Lady Medical Officer.

	ARL	

CAPER OF DEATH.    A				. 3	URBAN	DISTRIC	OTS.																			EURAL	DISTRIC	ITS.											
AL CAMES    18   71   18   73   74   75   75   75   75   75   75   75	CAUSES OF DEATH.	Kettering U.D.	Brackley M.B.	Davestry M.B.	Deshorough U.D.	Finedon U.D.	Higham Ferrers M.B.		berough U.D.	Oundle U.D.	Raugels U.D.	Rothwell U.D.		Wellingboro'	Barton	Latimer U.D.	Total	Beataley R.D.	Brixworth R.D.	Celek R.D.	Davestry R.D.	Easton on	Control	R.D.	Harfing- stone R.D.	Kettering R.D.	Middleton Chency R.D.	Northapts, R.D.	Oundle R.D. (part of)	Osmadon R.D.	Pottenspery R.D.	Thrapaton	Tourseles	R.D.	Wellingboro' R.D.	Total R.D's.			
Section   Process   Proc																														M. 7	м. у	. М.	F. M.	r.	M. F.	м. г.			
Section   Sect	ALL CAUSES	181 171	18 24	27 23	10 1	7 23 2	11 14	22 21	28	17 13	21 25	17 19	65 6	6 111 1	07 4	8 53	16 546	51 38	65 54	13 3	82 9	3 7	11 10	8 4	1 41	59 18	14 21	20 44	56 4	31 2	26 2	56	61 66	54	87 57	100 693			
Printerprophility	2 Smill you	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			3 4 3	1 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 4 5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		4 12	5 11 15 2 1 1 2 2 1 1 1 2 2 1 1 1 2 2 1 1 1 2 2 1 1 1 2 1	3 1 1 2 16 2 17 4 7 1	1 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 4 1 3 2 2 2 2 1 4 2 2 1 1 4 1 3 2 2 2 1 1 4 1 2 2 1 1 1 1 1 1 1 1 1 1 1	1	2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		6 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1		2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 5 1 1 2 6 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	3	# 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	4 6 8 1 7 8 9 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1	11 55 11 67 77 88 11 11 11 11 11 11 11 11 11 11 11 11	2 1 7 4 1 5 4 1 6 7 6 7 1 1 2 1 1 2 3 6 4 5 6 4 5 7 6 7 1 1 1 1 2 3 6 4 5 6	6 3 1 1 4 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Description of findings (Total 2 2 5 5 1 1 2 2 5 5 1 1 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Policencephalitis								= =			= =	-				-	-								2			-	-									
Engine   Processing   Process	Deaths of Infants { Total   Illegitimate	1 1 1	2	3 5 -	1	1 6	2		-			1		2			4 4	1 111						200	1 1	1			1	38 9	-		AL C.	77		4 2			
Disputation   12   11   17   17   18   18   18   18   18	TOTAL BERTHR	283 232	19 2	2 34 2	3 31 :	22 45	41 28	26 3	34	11 13	92 20	22 34	199 11	6 166 1	76 3	11 8	13 765	54 56	101 90	22 1	s 161 12	1 13	19 20	7 8	3 55	94 97	18 22	23 65	41 6	24 2	79 (	100	92 99	75	05 500	012040			
PRICEATION 20,340 2,353 3,515 4,250 4,120 2,744 4,506 2,672 3,872 4,49 13,790 20,710 4 Working 5,700 4,885 11,790 2,400 Nate 1,400 1	Legitimate	13 11	19 2	2 2	2 30	2 2	9 - D8	25 8	1 1		1	2		1 7	8 -				3 1	1			1	1 1	0 2	4 2	3 3	1 2	2 1	1	2 .	4	1 5	3	3 2				
after change = 5,476. [191,200 87,500] before change = 2,840 [113,424 at [123,005 at [13,424 at [123,005 at [	POSCLATION	30,340	2,35	3,61	• 31	to Births Mid-	and Dear	the are t	those regi	patered is	a the U.D.	). from th	e date of	its cons	titution.	Afte	28,706 er Be	dore ange	13,790	2,400	For Dea Rate	1,4		be Eirthe	and De Mid-ye	aths each	ude those tion adju ,, befo	r registers isted for v	d in the t vorking I -12,840	ransferre	area from	n the de	yte of th		pe.	Before 116 After	Change S Change S Change N	116,41	11

CAUSES OF DEATH IN ADMINISTRATIVE AREAS, 1923.

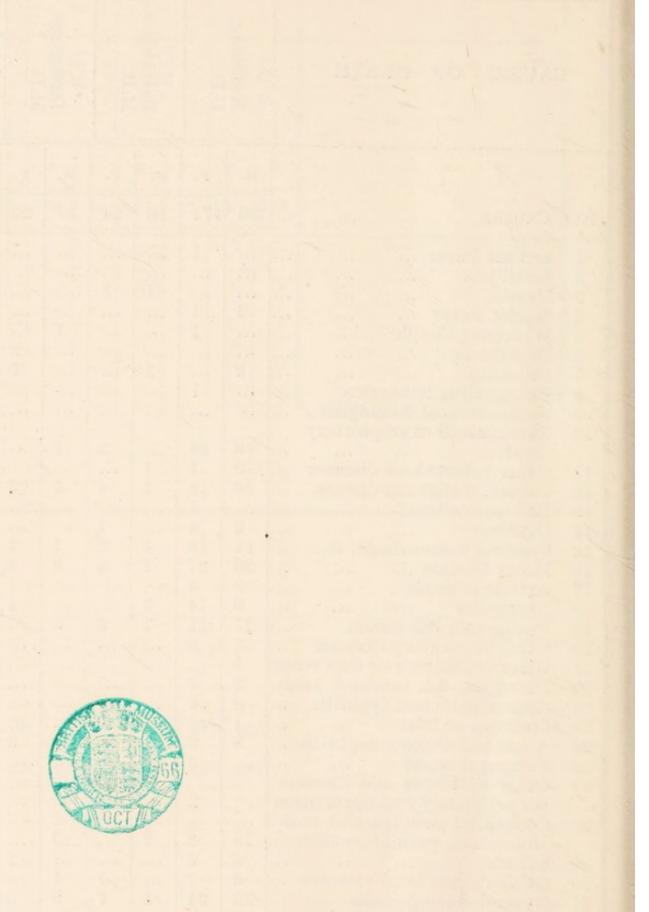


TABLE II.

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON, 1923.

CAUSES OF DEATH.	Sex.			AGGR	EGATE	OF U	RBAN	DISTR	ICTS.			5		AGG	REGAT	E OF	BURAI	, DIST	RICTS.		
		All	0-	1-	2-	5	15	25-	45-	65-	75	All	0	1	2-	5-	15-	25-	45-	65-	75_
ANY CANCES	M	536	68	11	3	14	26	56	131	120	107	700	57	7	9	20	21	60	153	155	218
ALL CAUSES	F	546	49	10	11	12	37	65	113	101	148	693	51	0	15	8	29	51	140	149	244
1 Enterio Forms	м		***	144	000	101	***	-	100	-000	***	2			***	-		1	1	-	147
1 Enteric Fever	P	1	***	***		***		1	-		***	212	***	***		***	- 0.00			***	***
2 Small-pox	M	***	***	***	***	***	-	***	***			***	***	***		***			***	100	***
	F	***	***	***		***	***		100		***		***					***	***	214	***
3 Measles	M	1		1	***	191	***		***		222	6	1	2	1	2			***	***	200
	F	4	311	3	1	***		100	***	***	101	3	1		1	1		100		***	
4 Scarlet Fever	M	1		***		1	***	***			***	1	***			1	***	***	200	***	-
-	F	3	***	***	3	***	***	1	1111		***	1		1			***		***	0-1	215
5 Whooping Cough	Ж	2	1	1	***		***	***				**	***	***	-				***	***	
	F	2	1	111	1	*11		***				4	2	1	1			210	201	***	400
6 Diphtheria	M	***	***			*10	***	***		***	364	3		***	1	2	1				
-	F	2 14	344	100	2	***	276	3	3	5	1	11	***	414	-	-	-01	1	4	3	3
7 Influenza	F	2	***	***		***	***		1		1	10					1	2		1	6
	M	2							2		***					-			***	201	
8 Encephalitis lethargica	F	1				1				***											
	M	-		***		411	101	- 111					141		***				244	164	
9 Meningococcal meningitis	P	1	1						***	-	-	1	100			***	1			***	
	M	46		***	***	2	14	14	14	2	-	36		-	110	***	5	19	10	1	1
10 Tuberculosis of respiratory system	P	45		***	***	3	24	10	7	1		32			***		14	12	5	***	1
	М	8		1		2	1	3	1		200	12	1	1	1	4	2	3		***	
11 Other Tuberculous Diseases	F	12	414	1	2	4	4	1	***	444	***	6	1	***	1	***	2	1	1	111	***
10 Canan Malimont	M	60	444	***			2	1	31	20	6	81	101	***	-101		1	6	200	24	20
12 Cancer, Malignant Disease	F	64	***	***			1	5	28	17	13	89		***	***	***	***	6	37	27	19
13 Rheumatic Fever	М	1-1	***	444	100	***			***		***	1	***	***	144	101	1	***	***	444	
25 Accountance over	F	1	***			100		1	7000	212	-111	2	-00	100			1	***		***	1
14 Diabetes	M	3			***				2	1	***	6	166				***	***	3	3	
	F	14	***	111	***			1	6	3	4	3		***	111	***	7110	****	1	2	
15 Cerebral Hamorr-	M	34		***		***	***	2	7	9	16	42	1	***	+		***	***	4	17	19
hage, &c.	P	37	***	111		111	***		9	10	18	73	***	241	***	***		1	22	26	24
16 Heart Disease	M	71		***	***	1	***	8	17	25	20	83	***	***	***	1	2	2	26	29	22
	F	92	***	- 111		1	2	13	19	34	23	29	***		100	***	1	5	23	81	18
17 Arterio-sclerosis	M	13	1					***	3	5		16		***	410		***		1	7	
	M	30	2				***	2	2	9	15	47	1		1		111	1	5	15	24
18 Bronchitis		31	1	100					5	9	16	58	5	1			***	2	9	13	28
-	M	28	7	4		1	1	3	5	4	3	36	5	3	111	2	3	8	0	8	1
19 Pneumonia (all forms		31	11	3	1	100	1	2	4	40	5	20	1	1	3		5	2	4	3	1
	34	8	1	1	200			1	3	1	1	7	***		1	444			2	2	2
20 Other Respiratory Diseases	F	5			***	***		***	1	1	3	6			212		414		2	***	4
	м	4					1	1	2	100	***	7		***	***		111	1	5	1	
21 Ulcer of Stomach or Duodenum	F	2	100			443		1	1	111	100	***	***		111	410		-	4-1	111	
	M	9	6		1				2	700		7	4		***	***	-		144	1	2
22 Diarrhova, &c	F	7	5	1	***	***		***		***	1	18	6	***	1	***	1	1	2	1	1
23 Appendicitis and	M	7	+++			2		. 2	3		244	3	***		***	1	101	244	2	141	444
Typhlitis	F	2				-	***	***	2		241	5	*****		- 190	1	1	1	- 1	1	
24 Cirrhosis of Liver	M	4			***		***		2	2	100	2	****		***	***	1	1			-
	F		***						-	171	1-1	1	101	***		101	201			1	101
25 Acute and Chronic	м	13	***	-	***		***	2	2	7	2	14	***		***			2	6	3	4
Nephritis	F	12		***	***			2	2	2	6	25		111	1	1	1		6	11	5
26 Puerperal Sepsis	M	***	***	***		***			631	210					611	100					***
	F	5	***	- 410	-01	201	2	3			***	1			***	201	***	1	***	144	712
27 Other Accidents and Diseases of Preg-	M		418		***		-			***		-	***	***	***			-	***	441	200
nancy & Parterition		8	40	***		***	1	7	-11		***	7 22		100		***	***	7		245	***
28 Congenital Debility and Malformation,	M	40	40			100		100				32	31			1			****	200	***
premature birth	F	23	23	+++	-		***	3	5	-	100	17	22	221		***	***				711
29 Suicide	M	9				***	***	11/1/3	3	1		17	***					5	7	2	3
-	-	5		***	-111	2	3	5	3	2	1	28	1		2	4	2	4	10	5	191
30 Other Deaths from Violence	M F	17	1	-110	1	1		3	4	1	5	16	2		1	2		1		1	9
Violence	M	107	10	2	-	3	4	5	17	26	40	181	12	1	2	2	3	8	22	34	19
31 Other defined Disease		101	7	2	1	1	2	11	17	13	47	173	11	2	5	1	1	7	20	23	103
-	M	101	-	1				1	5	3		6	144	-					5	1	1113
32 Causes III-defined or Unknown	P	5			111	1		2	2		100	5					***	1	3	1	1
Unknown	1	-	***	101	-		1		100		1		1	1 7/2	1	1	1138	10	1 "	1	***

JUV	1							
7 7						g TA		
								ATTARA EO EREUAD
-34	4.2							
181			. 8	VIII.				
BII								ALL CATBES
* 4.4		***				***		
***								1 Enterior Fever
***								
								2 Small-pox
***								
***							34	A Schill Proper
			A	Ta Maria				
			M		1			
				CT	<b>V</b>			
								and a second second

		URBAN DISTRICTS.													RURAL DISTRICTS.																	
DISEASES.	Brackley (Borough)	Daventry (Borough)	Higham Ferrers (Boro')	Burton Latimer	Desborough	Finedon	Irthlingborough	Kettering	Oundle	Raunds	Rothwell	Rushden	Wellingborough	Totals for Combined Urban Districts.	Brackley	Brixworth	Crick	Daventry	Easton-on-the-Hill	Gretton	Hardingstone	Kettering	Middleton Cheney	Northampton	Oundle	Oxendon	Potterspury	Thrapston	Towcester	Wellingborough	Totals for Combined Rural Districts.	Totals for Administrative
*Diphtheria (including Membranous Croup)  *Erysipelas Ophthalmia Neonatorum Cerebro-Spinal Fever Acute Poliomyelitis Encephalitis Lethargica  *Enteric Fever	1 1	1 2	1	    2	88 1 3 2 1 4 4 3	7 1 1      15	23 9 1   1  9 2 4	270  4 15 3 3 1 30 5 15	 1    2	2  2   1  4 6 8	102	16 4 11 1    27 6 15	155 111 4 1  1  27 2 10	665 23 45 8 1  5 4 2 136 27 67	2 1 5 2	13 7 4   3  18 1 12	1 1 1	39 17 2 2 1 9 2 17		   	48 6 1 1    7 1 10	68 8 5 1  1 1 16  4	 1   	10 3    8 1 13 13	4      3  1	11  1   4 2	56 5 2 12	9 34 1 3 5 3 2	2 5 1   2  7 3 13	40 1 5  1  1  11 1 3	301 82 21 6 1 1 1 24 3 103 15 92	960 100 60 14 23 43 45 150
Totals	4	10	9	3	106	26	49	346	3	23	112	80	212	983	10	58	3	89	7	1	74	104	2	49	8	18	75	57	33	62	650	1,6

<sup>\*</sup> The notifications shewn in respect of these diseases are as furnished by the Registrar-General; the remaining notifications shewn on the table are compiled from the weekly Returns of the District Medical Officers of Health.

