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BOROUGH OF ROYAL LEAMINGTON SPA



ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR THE YEAR 1931



W. L. GOLDIE, F.R.C.S., D.P.H.



COURIER PRESS, LEAMINGTON SPA



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BOROUGH OF ROYAL LEAMINGTON SPA.



HEALTH COMMITTEE.

Mr. Alderman MASON, J.P. (Chairman).

The MAYOR (Mr. Alderman R. F. BURY, M.R.C.S., L.R.C.P.

Mr. Alderman BAKER.

„ „ FLAVEL, J.P.

„ Councillor ANDREW.

„ „ DAVIS.

„ „ DURHAM.

„ „ HUNT.

„ „ JOHNSTON.

„ „ W. E. JONES.

„ „ Rev. J. A. MURRAY.

Miss „ SARGEAUNT.

MATERNITY AND CHILD WELFARE COMMITTEE.

Mr. Alderman MASON (Chairman).

The MAYOR.

Mr. Alderman FLAVEL.

„ Councillor HUNT.

Mrs. „ RICE.

Miss „ SARGEAUNT.

Mrs. ATKINSON.

„ GOODWAY.

„ WILLINGTON.

„ OLIVE.

PUBLIC HEALTH OFFICERS OF THE AUTHORITY.

(a).—MEDICAL. 1. Whole Time :

Medical Officer of Health, School Medical Officer, & Bacteriologist.

W. L. GOLDIE, F.R.C.S., D.P.H.

2. Part Time :

On Staff of Warneford Hospital :

Consulting Obstetric Surgeon : G. G. ALDERSON, F.R.C.S.

Surgeon for Diseases of Ear, Nose, and Throat :

F. W. SYDENHAM, M.D., F.R.C.S., resigned Sept., 1931.

J. IVOR GRIFFITHS, F.R.C.S., appointed Sept., 1931.

Ophthalmic Surgeon :

E. LL. HOWELL JONES, M.R.C.S., L.R.C.P.

Surgeon in Charge of X-Ray Department :

W. EDMUND JONES, M.R.C.S., L.R.C.P.

Dental Surgeon : LESLIE E. HANSON, L.D.S.

(b).—OTHERS. 1. Whole Time.

Sanitary Inspectors :

G. H. HAMMOND.*|| A. J. SMITH.*

*Inspector of Weights and Measures and Inspector
under the Shops Acts :*

J. H. BOOTH.

Health Visitors :

Miss L. NORMINGTON†‡¶

Whole Time,

(Half Time) Miss C. RAMSAY§‡¶

Clerk : Miss W. WEBB.

2. Part Time :

Public Analysts :

A. BOSTOCK HILL, M.D., D.P.H.

W. T. RIGBY, F.I.C.

Veterinary Inspector : E. RINGER, M.R.C.V.S.

* Inspector's Certificate of Royal Sanitary Institute.

† Health Visitor's Certificate of Royal Sanitary Institute.

|| Certificate of Royal Sanitary Institute for Inspecting Meat and other Foods.

¶ Three Years General Trained Nurse.

‡ Certificate of the Central Midwives' Board.

§ Health Visitor's Probation Certificate, University of Edinburgh.

Public Health Department,
Hamilton House,
Leamington Spa,
30th May, 1932.

LADIES AND GENTLEMEN,

I beg to herewith submit to you the Report of the Public Health Department for 1931.

There has been a small natural decrease of the population, i.e., excess of deaths over births of 54. The preliminary report of the Census of 1931 showed the town as having a population of 29,662, an increase of 1,102 over the figure for the previous Census.

The Registrar-General, however, reduced this to 29,490 as the estimated figure for the middle of 1931.

The birth rate of 13.0 per thousand is the lowest that has been recorded.

The Ministry of Health in their circular as to the contents of the Annual Report for 1931, allow certain information under the general provisions of health services that were given in detail last year, to be omitted in this report.

For reasons of economy advantage has been taken of this permission.

None of the infectious diseases were particularly prevalent during the year. The only notifiable disease that showed any marked increase was Pneumonia, of which the number notified was larger than in any year since 1922.

The Council have erected during the course of the year 120 houses on the Shrubland Hall Estate, and 40 more have been built by private enterprise. A start also has been made on 54 houses on the Windmill Estate by Leamington Slum Clearance.

In conclusion, I should like to express my indebtedness to all the officials of the Corporation, and especially to my own colleagues in this Department.

Great assistance has also been received from the staff of the Warneford Hospital, and from the Tuberculosis Officer.

I am,

Your obedient servant,

W. L. GOLDIE.

VITAL STATISTICS FOR THE YEAR 1931.

Estimated Population, middle of 1931 ...	...	29,490	
Natural Decrease of Population, 1931 ...	...	54	
Birth-rate ...	...	13.0	per 1,000
Death-rate (Crude) ...	...	14.8	„
Death-rate (corrected for Age and Sex Constitution) ...	...	10.87	„
Infantile Mortality, per 1,000 Births ...	...	54.5	„
Zymotic Death-rate ...	...	0.03	per 1,000
Pulmonary Tuberculosis Death-rate ...	...	0.54	„
Other Tuberculosis Death-rate ...	...	0.10	„
Cancer Death-rate ...	...	1.49	„
Average Age at Death ...	...	61	years
Density of Population per Acre ...	...	10.47	

STATISTICS AND SOCIAL CONDITIONS OF THE BOROUGH.

Area (in acres)	2,816
Population (Census, 1931 Preliminary Report)	29,662
„ Estimated middle of 1931	29,490
Number of Inhabited Houses, 1921	6,814
„ „ „ 1931 (according to Rate Books	7,710
Number of Private Families (Census, 1921) ...	7,482
Rateable Value	£266,894
Sum represented by a penny rate ...	£1,059 14s. 8d.

The Borough of Royal Leamington Spa is situated on the adjacent slopes of two hills, between which runs the river Leam. Generally speaking, the sub-soil is porous and is composed of Sand and Gravel; there is Clay in places.

The Climate is equable and well suited for the purpose of a residential town and Spa, the prevailing wind being South-West. Further information as to the Meteorological Conditions is given at the end of this Report.

The town itself, especially the more modern part, is well planned and laid out, the numerous Forest Trees and Pleasure Grounds entitle it to the eminent position to which it has attained amongst Inland Watering places.

There are few industries in the Borough; in fact, apart from three Factories, the population is mainly concerned in supplying the wants of Residents or Visitors. Roughly speaking, one may divide the population into the following classes:—

(1) Those who reside in the town because of its natural advantages, and who are in a position to reside in any other town should they consider it more desirable.

(2) Those who reside in Leamington Spa and travel daily to the neighbouring industrial centres of Coventry and Birmingham. The number of these has been increased very considerably during recent years, and they influence to a serious extent the problem of house shortage.

(3) Those who supply the wants of Inhabitants and Visitors to the Spa.

(4) Visitors who come to the Spa in search of health. The number of these fluctuates according to the time of the year, being greatest in the Spring and Autumn.

Spa treatment is necessarily somewhat costly and in a great measure restricted to people in comfortable circumstances. The actual treatment probably does not take up more than a couple of hours a day. Undoubtedly, it can be carried out as efficiently and effectively in this country as it can be abroad.

Unfortunately the restrictions placed by legislation on the ordinary comforts and amusements of the individual do not tend to induce people to make use of the Spas of their own country. The number of patients who received various forms of treatment at the Pump Room Baths was approximately the same as in 1930.

The Swimming Baths were well patronized although there was a decrease in the number of bathers due probably entirely to the weather conditions obtaining during last summer.

The turnstile figures for the last five seasons, which last from May to September in each year, are as follows:—

1927	...	38,767
1928	...	59,714
1929	...	73,369
1930	...	85,868
1931	...	79,535

EXTRACT FROM VITAL STATISTICS OF YEAR.

		Total.		Males.		Females.
Births—Legitimate	...	360	...	193	...	167
Illegitimate	...	25	...	10	...	15
Birth-rate	...	13.0				
Deaths	...	439	...	197	...	242
Death-rate	...	14.8				
Number of Women dying in or in consequence of Child-Birth—						
From Sepsis	...	...	...	...	...	—
From other Causes	...	...	...	...	...	3



Deaths of Infants under 1 year of age per 1000 Births—

Legitimate	...	...	...	...	...	52.7
Illegitimate	...	...	...	...	...	80.0
Total	...	...	...	...	...	54.5
Deaths from Measles (all ages)	...	...	...	...	—	
Deaths from Whooping Cough (all ages)	...	...	...	...	—	
Deaths from Diarrhœa (under 2 years)	...	...	...	...	1.0	

POPULATION.

The Natural decrease of population, expressed by the difference between the number of Births and Deaths, was 54. The population as estimated by the Registrar-General was 29,490, for the middle of 1931.

The Census Returns since 1851 are as follows:—

1851	...	15,723
1861	...	17,402
1871	...	20,917
1881	...	22,976
1891	...	26,930
1901	...	26,888
1911	...	26,713
1921	...	28,560
1931	...	29,662

BIRTHS.

385 Births (decrease of 29) were registered during 1931, and their distribution as to Wards is indicated in the following Table. The Birth-rate for 1931 was 13.0 per 1,000. There were 203 Males and 182 Females born, being in the proportion of 111 Males to 100 Females.

Table I.

WARDS.	Births.	Birth-Rates.	Estimated Population at Middle of Year.
North-East	80	11.7	6,800
South-East	143	15.1	9,430
West	106	13.1	8,084
Milverton and Lillington	56	10.8	5,176
External	70	—	—
	455	13.0	29,490

ILLEGITIMATE BIRTHS.

25 Illegitimate Births were registered during the year. This figure and the corresponding rates are compared with those for previous 10 years:—

Year.	All Births.	Illegitimate Births.	Illegitimate Birth-Rate.	Percentage of all Births.
1922 -	517	36	1.25	6.9
1923 -	469	21	.72	4.4
1924 -	452	33	1.12	7.3
1925 -	433	20	.68	4.6
1926 -	410	24	.79	5.8
1927 -	408	25	.83	6.1
1928 -	421	33	1.10	7.8
1929 -	394	32	1.08	8.1
1930 -	414	22	0.74	5.3
1931 -	385	25	0.84	6.4

MARRIAGES.

The number of Marriages during the year was 187. This includes all marriages in the Churches and all marriages in the Chapels having an authorised parson; but with regard to marriages registered by the Registrar, only including those where one of the contracting parties resided in Leamington. If we could claim them all, the marriage rate would be 6.3 per 1,000 living.

DEATHS.

The number of Deaths registered in this district during 1931 was 477. Of these, 115 were deaths of non-residents. On the other hand, 77 deaths of persons belonging to the Borough were registered elsewhere. The figures thus corrected, the nett number of deaths belonging to the Borough was 439, giving a Death-rate of 14.8 per 1,000.

The necessity for the correction of the Death-rate according to the age and sex constitution of the population is a matter of some importance. The Registrar-General has accordingly, calculated a "Standardizing Factor" based on the census of 1921 for each Urban and Rural District with a population of over 10,000. The factor in Leamington is .762 which gives for the Town a corrected Death-rate of 10.87.

CAUSES OF DEATH IN LEAMINGTON SPA IN 1931.

(From General Register Office, Somerset House).

Causes of Death.					Males.	Females.
All Causes	...	...	...	...	197	242
1 Typhoid and Paratyphoid Fevers	...	...	...	...	—	—
2 Measles	...	...	...	...	—	—
3 Scarlet Fever	...	...	...	...	—	—
4 Whooping Cough	...	...	...	...	—	—
5 Diphtheria	...	...	...	...	—	—
6 Influenza	...	...	...	...	3	5
7 Encephalitis Lethargica	...	...	...	...	3	—
8 Cerebro-Spinal Fever	...	...	...	...	1	—
9 Tuberculosis of Respiratory System	...	...	...	...	9	7
10 Other Tuberculous Diseases	...	...	...	...	2	1
11 Syphilis	...	...	...	...	1	1
12 General Paralysis of the Insane (Tabes Dorsalis)	...	...	...	...	—	—
13 Cancer, Malignant Disease	...	...	...	...	20	24
14 Diabetes	...	...	...	...	4	1
15 Cerebral Haemorrhage, etc.	...	...	...	...	8	18
16 Heart Disease	...	...	...	...	38	79
17 Aneurysm	...	...	...	...	—	—

Causes of Death.					Males.	Females.
18	Other Circulatory Diseases	...	...	...	10	8
19	Bronchitis	...	...	...	6	10
20	Pneumonia, all forms	...	...	...	24	22
21	Other Respiratory Diseases	...	...	...	1	3
22	Peptic Ulcer	...	...	...	2	—
23	Diarrhœa, etc. (under 2 years)	...	...	...	—	1
24	Appendicitis and Typhlitis	...	...	...	—	1
25	Cirrhosis of Liver	...	...	...	—	—
26	Other Diseases of Liver	...	...	...	2	2
27	Other Digestive Diseases	...	...	...	5	4
28	Acute and Chronic Nephritis	...	...	...	11	12
29	Puerperal Sepsis	...	...	...	—	—
30	Other Puerperal Causes	...	...	...	—	3
31	Congenital Debility, Premature Birth, Malformations, etc.	...	...	...	11	3
32	Senility	...	...	...	9	15
33	Suicide	...	...	...	6	2
34	Other Violence	...	...	...	10	4
35	Other defined Diseases	...	...	...	11	15
36	Causes ill-defined or unknown	...	...	...	—	1

The average age at death was 61.

The 261 deaths of persons over 65 years may, with interest, be analysed as follows:—

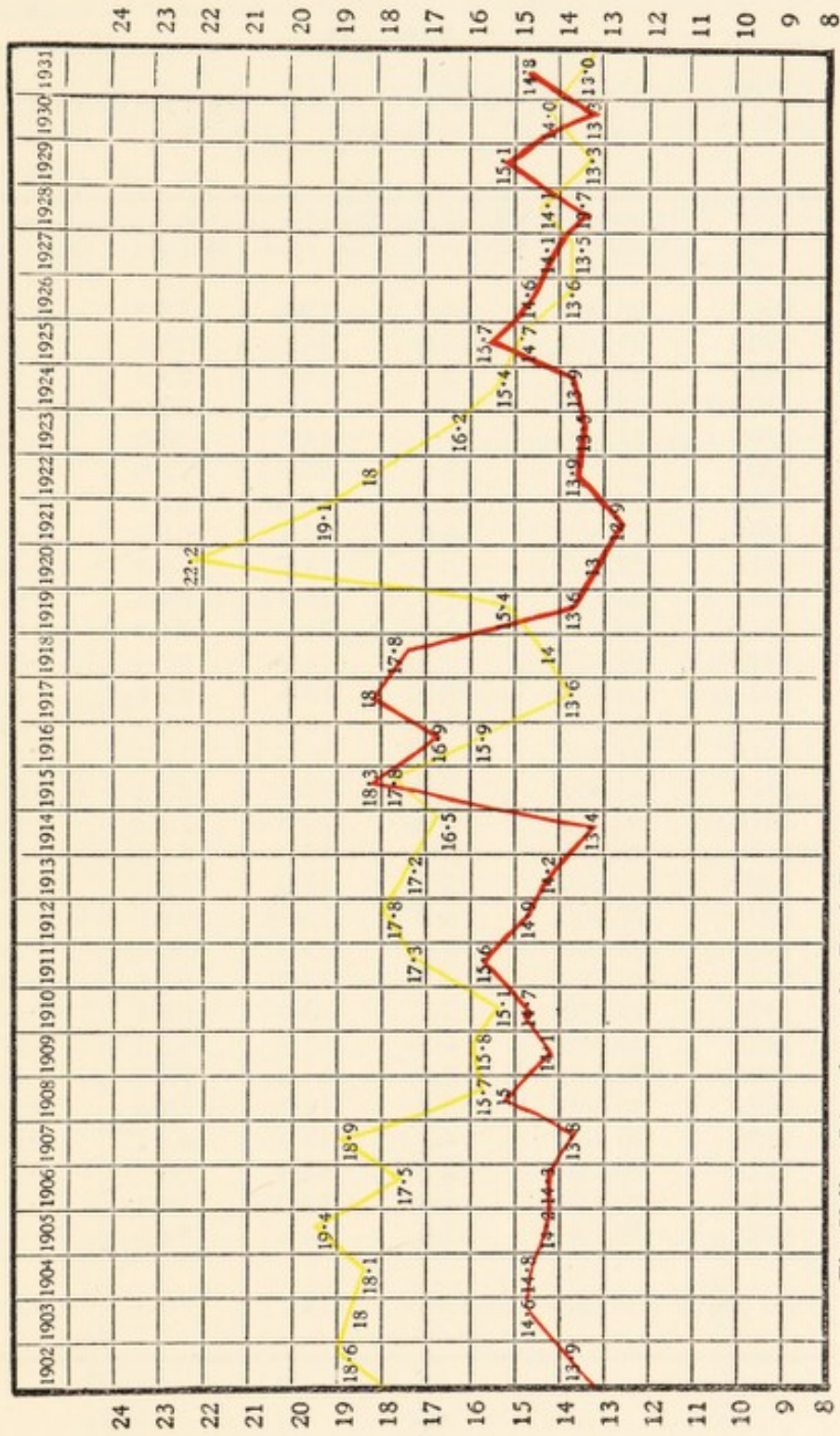
Age at Death : 65—75.	75—85.	85 and over.
100	126	35

INQUESTS.

51 Inquests were held: 32 on males, and 19 on females. The findings of the Jury were as follows:—

Accidental Deaths	...	...	22
Natural Causes	...	...	19
Shock whilst under Anaesthetic	...	...	1
Suicide while of Unsound Mind	...	...	5
Shock following Burns	...	...	1
Misadventure	...	...	2
Found Drowned	...	...	1

Chart showing Birth-Rate (Yellow Line) and Death-Rate (Red Line) per 1,000 in Leamington since 1902.



The Yellow Line shows the Birth-Rate.

The Red Line shows the Death-Rate.

Table II.

POPULATION, BIRTH, AND DEATH-RATES
From 1902 to 1931

Year.	Estimated Population	Birth-rate per 1000.	Death-rate per 1000.	Infantile Mortality.	Zymotic Death-rate
1902	26,967	18.6	13.9	113.3	0.40
1903	27,017	18.0	14.6	125.2	0.25
1904	27,060	18.1	14.8	123.9	0.18
1905	27,100	19.4	14.2	102.6	0.36
1906	27,140	17.5	14.3	126.0	0.51
1907	27,207	18.9	13.8	112.6	0.22
1908	27,217	15.7	15.0	84.1	0.33
1909	27,252	15.8	14.1	101.8	0.40
1910	27,360	15.1	14.7	74.9	0.44
1911	26,739	17.3	15.8	88.5	0.67
1912	26,690	17.8	14.9	73.3	0.07
1913	26,671	17.2	14.2	80.6	0.63
1914	26,652	16.5	13.4	86.1	0.49
1915	25,912	17.7	18.3	95.6	1.07
1916	27,888	15.9	16.9	74.7	0.14
1917	25,654	13.6	18.0	87.2	0.58
1918	30,730	14.0	17.8	72.2	0.18
1919	29,498	15.4	13.6	52.6	0.06
1920	29,445	22.2	13.0	62.6	0.27
1921	28,560	18.9	12.94	64.1	0.30
1922	28,740	18.0	13.9	58.0	0.24
1923	28,790	16.2	13.5	57.5	0.34
1924	29,260	15.4	13.9	64.1	0.41
1925	29,360	14.7	15.7	62.3	0.27
1926	30,040	13.6	14.6	75.6	0.43
1927	30,050	13.5	14.1	68.6	0.19
1928	29,760	14.1	13.7	61.7	0.16
1929	29,450	13.3	15.1	68.5	0.27
1930	29,450	14.0	13.3	36.2	0.13
1931	29,490	13.0	14.8	54.5	0.03
30 years' Average		16.3	14.7	80.3	0.33

STILL-BIRTHS.

14 Notices were received from the Borough Treasurer, acting as Registrar of Cemeteries, of which 6 were males and 8 females. The deaths, as far as could be ascertained, were due as follows:—Physique of Mother, 2; Shock 2; Difficult Labour, 1; Unknown, 3; Accident, 1; Breech Presentation, 1; Macerated Foetus, 2; Prematurity, 2.

The percentage of Still-Births to Births was 3.6, the same as last year.

INFANTILE MORTALITY.

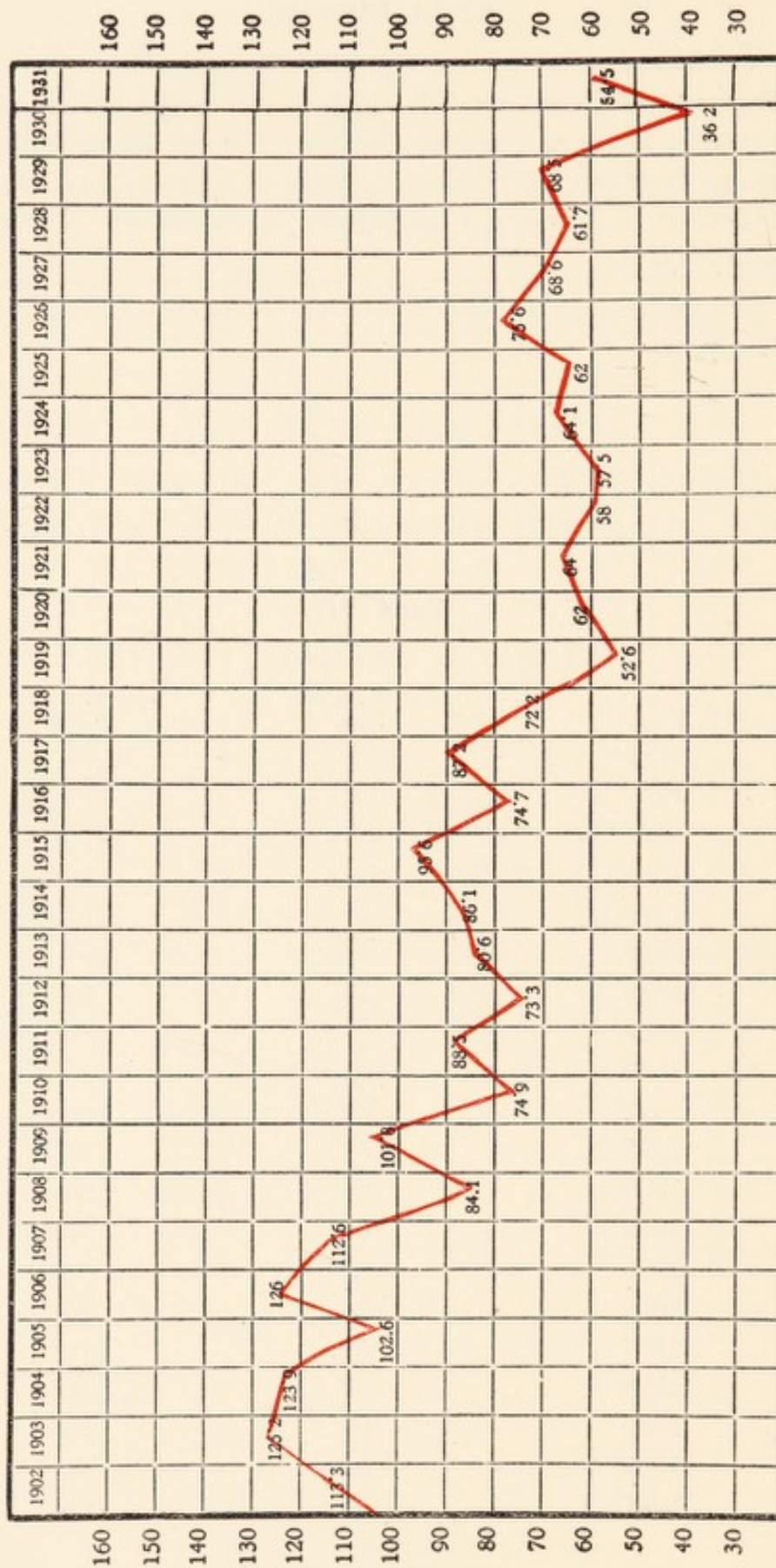
The infantile mortality rate, 54.5. The figure for the 159 smaller towns (adjusted populations, 20,000 to 50,000) is 62.

Table III.

INFANTILE MORTALITY RATES.

Year.	Leamington Spa.	England and Wales.
1912	73	95
1913	80	109
1914	86	105
1915	97	110
1916	75	91
1917	87	97
1918	72	97
1919	52	89
1920	62	80
1921	64	83
1922	57	69
1923	57	69
1924	64	75
1925	62	75
1926	75	67
1927	68	69
1928	61	60
1929	68	74
1930	36	60
1931	54	66

Chart Showing Infantile Mortality per 1,000 Births in Leamington since 1902.



The total number of deaths under 1 year of age was 21, 2 of whom were illegitimate. Of this number, 14 were neonatal deaths, i.e., children under 4 weeks of age.

The causes of death in these were as follows:—(1) Prematurity, 8; (2) Congenital Defects, 3; Marasmas, 1; (4) Meningitis, 1; (5) Pemphigus Neonatorum, 1.

4 pairs of twins were born during the year. Of these, one child was still-born. The others are all alive and well.

Table IV.

CAUSES OF INFANT MORTALITY, 1925 TO 1931.

	1925	1926	1927	1928	1929	1930	1931	Total Deaths 7 years
Marasmus	2	1	2	1	...	2	1	9
Premature Birth	8	7	10	9	11	2	8	55
Bronchitis	2	1	1	2	...	1	...	7
Pneumonia... ..	4	6	5	3	3	...	5	26
Convulsions	1	1	1	2	...	1	...	6
Congenital Defects	...	5	2	5	6	7	4	29
Diarrhoeal Diseases	2	6	5	...	...	1	1	15
Whooping Cough	1	...	...	...	...	...	...	1
Pemphigus Neonatorum	...	...	...	...	...	...	1	1
Measles	...	...	1	...	...	...	...	1
Non-Tuberculous Men'gitis	1	2	...	1	...	...	1	5
Tuberculous Meningitis	1	1	...	1	...	...	...	3
Tuberculous Enteritis	1	1	...	...	...	...	...	2
Miliary Tuberculosis	...	...	...	...	2	...	...	2
Asphyxia	...	...	...	...	3	...	...	3
Other Causes	4	...	1	2	2	1	...	10
Total Deaths below 1 year	27	31	28	26	27	15	21	175
Rate per 1000 Births ...	62.3	75.6	68.6	61.7	68.5	36.2	54.5	61.0

GENERAL PROVISION OF HEALTH SERVICES IN THE BOROUGH.

Detailed information was given regarding these services in the annual report for 1930.

The only further development to report was the appointment in October, 1931, of Mr. G. G. Alderson, F.R.C.S., as consultant in cases where local practitioners require assistance in any difficulty or complication arising during pregnancy.

MATERNAL MORTALITY.

There were three deaths during the year in consequence of child-birth. The causes of death were as follows:—

- (1) Acute Nephritis and Hepatitis following pregnancy and difficult labour;
- (2) Caesarean section for obstructed labour. Heart failure.
- (3) Heart failure following Child-birth.

SANITARY CIRCUMSTANCES OF THE AREA.

WATER.

The Water supply of the town is derived from two sources, (a) The Lillington Well on the Rugby Road, and (b) The Campion Terrace Well, about three-quarters of a mile from the centre of the town.

A detailed description of these wells was included in the report for 1925.

The extra supply of water obtained from the new heading driven in 1925 seems to be well maintained, but it appears probable that in the near future it will be necessary to take steps to augment the present yield.

Samples were submitted for chemical and bacteriological examination quarterly and all proved satisfactory, though as obtains throughout a great part of Warwickshire the degree of hardness was very high.

For the distribution of the water supply for domestic purposes, some 44 miles of main have been laid. During the year a further 2,950 yards of new town water mains have been laid.

During 1931 the following amount of Water was pumped:—

From Campion Terrace	...	...	198,198,500	gallons
„ Lillington	...	...	117,897,000	„
„ River (through meters only)			41,003,000	„

For some years there has been very little yearly variation in the amount of daily consumption of water per head. For 1931 the consumption was 28.92 gallons per head as against 27.08 in 1930.

A summary of the Bacteriological and Chemical Examinations is as follows:—

BACTERIOLOGICAL EXAMINATION.

Quantitative Analysis:

Aerobic micro-organisms growing in 3 days in Nutrient Gelatine at 20° C. to 21° C.

	Average Results of 8 Examinations. No. of Colonies in one gramme. (15.43 grains of water).			
	Lillington.		Campion Terrace.	
Non-liquefying Bacteria	...	183	...	111
Liquefying Bacteria	...	27	...	39
Aerobic organisms growing in Standard Agar in 48 hours at 37° C.	...	26	...	3

Qualitative Analysis:

	Quantity of Water in which these bacteria were			
	Found.	Not Found.	Found.	Not Found.
(a) Bacteria associated with sewage or faecal pollution	...	—	...100c.c....	—
(b) Bacteria associated with disease	...	—	...	—

CHEMICAL ANALYSIS.

(Expressed in parts per 100,000).

			Lillington.	Campion Terrace.		
Free and Saline Ammonia	...	...	0.002	...	0.002	
Albuminoid Ammonia	...	...	0.002	...	0.003	
Chlorine in Chlorides	...	...	1.800	...	3.400	
Nitrogen in Nitrates and Nitrites	...	...	0.286	...	Trace.	
Oxygen absorbed from Permanganate at						
80° F. in 4 hours	...	...	0.005	...	0.006	
Total Solids dried at 100° C.	...	...	38.000	...	72.000	
Hardness	{	Temporary	...	12.6	...	16.6
		Permanent	...	17.3	...	31.2
		Total	...	29.9	...	47.8
Appearance:	No. 1.	Bright.	Few small particles.			
	No. 2.	Bright.	Few small particles.			

RIVERS.

The River Leam, which runs through the middle of the town, rises in Northamptonshire and is joined by the Itchen near Marton, passes through Offchurch and Leamington, and joins the Avon between the Portobello and Warwick Bridges. The river Avon forms the western boundary of the town for a little over half-a-mile.

DRAINAGE AND SEWAGE.

A full report of the New Sewage Disposal Scheme, which is by means of Settlement Tanks and Filters on land at Heathcote, which was begun in July, 1927, and completed in December, 1928, was contained in the report for 1929. During the year, the general character of the sewage effluent was satisfactory, and no complaints were received.

CLOSET ACCOMMODATION.

With the exception of a few cottages in the Lillington district, the houses throughout the town are supplied with water closets.

SCAVENGING.

Horse-drawn four-wheeled wagons for the removal of refuse were abolished in 1926, and replaced by Fordson tractors and trailers.

This method of removal has proved most satisfactory and considerably more economical than the old system.

Approximately 8,891 tons of refuse were destroyed.

SANITARY WORK FOR THE YEAR ENDING 31st DECEMBER, 1931.

One hundred and twenty-six complaints were received during the year.

One hundred and seventy-eight notices were served during the year; of these ten were statutory.

One hundred and eighty-three notices were complied with during the year; seven are still outstanding.

SUMMARY OF SANITARY WORK EXECUTED.

Total number of visits made	...	...	...	...	...	3485
Complaints received	...	...	...	...	...	126
Visits in relation to notifiable infectious diseases	...	...	...	...	...	58
„ „ „ „ non-notifiable infectious diseases	...	...	...	...	...	30
Number of patients removed to isolation hospital	...	...	...	...	...	42
House fumigations	...	...	...	...	...	110
Steam disinfections	...	...	...	...	...	101
Notices to Librarian re infected houses	...	...	...	...	...	15
Inspections of Factories and Workshops	...	...	...	...	...	79
„ „ Bakehouses	...	...	...	...	...	138
„ „ Laundries	...	...	...	...	...	12
„ „ Outworkers' Premises	...	...	...	...	...	2
„ „ Common Lodging Houses	...	...	...	...	...	81
„ „ Slaughterhouses and Butchers' Shops	...	...	...	...	...	673
„ „ Dairies, Cowsheds and Milkshops	...	...	...	...	...	337
„ „ Food Shops and Premises	...	...	...	...	...	1031
„ „ Offensive Trades Premises	...	...	...	...	...	33
„ „ Tents, Vans, Sheds, etc.	...	...	...	...	...	12
„ „ Canal Boats	...	...	...	...	...	49
Samples of Food and Drugs taken for analysis	...	...	...	...	...	110
Vehicles disinfected under the Swine Fever Order, etc.	...	...	...	...	...	168

DWELLING HOUSES.

Repaired or made fit	...	...	...	...	...	146
Roofs repaired	...	...	...	...	...	30
Floors re-paved	...	...	...	...	...	11

Floors repaired	26
Wall plaster cleansed, scraped, repaired or renewed, rooms	186
Rooms redecorated or limewashed	215
New earthenware sinks put in	7
Sinks removed	7
Sink waste pipes renewed	7
„ „ „ repaired	4
External walls cemented or tarred	2
External walls pointed up	9
Washhouses provided	1
Washhouses—floors repaired or re-laid	3
„ roofs repaired	11
„ door frames repaired	3
„ rainwater cisterns cleansed	8
„ pumps repaired	2
„ coppers repaired	9
„ copper firesets repaired or renewed	3
Windows made to open	5
Windows repaired	29
Sashcords renewed	22
Paving of yards and passages repaired	4
Basement steps repaired	2
Dangerous walls repaired	4
Stairs repaired	8
Doors repaired or re-hung	7
Doors—weatherboards provided	2
New firegrates fixed	3
Firegrates repaired	15
Chimneys repaired	2

DRAINS, WATER-CLOSETS, URINALS, ETC.

Drains reconstructed	1
Obstructed drains cleansed	15
Drains repaired	1
Obstructed W.C.'s cleansed	4
Intercepting traps provided	1
Soil pipes repaired	2
Inspection chambers provided	1

Inspection chamber covers provided	...	...	...	...	3
Broken basins renewed	...	...	...	...	15
W.C.'s provided with flushes	...	...	...	...	6
Flushes repaired	...	...	...	...	5
W.C.'s repaired or rebuilt	...	...	...	...	14
W.C. basins cleansed	...	...	...	...	3
W.C.'s limewashed	...	...	...	...	5
Additional gullies provided	...	...	...	...	7
Fresh air inlets provided or repaired	...	...	...	...	3
Dustbins provided	...	...	...	...	29
Rainwater spouting repaired or renewed	...	...	...	...	21
Accumulations removed	...	...	...	...	6
Smoke nuisances abated	...	...	...	...	2
Verminous houses cleansed	...	...	...	...	5
Smoke tests applied to drains	...	...	...	...	5
Water „ „ „ „	...	...	...	...	6
Chemical „ „ „ „	...	...	...	...	20
Wells closed	...	...	...	...	1
Overcrowding nuisances abated	...	...	...	...	1

COMMON LODGING HOUSES.

There are now three Common Lodging Houses in the Borough, two situated in Satchwell Street and one in Clemens Street. The latter, for men only, was added to the Register in October.

Seventy-three visits were paid to these premises during the year. The houses were found to be kept in a satisfactory condition and no cases of infectious diseases were reported by the keepers during the year.

OFFENSIVE TRADE PREMISES.

There are two offensive trade premises in the Borough where tripe-dressing is carried on. Twenty-one visits were made to the premises which were found to be kept in a satisfactory condition.

CANAL BOATS ACTS.

Number of Boats on Register December 31st, 1931 ...	...	1
Number of Boats inspected during 1931 ...	...	49
Number of Boats conforming to Acts and Regulations ...	...	47
Number of Boats infringing Acts and Regulations ...	...	2
Number of persons for which Cabins were Registered ...	...	166
Number of persons occupying Cabins ...	...	151
Details of occupation—Male adults ...	...	64
Female adults ...	...	36
Children of school age ...	...	29
„ under school age ...	...	22

DETAILS OF INFRINGEMENTS FOUND AND REMEDIED.

Found	Remedied
2 Boats requiring re-painting ...	2

SLAUGHTER HOUSES.

The number of slaughter houses in the Borough is as follows:—

Registered ...	14
Licensed ...	5

One registered slaughter house has been rebuilt.

Six hundred and seventy-three visits were made to these premises during the year. The premises have been kept reasonably clean and the local butchers have given your Inspectors every assistance in the detection of diseased, unsound and unwholesome food by promptly reporting any abnormal conditions found. It has been unnecessary to take legal proceedings, as all diseased and unsound meat has been surrendered voluntarily.

SMOKE NUISANCES.

Repeated observations have been made in respect of two premises. In each case cautionary notices were sent resulting in the abatement of the nuisances.

DISEASED AND UNSOUND FOOD DESTROYED.

Apricots	...	...	...	16 tins	...	Decomposition
Beasts' carcasses and offals	...	...	...	2	...	Generalised tuberculosis
Beasts' quarters	...	...	...	1	...	Abscesses
Beef	...	...	...	80 lbs.	...	Decomposition
Bacon	...	...	...	131 lbs.	...	"
Black Puddings	...	...	...	4	...	"
Beef	...	...	...	11 tins	...	"
Beans	...	...	...	5 "	...	"
Brawn	...	...	...	6 "	...	"
Cherries	...	...	...	15 "	...	"
Crab	...	...	...	15 "	...	"
Cream	...	...	...	11 "	...	"
Fruit Salad	...	...	...	27 "	...	"
Grape Fruit	...	...	...	18 "	...	"
Herrings	...	...	...	7 "	...	"
Milk	...	...	...	31 "	...	"
Pears	...	...	...	45 "	...	"
Peaches	...	...	...	62 "	...	"
Pineapple	...	...	...	25 "	...	"
Plums	...	...	...	54 "	...	"
Peas	...	...	...	25 "	...	"
Pilchards	...	...	...	3 "	...	"
Pigs' head	...	...	...	1	...	Tuberculosis
Pigs' hindquarters	...	...	...	1	...	"
Pigs' offals	...	...	...	1	...	"
Pigs' carcase and offals	...	...	...	1	...	Hydraemia
Pigs' carcase and offals	...	...	...	1	...	Erysipelas
Raspberries	...	...	...	2 tins	...	Decomposition
Salmon	...	...	...	21 "	...	"
Sardines	...	...	...	8 "	...	"
Strawberries	...	...	...	1 "	...	"
Tomatoes	...	...	...	111 "	...	"
Tongue	...	...	...	9 jars	...	"
Veal	...	...	...	1 fore quarter	...	Tuberculosis

FOOD AND DRUGS (ADULTERATION) ACT, 1928.
PUBLIC HEALTH (PRESERVATIVE IN FOODS, ETC.)
REGULATIONS, 1925.

The following samples of Food and Drugs were taken and submitted to the Borough Analyst for analysis during the year:—

	Formal.	Informal.	Totals.
Coffee	—	3	3
Cheese	—	3	3
Cream	—	16	16
Jam	—	3	3
Lard	—	3	3
Liquorice Powder	—	2	2
Milk	36	4	40
Margarine	1	7	8
Mercury Ointment	—	2	2
Sausage	—	10	10
Sponge Cake	—	6	6
Sulphur Ointment	—	2	2
Vinegar	1	9	10
Zinc Ointment	—	2	2
	—	—	—
	38	72	110
	—	—	—

Of the 40 samples of milk analysed, 4 were found to be adulterated and 36 were found to be genuine, free from preservative, artificial colouring matter and extraneous dirt.

One sample of milk was found to contain 11 per cent. of added water. The vendor was prosecuted and fined £1 1s. and £1 1s. costs.

Three samples of milk were found to be deficient in fat to the extent of 13 per cent., 6 per cent. and 3 per cent. respectively. The vendors were cautioned in each case.

All the samples of cream were genuine, free from preservative, and had fat contents ranging from 49 per cent. to 70 per cent.

One sample of margarine was contained in a wrapper which was not in accordance with the requirements of the Act. The vendor of the sample was cautioned.

One informal sample of malt vinegar was adulterated, containing only 2.8 per cent. of acetic acid, or a deficiency of 44 per cent. A subsequent formal sample from the same vendor was found to be only slightly below the limit.

One informal sample of mercury ointment was found to contain only 10.4 per cent. of mercury. This should have contained 30 per cent. A formal sample was taken from the same vendor and proved to comply with the requirements of the British Pharmacopoeia.

The percentage of samples adulterated to those submitted was 5.4.

The average composition of milk for each quarter was as follows:—

Quarter ended March	...	Fat	...	...	3.7%
		Solids not Fat			12.4%
„ „ June	...	Fat	...	...	4.4%
		Solids not Fat			8.9%
„ „ September		Fat	...	...	3.2%
		Solids not Fat			8.7%
„ „ December	...	Fat	...	...	3.8%
		Solids not Fat			8.8%

MILK AND DAIRIES (AMENDMENT) ACT, 1922

and

MILK (SPECIAL DESIGNATIONS) ORDER, 1923.

The following licences were issued during the year:—

Dealers' licences to sell milk as "Certified"	...	...	...	5
Dealers' licences to bottle and sell milk as Grade "A" (T.T.)				2
Dealers' licences to bottle and sell milk as Grade "A"	...			1
Supplementary licences to sell milk as "Pasteurised"	...			1

Six samples of designated milks were submitted for bacteriological examination and were all found to be satisfactory.

MILK AND DAIRIES (CONSOLIDATION) ACT, 1916.

One sample of Milk was submitted for examination for Tubercle Bacilli and gave a negative result.

**PUBLIC HEALTH (CONDENSED MILK) REGULATIONS,
1923 and 1927.**

No cases of incorrectly labelled condensed milk containers came to the notice of your Inspectors.

**WART DISEASE OF POTATOES ORDER, 1914,
and
CORKY SCAB POTATOES ORDER, 1914.**

Allotments and gardens within the Borough were kept under observation, frequent visits being paid to the former, but no cases under these Orders came to the notice of your Inspectors.

AMERICAN GOOSEBERRY MILDEW ORDER, 1919.

Greengrocers' shops and allotments were frequently visited, but no signs of this disease were found during the year.

SILVER LEAF ORDER, 1919.

One case of this disease was reported and verified and the tree grubbed up and burnt.

RAG FLOCKS ACT, 1911.

The upholsterers in the Borough were found to be using certified sterilised flocks only, and therefore no samples were taken during the year.

FABRICS (MISDESCRIPTION) ACTS, 1913.

No cases were discovered where traders were misleading the public with regard to the sale of inflammable material.

MERCHANDISE MARKS ACT, 1926.

Frequent observations have been made upon shops dealing in articles affected by the above Act. In a number of instances traders were cautioned for breaches of the Orders.

RATS AND MICE DESTRUCTION ACT, 1919.**NATIONAL RAT WEEK.**

The usual work in connection with National Rat Week was carried out during the prescribed period, viz., November 2nd to November 7th and also during the following week. Three notices were inserted in the local press calling the attention of the public to its obligations under the Act. Many enquiries were made at the Public Health Department, and advice was given and action taken under the supervision of your Inspectors. In the public sewers 4,034 baits were laid, and the re-inspection of 2,446 of these proved that 1,600, or 65 per cent., had been taken. The percentage taken is lower than that of last year, when 75 per cent. were taken, the same bait being used. There is every reason to believe that the action taken was attended by good results, as a large number of dead rats were found in the screening plant at the Sewage Works.

1.—INSPECTION OF FACTORIES, WORKSHOPS & WORKPLACES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries)	79	—	—
Workshops (Including Workshop Laundries)	140	4	—
Workplaces (Other than Outworkers' Premises)	12	—	—
TOTAL	231	4	—

2.—DEFECTS FOUND.

Particulars.	Number of Defects			Number of Prosecutions
	Found.	Remedied.	Referr'd to H.M. Inspector	
Nuisances under the Public Health Acts*				
Want of cleanliness	4	4	—	—
Want of ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other nuisances	—	—	—	—
Sanitary accommodation {	insufficient	—	—	—
	unsuitable or defective	2	2	—
	not separate for sexes	1	1	—
Offences under the Factory and Workshop Acts:—				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	—	—	—	—
Other Offences (Excluding offences relating to out-work & offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921.)	—	—	—	—
TOTAL	7	7	—	—

*Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

SCHOOLS.

There are nine Public Elementary Schools—of which four are non-provided—in the Borough. Also two Secondary Schools, one for boys and one for girls. These are all adequately provided with water from the town supply.

Exclusion from school in the case of infectious disease is on the lines of the Memorandum on Closing of, or Exclusion from School, 1927.

Great assistance has been given by teachers not only in the case of non-notifiable infectious diseases, but in seeing that children needing treatment attend the Clinic.

HOUSING STATISTICS, 1931.

1. *Inspection of Dwelling-houses during the Year:—*
 - (1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts ... 210
 - (b) Number of inspections made for the purpose ... 210
 - (2) (a) Number of dwelling-houses (included under sub-head (1) above which were inspected and recorded under the Housing Consolidated Regulations, 1925 ... 8
 - (b) Number of inspections made for the purpose ... 8
 - (3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ... 96
 - (4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation ... 139
2. *Remedy of Defects during the Year without Service of formal Notices:—*

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers ... 137
3. *Action under Statutory Powers during the Year:—*
 - A.—Proceedings under sections 17, 18 and 23 of the Housing Act, 1930:
 - (1) Number of dwelling-houses in respect of which notices were served requiring repairs ... 8
 - (2) Number of dwelling-houses which were rendered fit after service of formal notices:—
 - (a) by owners ... 8
 - (b) By local authority in default of owners ... —

B.—Proceedings under Public Health Acts:

- | | |
|---|---|
| (1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied | 1 |
| (2) Number of dwelling-houses in which defects were remedied after service of formal notices:— | |
| (a) By owners | 1 |
| (b) By local authority in default of owners | — |

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

- | | |
|---|---|
| (1) Number of dwelling-houses in respect of which Demolition Orders were made ... | — |
| (2) Number of dwelling-houses demolished in pursuance of Demolition Orders ... | — |

D.—Proceedings under section 20 of the Housing Act, 1930:

- | | |
|--|---|
| (1) Number of separate tenements or underground rooms in respect of which Closing Orders were made | 4 |
| (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit | — |

E.—Proceedings under section 3 of the Housing Act, 1925:

- | | |
|--|---|
| (1) Number of dwelling-houses in respect of which notices were served requiring repairs | — |
|--|---|

- (2) Number of dwelling-houses which were rendered fit after service of formal notices:—

(a) By owners —

(b) By local authority in default of owners —

- (3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close —

F.—Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925:

- (1) Number of dwelling-houses in respect of which Closing Orders were made —

- (2) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit —

- (3) Number of dwelling-houses in respect of which Demolition Orders were made —

- (4) Number of dwelling-houses demolished in pursuance of Demolition Orders —

HOUSING CONDITIONS.

During the year a total number of 160 houses were built, 40 by private enterprise and 120 by the Local Authority. In 1929 the Council purchased 17 acres of land on the Shrubland Estate,

and on this 192 are to be erected, of which 120 were completed by the end of 1931.

In addition, Slum Clearance, Limited, have acquired land on the Windmill Estate, Tachbrook Road, on which 54 houses are to be built. A start was made with these in November, 1931.

At the present time the Corporation own 536 houses, situated as follows:—

	Parlour.	Non-Parlour.	Total.
Leicester Street	24	10	34
Tachbrook Road	90	42	132
Rushmore Estate	18	226	244
Lillington	—	6	6
Shrubland Hall Estate ...	—	120	120
	132	304	536

During the last 10 years a total number of 775 houses have been built, 441 by the Corporation and 334 by private enterprise, of which 18 were erected by Slum Clearance, Limited.

PREVALENCE & CONTROL OVER INFECTIOUS DISEASES

NOTIFICATION OF INFECTIOUS DISEASES.

CASES OF COMMONER INFECTIOUS DISEASES
NOTIFIED FROM 1911 TO 1931 (21 YEARS).

Year.	Scarlatina.	Diphtheria and Membr. Croup.	Enteric Fever.	Puerperal F.	Puerperal Pyrexia.	Erysipelas.	Tuberculosis.	Totals.
1911	34	3	1	1	...	12	23	74
1912	19	7	1	...	...	10	37	74
1913	92	33	2	...	...	9	55	191
1914	58	32	3	...	...	4	58	155
1915	42	27	3	...	...	9	60	141
1916	20	3	1	...	...	15	72	138
1917	22	21	1	1	...	10	72	127
1918	18	29	1	2	...	5	73	128
1919	13	7	4	...	...	5	56	85
1920	42	24	2	...	...	10	45	123
1921	16	26	2	1	...	15	45	105
1922	42	49	1	2	...	21	53	168
1923	85	24	45	3	...	12	57	226
1924	49	7	7	...	...	10	44	113
1925	40	31	1	1	...	12	35	120
1926	41	13	...	2	2	8	39	105
1927	57	10	9	1	8	13	41	139
1928	19	29	5	4	2	10	31	100
1929	36	4	...	5	5	15	40	105
1930	54	14	2	...	4	14	39	124
1931	38	3	2	4	...	14	30	91

Table VII.

CASES OF NON-NOTIFIABLE INFECTIOUS DISEASE
REPORTED IN EACH MONTH OF THE YEAR 1931.

			Whooping Cough	Chicken- Pox	Mumps	Ringworm	Impetigo	Scabies	Measles	Totals
January	...	...	—	6	13	4	17	2	—	42
February	...	...	—	—	1	—	7	—	—	8
March	...	...	—	2	—	1	7	1	—	11
April	...	...	1	15	5	2	11	—	2	36
May	...	...	—	15	—	—	17	2	2	36
June	...	...	—	23	—	4	25	—	—	52
July	...	...	—	10	—	1	15	3	28	57
August	...	...	—	7	—	—	—	—	7	14
September	...	...	—	1	—	3	12	—	—	16
October	...	...	14	1	—	1	8	1	—	25
November	...	...	2	4	—	1	12	2	—	21
December	...	...	7	7	—	—	9	1	1	25
			24	91	19	17	140	12	40	343

LABORATORY WORK, 1931.

The following Examinations were made at the Municipal Laboratory and also at Birmingham University:—

Examinations at Municipal Laboratory.	1931	At B'ham University
SWABS from Throats, examined for Diphtheria		
Positive ...	2	—
Negative ...	67	21
SPUTA, examined for Tubercle.		
Positive ...	—	7
Negative ...	—	19
Other Examinations and Preparations ...	2	8
	71	55

NOTIFIABLE DISEASES DURING THE YEAR.

Disease.	Total Cases Notified.	Cases Admitted to Hospital.	Total Deaths
Small Pox	—	—	—
Scarlet Fever	38	35	—
Diphtheria	3	3	—
Enteric (incl. Paratyphoid)	2	1	—
Puerperal Fever	4	4	—
„ Pyrexia	—	—	—
Pneumonia	62	18	46
Erysipelas	14	3	2
Acute Poliomyelitis ...	—	—	—
Encephalitis Lethargica ...	1	—	3

AGE INCIDENCE. NOTIFIABLE DISEASES.

Disease.	Under 1 Year	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 and over	Total
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	2	...	1	...	17	14	2	2	...	...	...	38
Diphtheria	...	...	...	...	...	1	2	...	...	...	...	...	3
Enteric (including Paratyphoid)	...	...	1	...	...	...	...	...	...	...	1	...	2
Puerperal Fever	...	...	...	...	...	...	...	...	3	1	...	...	4
Pyrexia	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	1	1	2	1	...	11	2	1	14	9	14	6	62
Erysipelas	...	...	...	...	...	...	...	1	5	...	7	1	14
Encephalitis Lethargica	...	...	...	...	...	...	...	...	1	...	...	...	1

During the year there was no marked epidemic of any of the notifiable diseases.

SCARLET FEVER.—38 cases were notified with no deaths.

The type of disease prevalent was extremely mild and there were no serious complications.

DIPHTHERIA.—Notifications numbered 3 and there were no deaths. The distribution of the cases this year was:—

West Ward.	N.E. Ward.	S.E. Ward.	Milverton and Lillington.
1	...	2	...

Anti-toxin can be obtained at any hour by practitioners free of cost, so that early serum treatment is always available.

ENTERIC FEVER.—Two cases of Paratyphoid were notified in 1931.

ERYSIPELAS.—Notifications numbered 14.

OPHTHALMIA NEONATORUM.

Cases.			Vision Un- impaired.	Vision Impaired.	Total Blindness	Deaths.
Notified.	Treated.					
	At Home.	In Hospital.				
3	—	3	—	—	—	—

PNEUMONIA.—During the year ending December 31st, 1931, notifications of this disease were as follows:—

Acute Primary Pneumonia, 60; Influenzal Pneumonia, 2.

ENCEPHALITIS LETHARGICA.—One case, which ended fatally, was notified.

INFLUENZA.—8 deaths: 3 males, 5 females.

MEASLES.—The number of cases unofficially notified was 40, with no deaths. Years which may be considered epidemic years—i.e., where the number of cases have been considerably above the average—have been 1911, 1916, 1917, 1923, 1926, and 1928.

WHOOPING COUGH.—The number of cases notified was 24, with no deaths. The years this disease has been particularly prevalent have been 1916, 1924, and 1926.

PUERPERAL FEVER AND PUERPERAL PYREXIA.—4 notifications of Puerperal Fever were received.

CHICKEN POX.—The number of cases was 91. Epidemic years of this disease have been 1915, 1918, and especially 1924.

MUMPS.—40 cases only were reported. Two years particularly stand out when this disease was particularly prevalent, viz., 1914, when 592 cases were notified, and 1925, when there were 447 cases.

VACCINATION.—From the Return of the Vaccination Officer I am enabled to give the figures for vaccination of the children born from 1st July, 1930, to 30th June, 1931, viz. :—

1.	Number of babies registered for the 12 months ending June 30th, 1931	436
2.	Number of these births duly entered as being successfully vaccinated	114
3.	Number of these births duly entered as being exempted from vaccination	284
4.	Dead, unvaccinated	16
5.	Postponement by Medical Certificate	3
6.	Removed to other places	16
7.	Certificate of Insusceptibility	1
8.	Number of these births not accounted for in Vaccination Register	2

It will be thus seen that of 420 living children 27 per cent. are known to have been vaccinated.

No primary vaccinations or re-vaccinations were performed under the Public Health (Small Pox Prevention) Regulations, 1917, by the Medical Officer of Health.

WARWICK JOINT HOSPITAL BOARD.

HEATHCOTE HOSPITAL.

Cases to this Hospital are admitted from the Boroughs of Leamington and Warwick, the Urban District of Kenilworth, and from the Warwick Rural District.

On January 1st, 1931, there were 32 cases remaining in Hospital. During 1930, 104 cases were admitted suffering from the following diseases:—

Scarlet Fever ...	...	...	...	...	73
Diphtheria ...	...	...	...	...	20
Paratyphoid ...	...	...	...	...	5
Typhoid ...	...	...	...	...	2
Tonsilitis ...	...	...	...	...	2
Psoriasis ...	...	...	...	...	1
Rheumatism ...	...	...	...	...	1

These cases were admitted from:—

	Scarlet Fever.	Diphtheria.	Enteric Fever.	Other Diseases.	Total
Leamington ...	35	3	1	1	40
Warwick ...	21	5	2	1	29
Kenilworth ...	5	6	3	1	15
Warwick Rural District ...	12	—	1	1	14
Rugby Rural District ...	—	6	—	—	6
	73	20	7	4	104

SCARLET FEVER.—The disease generally was very mild, and the few complications slight.

There were no deaths, and as far as could be ascertained, only two return cases occurred, one 19 days and the other 21 days after the discharge of a patient.

Average stay in hospital ...	35 days.
Longest „ „ ...	82 „
Shortest „ „ ...	22 „

Age periods:—

Under 1	1-5	5-10	10-15	15-20	20-30	30-40	40 & over	Total.
—	13	29	19	3	9	—	—	73

Oldest patient, 28 years. Youngest patient, $1\frac{5}{12}$ years.

It will be noticed that the average length of time these patients were in hospital was under five weeks. Every effort is made to discharge uncomplicated cases at as early a date as is compatible with safety, though the ancient superstition that Scarlet Fever cases must be isolated for at least six weeks still very largely exists.

Complications, generally slight, occurred in 16 patients, viz. :—

Albuminuria	...	...	...	4
Adenitis	...	...	...	10
Otorrhœa	...	...	...	7
Rhinorrhœa	...	...	...	2
Herpes	...	...	...	1
Septic Fingers and Toes	...	...	...	5
Tonsillar Abscess	...	...	...	1

DIPHTHERIA.—20 cases were admitted, with one death, which occurred within 24 hours of admission.

Average stay in hospital	...	37 days.
Longest	„ „	67 „
Shortest	„ „	16 „

Age periods:—

Under 1	1-5	5-10	10-15	15-20	20-30	30-40	40&over	Total.
—	3	8	3	3	3	—	—	20

Oldest patient, 25 years. Youngest patient, $3\frac{9}{12}$ years.

Complications:—

Albuminuria	...	...	...	2
Anti-toxin Rash	...	...	...	1
Palatal Paralysis	...	...	...	1
Scarlet Fever	...	...	...	1

ENTERIC FEVER.—2 cases of Typhoid, one from Warwick and 1 from Hampton-on-the-Hill, and 5 cases of Paratyphoid, 1 from Warwick, 1 from Leamington and 3 from Kenilworth, were admitted; one of the latter died.

No Schick or Dick tests were performed.

FOSSE HOSPITAL.

SMALLPOX.—No cases were admitted during the year.

TUBERCULOSIS.

Age-Periods.	New Cases.				Deaths.			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0 ...	—	—	—	—	—	—	—	—
1 ...	—	—	1	—	—	—	1	—
5 ...	—	1	—	—	—	—	—	—
10 ...	1	1	—	1	—	1	—	—
15 ...	1	—	—	—	—	—	—	—
20 ...	—	2	1	—	—	1	—	—
25 ...	2	3	1	—	3	2	—	—
35 ...	4	2	—	1	2	1	—	1
45 ...	3	1	—	—	1	1	—	—
55 ...	—	2	—	—	1	1	—	—
65 & upwards	2	—	—	—	2	—	—	—
Totals ...	13	12	3	2	9	7	1	1

Of the 18 cases who died in 1931, 9 were notified during the year. Of the total number of deaths ascribed to Tuberculosis 2 were notified only after death, and in 1 case no notification was received. Two of the deaths occurred in Institutions, viz., 1 in Leamington and 1 out of the town.

One other death has been allocated to Leamington by the Registrar-General, but no trace of this person can be found.

The 30 cases discovered in the course of the year were as follows:—

Private Practitioner.	Transfers.	Tuberculosis Officer.	Hospital.	Died before Notification.
4	4	12	7	3

Notification of all forms of Tuberculosis was made compulsory in 1913. The number of Annual Notifications since that year with the subsequent histories as far as can be ascertained is appended.

Year.	No. notified.	Still under observation.	Recovered or quiescent.	Left Town.	Died.
1913	55	1	13	12	29
1914	58	1	12	13	32
1915	61	1	15	13	32
1916	72	1	28	19	24
1917	72	3	31	15	17
1918	72	4	18	22	28
1919	56	2	10	13	31
1920	45	2	2	16	25
1921	45	3	7	6	29
1922	52	3	7	14	28
1923	57	6	10	12	29
1924	44	4	7	7	26
1925	35	3	2	7	23
1926	39	8	5	5	21
1927	41	5	1	6	29
1928	31	5	1	3	22
1929	40	10	—	5	25
1930	39	15	—	9	15
1931	30	19	—	2	9

Of the 994 cases notified since 1913, 474 are known to be dead, 96 are still under observation, and 198 have left the town for elsewhere.

The total number of deaths from Tuberculosis during the year was 18, viz., 10 males and 8 females.

Death Rate per 1,000:—

	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Pulmonary Tuberculosis }	.94	.72	.71	.85	.53	.93	.77	.71	.50	0.54
Other forms of Tuberculosis }	.13	.20	.10	.30	.19	.06	.06	.27	.03	0.10

The details of the 39 cases notified this year are as follows:—

WARD DISTRIBUTION.

Ward.	Cases notified.	Deaths of those notified 1931.
South-East ...	15	4
North-East ...	4	—
West ...	8	4
Milverton and Lillington ...	3	1
	—	—
	30	9

OCCUPATIONS.

School Children	5	Guard	1
Babies	1	Porter	1
Children's Nurse	1	Clerk	1
Laundress	1	Ex-Soldier	1
Companion Buyer	1	Radio Engineer	1
Chemist Dental Mechanic	1	Housewives	7
Actress	1	Company Secretary ...	1
Engine Cleaner	1	Independent	1
Store-Keeper	1	Not known	1
Police Force	1	Painter	1

HOUSING.—As regards housing conditions, the following was ascertained:—

Two-roomed Houses	2
Three-roomed Houses	2
Four-roomed Houses	7
Five-roomed Houses	6
Six-roomed Houses	1
Seven and over roomed Houses ...	2
Lodgings	2
Basements	1
Died before notification	4
In Rooms	2
Flat	1
	30

Of the cases notified this year, 9 have died, 2 have left the town, and 19 remain under observation.

CONTROL OF TUBERCULOSIS.—Our work continues to be of the same character as in past years. Sputum flasks and disinfectants are supplied on application, and the disinfection of premises is carried out whenever a patient dies or removes to another house.

TREATMENT.—This work comes principally under the County Scheme. 12 (7 males and 5 females) cases have been sent to Hertford Hill Sanatorium and 5 to Warwick Infirmary, and 5 other patients were treated at the Warneford Hospital.

As in previous years, I am greatly indebted to the Assistant Tuberculosis Officer (Dr. Cyriax) for his kindness and help, more especially in the examination of suspected cases among School Children.

471 visits were paid to Tuberculosis cases by the Health Visitors. 12 cases were notified by the Tuberculosis Officer, and 19 other cases notified during 1931 were attending the Dispensary.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1924.—The number of cases of Tuberculosis remaining on the Register of Notifications on December 31st, 1931, is as under:—

Pulmonary ... Males, 38; Females, 26.
Non-Pulmonary ... Males, 17; Females, 15.

PUBLIC HEALTH ACT, 1925. Section 62.

It has not been necessary to take any action under this section of the 1925 Act during 1931.

CANCER.—The deaths ascribed to Malignant Disease numbered 44, classified in age groups as follows:—

Table VIII.

Age-Group.			Male.		Female.		Total.
20-30	...	...	—	...	—	...	—
30-40	...	...	—	...	—	...	—
40-50	...	...	—	...	1	...	1
50-60	...	...	3	...	3	...	6
60-70	...	...	10	...	11	...	21
70-80	...	...	7	...	6	...	13
80-90	...	...	—	...	3	...	3
Over 90	...	...	—	...	—	...	—
			—		—		—
			20		24		44
			—		—		—

For the past ten years the deaths have been as follows:—

	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
	38	47	46	68	51	55	59	52	71	44
Death Rate per 1,000	1.31	1.63	1.57	1.87	2.26	1.69	1.98	1.76	2.4	1.49

Table IX.**DEATHS FROM CANCER,****TABULATED ACCORDING TO SITE.**

Stomach, 3.	Breast, 5.
Bowel, 9.	Uterus, 4.
Liver, 6.	Bladder, 1.
Rectum, 3.	Pancreas, 1.
Larynx, 1.	Glands of Neck, 1.
Lung, 2.	Miscellaneous, 6.
Esophagus, 2.	

Death-rate per 1,000 was 1.49.

DISINFECTION OF PREMISES, BEDDING, ETC.

PREMISES.—The disinfection of premises is carried out after cases of Scarlet Fever, Enteric Fever, Diphtheria, and any other cases of notifiable infectious diseases where the medical practitioner especially desires disinfection. Also after deaths from notifiable and non-notifiable diseases and other cases if deemed necessary.

The two main methods adopted for the disinfection of rooms are by gaseous and liquid disinfectants. As to which method is used is a matter of expediency.

Formalin gas is used for the former and for liquid disinfection a formalin spray is used.

CLOTHING.—This is carried out at the Corporation Disinfecting Station. Infected clothing, etc., is removed by a special van before the disinfection of the premises.

A Washington-Lyons disinfecting apparatus is used for this work. Leather goods, etc., which do not stand disinfection by steam, are set aside and treated either by the gaseous method or the formalin spray.

Books are subjected to formalin vapour.

The following work was carried out during 1931:—

	Other than Trade.		Trade.		Total.
Premises	...	108	...	2	110
Clothing, etc.	...	77	...	24	101
Books	...	26	...	—	26
		211		26	237

MATERNITY AND CHILD WELFARE.

The total number of babies brought to the infant clinic was 397, of whom 217 had been born during the course of the year, representing 58 per cent. of all babies born in this town in 1931.

The weighings numbered 4,185, giving an average of 83 children weighed weekly. The total attendance made by babies and all children between 1 and 5 years numbered 5,092, giving an average attendance of 101 weekly.

24 women and 11 children were treated by ultra-violet light.

As regards the women, these were all cases in which there had been prolonged or difficult labour, Caesarean Section, or some complication of Childbirth such as severe Post-Partum Haemorrhage, Anaemia, etc.

Great improvement was noted in 7 cases, judging by their general appearance, and this was confirmed by their own statements.

In 3 others a certain degree of benefit was undoubtedly derived. In 2 there appeared to be no change.

1 woman left the town. The remaining 11 ceased coming to the Clinic after the first few attendances, in several cases owing to illness in other members of the family, or owing to the fact that they were compelled to go out to work.

Of the 11 children, 5 improved, 1 especially—a premature infant of 7 months. The remainder ceased to attend after a few treatments.

VISITING.

During the year 3,783 visits were paid to 354 babies, and 2,889 to children between the age of 1 and 5 years, and also 581 other visits.

The card records of conditions found show the following:—
Breast fed, 232; partly breast fed, 36; and bottle fed, 68.

5 children survived only 24 hours; 14 were still-born, and 14 were not visited.

223 visits were paid to expectant mothers.

Of 388 births reported, 115 were attended by Medical Practitioners, and 273 by Midwives.

As regards children from 2 years old up to school age arrangements have been made whereby they are visited quarterly during the 3rd and 4th years and twice during the 5th year.

INFANT FEEDING.

As empowered by the Milk (Mothers' and Children's) Order the Council has continued to supply Glaxo on special terms.

A scale of income, sanctioned by the Ministry of Health, has been drawn up for the free distribution, or sale at reduced price, of Glaxo, and under this arrangement 1,920 lbs. of Glaxo have been sold at cost price and 916 lbs. have been given away free.

Under the above Order also, the Council has made arrangements to give dinners to poor expectant mothers, and 144 dinners in 16 cases have been so provided.

The thanks of the Committee are once again due to those who have assisted voluntarily at the Clinic, and also to the subscribers to the Infant Health Society, whose generosity has permitted of the free distribution of Milk, Virol, and Lactagol to necessitous and deserving cases.

MATERNITY CASES.

Under the arrangement entered into between the Council and the Warneford Hospital, whereby on payment of an annual fee, together with a fixed charge per head, 3 beds are retained for maternity cases, 21 women were admitted for confinement. The average length of stay in hospital for these cases was 15 days. As suggested in the Circular, "Maternity and Child Welfare 4," these cases are confined to two classes: (1) Cases of Difficult Labour; (2) Cases of Normal Labour where the Medical Officer of Health is of opinion that the home conditions are unsuitable.

I have to record a further development of the Maternity Service for the Borough during the year. In October, Mr. G. C. Alderson, F.R.C.S., was appointed as consultant in cases where local practitioners required assistance in any difficulty or complications occurring during pregnancy.

I am glad to report that increased use has been made of the Ante-Natal Clinic organised in connection with the Warneford Hospital.

Mr. Alderson, the surgeon in charge of the obstetric department examines expectant mothers on the 1st and 3rd Fridays of each month. A large majority of the cases referred to the Hospital under the Council's scheme were first seen not later than the 6th month of pregnancy.

The Post-Natal clinic has, I am glad to say, been well attended. All mothers whose confinement takes place in the Warneford Hospital, under the Council's scheme, are required to attend the Hospital for examination between 3 and 4 weeks after they have been discharged. After the final attendance at the Clinic a card containing the medical history of the mother and child during their stay in hospital is sent to the Medical Officer of Health.

In this way it is hoped that any complication or ill-effects resulting from child-bearing will be recognised and rectified at as early a date as possible, and thereby reduce the possibilities—in mild cases of discomfort, in severe cases of chronic ill-health and invalidness. One has only to instance displacements of uterus and prolapse which, if treated at once, would have saved many women years of loss of health and suffering.

METEOROLOGICAL REPORT, 1931.

The taking and reading of Meteorological conditions in the Borough has been continued morning and evening throughout the year. The following instruments are in use:—

AT THE PUMP ROOMS.

- (1) A Standard Fortin Barometer.
- (2) A Campbell-Stokes Sunshine Recorder.
- (3) A Wind Vane and Anemometer.

IN THE PUMP ROOM GARDENS.

- (4) A Stevenson's Screen, containing a Hygrometer and a Maximum and 2 Minimum Thermometers.
- (5) One Solar Radiation Maximum Thermometer, Black bulb in vacuo.
- (6) One Solar Radiation Thermometer, Bright bulb in vacuo.
- (7) One Terrestrial Radiation Thermometer.
- (8) One 8in. Rain Gauge (Meteorological Office Pattern) with Measuring Glass.
- (9) One Earth Thermometer at a depth of 1 foot.
- (10) One Earth Thermometer at a depth of 4 feet.

The Station is recognised by the Meteorological Office. A monthly report was sent throughout the year, and evening reports were sent by telegram. On Sundays the report is telephoned to Birmingham, and then telegraphed from there to London.

EXTREMES FOR YEAR.

BAROMETER.—The highest reading (corrected to 32° F. and mean sea level) was 30.75 on 22nd December. The lowest reading was 29.17 on 25th April.

TEMPERATURE.—The highest temperature recorded in the shade during the year was 76° on the 4th August, and the absolute minimum was 21° on the 10th March and the 19th December. The mean maximum for the year was 55.5° and the mean minimum for the year 42.8°.

SUNSHINE.—As will be seen from Table XIII., there were 1196.3 hours of bright sunshine during the year. This gives a daily average of 3.3 hours. The maximum sunshine for one day was 14.3 hours on 26th June. The month yielding the most sunshine was June, with 158.3 hours, a daily mean of 5.3 hours.

RAINFALL.—During the year 25.46 inches of rain fell, distributed over 168 days. The wettest month during 1931 was April with 3.95 inches, which were distributed over 20 days. March was the driest month, with only 0.03 in. of rain, which was distributed over 2 days.

MONTHLY NOTES.

JANUARY.—The maximum temperature was 53° on the 16th, and the minimum was 22° on the 5th. The lowest daily maximum was 28° on the 6th, and the highest daily minimum was 43° on the 16th. 21 ground frosts were registered during the month. The total rainfall for the month was 1.34 ins., distributed over 18 days. The prevailing wind was south-west. Snow fell on one day, and gales occurred on the 16th and 17th.

FEBRUARY.—The maximum and minimum shade temperatures were 56° on the 25th, and 28° on the 2nd and 22nd respectively. The lowest daily maximum was 36° on the 17th, and the highest minimum 48° on the 26th. The total rainfall was 2.50 ins., distributed over 18 days. The prevailing wind was south-west. There were 17 ground frosts. Snow fell on four days. Hail occurred on the 16th and a thunderstorm on the 11th.

MARCH.—The maximum shade temperature for the month was 65° on the 20th, and the minimum was 21° on the 10th. The lowest daily maximum was 33° on the 9th, and the highest daily minimum was 50° on the 21st. Rain fell on two days only, amounting to only 0.03 ins.. This was the driest month of the year. The prevailing wind was north-east. There were 22 ground frosts. 144.7 hours of sunshine were recorded during the month. Snow fell on two days.

APRIL.—The maximum shade temperature was 66° on the 11th, and the minimum was 30° on the 1st. The lowest maximum

was 43 on the 19th, and the highest minimum was 47° on the 15th. Rain fell on 20 days, and totalled 3.95 ins.; this constitutes a record fall for April. The prevailing wind was north-west. Hail and sleet fell on the 17th. There were 3 ground frosts.

MAY.—The maximum shade temperature for the month was 74° on the 27th. The lowest temperature was 33° on the 21st. 8 ground frosts were recorded. Rain fell on 12 days, and totalled 2.84 inches. The lowest daily maximum was 53° on the 3rd, 17th and 20th, and the highest minimum was 55° on the 28th. The prevailing wind was south-west. 144.4 hours of bright sunshine were recorded.

JUNE. This month yielded 158.3 hours of sunshine. Rain fell on 13 days, and totalled 2.53 inches. The maximum shade temperature for the month was 75° on the 28th, and the minimum 42° on the 25th. The lowest daily maximum was 57° on the 5th, and the highest daily minimum was 59° on the 14th. The prevailing wind was south-west. Thunder was heard on the 14th and 19th.

JULY.—The maximum temperature was 72° on the 1st and 22nd. The minimum was 42° on the 21st. The lowest daily maximum was 60° on the 20th, and the highest minimum was 58° on the 4th and 12th. Sunshine recorded during the month was 141.7 hours. Rain fell on 20 days, and totalled 2.57 ins. The prevailing wind was south-west. A thunderstorm occurred on the 12th, and thunder was heard on the 6th and 7th. A ground temperature of 33° was recorded on the 21st.

AUGUST.—The maximum shade temperature was 76° on the 4th, and the minimum was 41° on the 26th. The lowest daily maximum was 57° on the 8th and 23rd, and the highest minimum 60° on the 5th. There were 144.2 hours of bright sunshine during the month. The rainfall was 3.44 ins., distributed over 15 days. The prevailing wind was north-east. Thunder and lightning occurred on the 3rd and 14th.

SEPTEMBER.—The maximum shade temperature was 69° on the 1st and 16th. The minimum shade temperature was 34° on the 8th. The lowest daily maximum was 53° on the 12th, and the highest minimum was 57° on the 2nd. The amount of bright sun-

shine recorded for the month was 81.9 hours. 2.53 ins. of rain fell, and was distributed over 12 days. A thunderstorm occurred on the 3rd, when 1.16 ins. of rain fell. The prevailing wind was north-east.

OCTOBER.—The maximum shade temperature was 67° on the 12th, and the minimum 23° on the 22nd, 26th and 27th. The lowest daily maximum was 48° on the 25th, and the highest minimum was 58° on the 4th. 107.5 hours of sunshine were recorded during the month. The rainfall was 0.47 ins., and distributed over 7 days. The prevailing wind was south-west. 12 ground frosts were recorded.

NOVEMBER.—The maximum shade temperature registered during the month was 60° on the 3rd, and the minimum was 33° on the 30th. The lowest daily maximum was 40° on the 29th, and the highest minimum 56° on the 4th. There were 53.4 hours of sunshine during the month. Rain fell on 19 days, and totalled 2.35 ins. The prevailing wind was south-west. A gale occurred on the 4th. Fogs were prevalent towards the end of the month.

DECEMBER.—The maximum shade temperature was 60° on the 4th, and the minimum was 21° on the 19th. The lowest daily maximum was 30° on the 18th, and the highest daily minimum 49° on the 4th. The sunshine recorded for the month totalled 30.2 hours. The total rainfall was 0.75 ins., and fell on 11 days. The prevailing wind was south-west. 12 ground frosts were recorded. Snow fell on 2 days, and a gale occurred on the 3rd. Thick fogs prevailed on the 18th and 19th.



Table XI.
METEOROLOGICAL AVERAGES OF
LEAMINGTON SPA.

For the 51 Years, 1881—1931.

Month.	Means of Barom. 9 a.m.	Air Temperature.		Rainfall.	
		Max.	Min.	Inches.	Days.
January ...	29.90	45.3	34.6	2.20	18
February...	29.91	45.4	34.8	1.64	13
March ...	29.94	49.9	36.4	1.65	15
April ...	29.93	54.3	38.9	1.96	15
May ...	29.93	63.1	44.9	1.89	13
June ...	30.03	67.4	49.3	1.57	12
July ...	29.91	69.8	53.1	2.26	14
August ...	29.88	68.9	52.4	2.39	16
September	29.99	64.2	47.9	2.07	12
October ...	29.97	57.5	42.1	2.19	14
November	29.86	48.5	36.4	2.33	16
December	29.87	46.5	36.1	2.95	18
Means and Totals...	29.92	56.7	42.2	25.10	176

Table XII.PREVAILING WINDS AND NUMBER OF DAYS
PER MONTH.

(Observations taken at 9 a.m., G.M.T.)

YEAR 1931.

		Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
January	... ..	7	2	—	—	—	—	16	5	1
February	... ..	2	1	1	—	3	1	14	4	2
March	... ..	—	—	12	6	10	—	1	—	2
April	... ..	2	1	1	1	—	—	9	6	10
May	... ..	1	—	7	—	5	6	9	2	1
June	... ..	3	—	5	—	2	2	16	1	1
July	... ..	2	—	—	—	2	2	19	3	3
August	... ..	2	—	14	—	—	—	7	—	8
September	...	15	—	6	—	5	—	2	2	—
October	... ..	9	—	3	—	—	—	12	1	6
November	... ..	3	—	—	2	4	4	17	—	—
December	... ..	8	—	1	—	—	—	22	—	—
TOTALS	... ..	54	4	50	9	31	15	144	24	34

Table XIII.

TABLE OF METEOROLOGICAL OBSERVATIONS, LEAMINGTON SPA, 1931.

Latitude 52° 18' N. Longitude 1° 30' W.

Month.	Means of Barom. 9 a.m.	AIR TEMPERATURES.						EARTH TEMPERATURES.			Direction of the prevailing Wind.	Rainfall.		Sunshine Hours.
		Means			Absolute Temperatures.			At 1 foot.	At 2 feet.	At 4 feet.		Inches	Days.	
		9 a.m.	Max.	Min.	Max.	Date.	Min.								Date.
January ...	29.86	38.1	42.8	33.0	53	on 16th	22	on 5th	37.4	...	45.7	1.34	18	44.0
February ...	29.88	40.7	45.5	34.8	56	" 25th	28	" 2nd & 22nd	38.3	...	44.8	2.66	19	59.1
March... ..	29.81	42.5	47.8	33.0	65	" 20th	21	" 10th	40.6	...	44.5	0.03	2	144.7
April	29.87	47.9	52.6	40.6	66	" 11th	30	" 1st	47.5	...	47.3	3.95	20	86.9
May	29.88	55.0	60.9	45.5	74	" 27th	33	" 21st	55.8	...	50.8	2.84	12	144.4
June	30.04	60.9	67.0	54.6	75	" 28th	42	" 25th	64.6	...	55.9	2.53	13	158.3
July	29.84	61.4	67.4	53.4	72	" 1st & 22nd	42	" 21st	63.8	...	59.2	2.57	20	141.7
August	29.92	58.8	65.7	51.7	76	" 4th	41	" 26th	61.7	...	59.5	3.44	15	144.2
September ...	30.18	55.1	60.4	47.7	69	" 1st & 16th	34	" 8th	57.7	...	58.3	2.53	12	81.9
October	30.13	49.6	56.4	40.1	67	" 12th	23	" 22nd, 26th, & 27th	50.5	...	56.4	0.47	7	107.5
November... ..	29.88	47.8	49.1	42.0	60	" 3rd	33	" 30th	46.0	...	51.7	2.35	19	53.4
December ...	30.29	42.1	45.0	37.1	60	" 4th	21	" 19th	43.2	...	49.4	0.75	11	30.2
Totals	...	...	...	...	...	...	...	...	...	...	...	25.46	168	1196.3
Means	29.96	50.0	55.5	42.8	...	...	...	...	50.6	...	52.0	...	...	...





