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BOROUGH OF ROYAL TUNBRIDGE WELLS.

ANNUAL REPORT

OF THE

Medical Officer of Health

For the Year 1931.

F. C. LINTON, M.A., M.B., Ch.B., D.P.H.

Tunbridge Wells :
BALDWIN, GROSVENOR WORKS.
2029—32.

*Men sent for no. of inspection
B.F. Smith. JRS 9/9*

*1) B.F. 5/11 Stats for night
2) P.A. 40 9*

1 2/11 d m 26/12/31





BOROUGH OF ROYAL TUNBRIDGE WELLS.



ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For the Year 1931.

F. C. LINTON, M.A., M.B., Ch.B., D.P.H.

TUNBRIDGE WELLS—
C. BALDWIN, GROSVENOR PRINTING WORKS.
1883-32.

BOROUGH OF ROYAL TUNBRIDGE WELLS.

HEALTH COMMITTEE :

(Present Constitution)

THE MAYOR (Mr. Alderman DENNIS).

Mr. Councillor STRANGE (Chairman).

Mr. Councillor HARGREAVES (Acting Chairman).

Mr. Alderman CALEY.

Mr. Councillor MISSENDEN.

Councillor Miss BARNES.

Councillor Major WALKER.

Mr. Councillor DENCE.

MATERNITY AND CHILD WELFARE COMMITTEE :

(Present Constitution)

THE MAYOR (Mr. Alderman DENNIS).

Mr. Councillor STRANGE (Chairman).

Mr. Councillor HARGREAVES (Acting Chairman).

Mr. Alderman CALEY.

Councillor Major WALKER.

Councillor Miss BARNES.

Mrs. PAYNE.

Mr. Councillor DENCE.

Miss SCOTT.

Mr. Councillor MISSENDEN.

Mrs. HAMMOND.

STAFF :

Senior Sanitary Inspector :

H. T. TAYLOR, M.R.S.I., M.S.I.A. 1, 2

Inspectors :

E. J. WELLS. 1

W. P. CAVE. 1, 2

E. J. A. BETTLE. 1, 2

Disinfectors, etc. :

H. MAIL.

Chief Clerk :

J. G. COX.

Assistant Clerks :

Miss DOROTHY BULL.

C. H. WEEKES (*appointed 7/12/1931*).

Health Visitors :

Miss M. G. CORNISH 3, 4 (*appointed 1/6/1931*).

Miss E. A. MEAKINS. 3, 4.

(*resigned 31/5/1931*).

Miss J. DONALDSON. 3

Miss E. RICE OXLEY. 3, 4.

Miss M. MACLAREN. 3, 4.

Borough Infectious Diseases Hospital :

Medical Superintendent :

THE MEDICAL OFFICER OF HEALTH.

Matron :

Miss E. M. BROCKLEHURST.

Public Analyst :

A. H. M. MUTER, F.I.C.

Dental Surgeon :

T. F. FOX, L.D.S., R.C.S., Eng.

Medical Officer for Ante-Natal Clinic :

MARGARET EMSLIE, M.B., Ch.B.

Medical Officer for Orthopaedic Clinic :

P. L. RICHARDSON, M.B., B.S., M.R.C.S., L.R.C.P.

Medical Officer of Health and Medical Officer for Maternity and Child Welfare :

F. C. LINTON, M.A., M.B., Ch.B., D.P.H.

1 R.S.I. Certificate.

3 Health Visitors Certificate.

2 Meat Certificate.

4 C.M.B. Certificate.

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*To His Worship the Mayor, and to the Aldermen and Councillors
of the Borough of Royal Tunbridge Wells.*

MR. MAYOR, LADIES AND GENTLEMEN,

In accordance with the instructions of the Ministry of Health, I submit my eighteenth Annual Report dealing with the Vital Statistics, and the work of the Public Health Department, of the Borough for the year 1931.

Owing to the diminishing birth rate, and the increasing longevity of the population, the death-rate can no longer be expected to decrease in this country: in residential towns, attractive to elderly and leisured persons, it has already begun to increase, as deaths are—in the course of Nature—more numerous amongst the aged than amongst the youthful. Hence, in Tunbridge Wells, deaths over 65 years of age increase almost yearly, whilst those below the age of 45 tend steadily to decrease. The nett death-rate of 11.3 per thousand as compared with 12.3 for England and Wales, speaks well for the healthy conditions prevailing in the Borough. The birth-rate, 11.7 is fractionally higher than in 1930. The birth-rate for England and Wales for 1931 was 15.8 per thousand. Infant Mortality, 49 per thousand births, was low: 66 per thousand was the figure for the Kingdom in general. The deaths from Zymotic diseases totalled but one—a death from diphtheria: this is the smallest figure recorded in any year.

The mortality from Tuberculosis is still slowly decreasing, that for 1931, 0.55 per thousand persons being the lowest recorded during the 42 years of records.

The present staff of the department has worked conscientiously and well: it is a matter for regret that financial stringency has made it impossible for me to ask you to extend the medical and nursing section so that it could cope more

adequately with the ever-increasing demands upon its time and energies.

The removal of the Public Health Offices from 9 and 10, Calverley Parade, to 9 and 10, Calverley Terrace, took place on the 19th September, 1931. The new premises are appreciated not only by members of the staff, to whose comfort the better construction, larger amount of air space and distance from noisy traffic add greatly, but also by the general public, particularly those who make use of the School Medical Centre which is now in airy rooms on the ground floor instead of, as formerly, in a dark basement.

Housing conditions continued to attract attention: the population of the Borough was practically stationary between 1921 and 1931, but the number of houses available has increased by several hundreds: this means that the number of persons per house must have decreased, and that the housing problem, despite individual cases of hardship, is gradually being solved.

Meteorological conditions, in a year of dull skies, were again comparatively favourable to Tunbridge Wells, which recorded bright sunshine much in excess of any other inland health resort.

In conclusion, may I express to my staff, to the Council and its officers, my sincere thanks for the cordial support given me in the task of promoting the health of the inhabitants of our Borough.

I am, Mr. Mayor, Ladies and Gentlemen,

Your obedient Servant,

F. C. LINTON.

PUBLIC HEALTH OFFICES,
10, CALVERLEY TERRACE,
TUNBRIDGE WELLS.

1.—General Statistics.

Area in acres	...	...	...	...	...	3,991
Population (Census, 1931)	...	...	...	...	...	35,367
Resident Population (Registrar-General's estimate— Mid-year, 1931)	...	...	...	...	...	34,660
Number of houses intended or used for habitation at December 31st, 1931	...	...	...	...	...	9,134†
Number of inhabited houses	...	...	...	...	...	8,981†
Rateable value	...	...	...	...	...	£416,990
Sum represented by a penny rate :— On General Rate	...	...	...	...	...	£1,650
Mean annual temperature	...	...	...	...	...	48.2° F.
Total rainfall	...	...	...	...	...	28.61 inches.
Hours of bright sunshine	...	...	...	...	...	1,450 hours 24 minutes.

†These figures include flats, and represent the number of separately occupied premises.

2.—Extracts from Vital Statistics of the Year.

		Total.	Males.	Females.
Live Births	{ Legitimate	... 391	182	209
	{ Illegitimate	... 16	15	1
Birth Rate—11.7 per thousand.				
Stillbirths	...	13	5	8
Stillbirth Rate per thousand of total births—31.0.				
Deaths	...	536	228	308
Crude Death Rate—15.5 per thousand.				
Death Rate corrected for age and sex constitution, 11.3 per thousand (factor for correction 0.731).				
Deaths from diseases and accidents of pregnancy and child- birth :—				
	From sepsis	...	0	
	From other causes	...	2	
Deaths of infants under one year of age, per 1,000 births :—				
	Legitimate	... 40.9	} Total, 49.1	
	Illegitimate	... 250.0		

	Total.	Males.	Females.
Deaths from Measles (all ages) ...	0	0	0
„ „ Whooping Cough (all ages) ...	0	0	0
„ „ Diarrhoea, etc. (under 2 years of age) ...	0	0	0

NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

1.—Population.

The population at mid-year in 1931 was stated by the Registrar-General to be 34,660 and the birth and death rates have been calculated upon this figure so that uniformity may be maintained with returns throughout the Kingdom. The Census figure three months earlier was 35,367. The analysis of the "Usual Residence" question was incomplete, but the Registrar-General stated in reply to enquiry that "the new figure was sufficiently accurate for the purpose for which it was supplied."

2.—Physical Features and General Character.

The Borough of Royal Tunbridge Wells covers 3,991 acres. It is built upon hills, the altitude above sea level varying from 220 feet at the bottom of the valley in which the historic mineral spring is situated, to 500 feet at the Blackhurst Collecting Reservoir; most of the houses stand at a level between 300 and 450 feet. Its climate is therefore breezy and bracing, with sheltered spots for those who live in the valleys. It lies in the extreme south-west corner of Kent, $34\frac{1}{2}$ miles from London. The sub-soil is mostly sandstone, the geological layer known as Tunbridge Wells sands predominating. The water supplies for the Borough are drawn from a deeper sandstone layer known as the Hastings sandstone: the supply is pure and soft. During the year 1926, sanction was obtained from the Ministry of Health to open a new borewell so as to increase the amount

available; this work was completed and water from the Saint's Hill Borewell was first pumped into supply on June 22nd, 1931. A sample, taken on August 31st, 1931, from the filtered water as delivered from the new supply to consumers, gave the following satisfactory result :—

Chemical Analysis.

			<i>Parts per 100,000.</i>
Free and Saline Ammonia	...	...	0.035
Albuminoid Ammonia	...	...	0.001
Oxygen absorbed at 80° F.	} in 15 minutes	...	0.0032
		in 4 hours	0.0064
Nitric Nitrogen	...	...	none
Chlorine	...	...	2.8
Equivalent to Sodium Chloride	...	...	4.6
Total solid matter (dried at 180° C.)	...	...	30.0
Temporary Hardness	...	...	12.0
Permanent Hardness	...	...	none.
Appearance in two-foot tube	...	...	colourless and clear.
Metals (Lead, Copper, Zinc, Iron)	...	...	Iron—0.0048 parts per 100,000 (as Fe).

REMARKS.

Carbonate of Soda (Na_2CO_3)	...	...	5.83 parts per 100,000.
Free carbon dioxide (CO_2)	...	...	2.31 ditto.
No trace of aluminoferric present.			

Bacteriological Statement.

No. of organisms per cubic centimetre capable of growing.		B. Coli Communis Pre-sumptive Test.		
on standard Gelatin in 4 days at 22° C.	on standard Agar-Agar in 24 hours at 37/38° C.	100 c.c.	10 c.c.	1 c.c.
4	0	—	—	—

3.—Meteorological Notes.

The records of the Municipal Meteorological Station, which is one of the official auxiliary stations reporting to the Meteorological Office, are kept by the staff of the Health Department and have been so kept since 1st July, 1914. The instruments are situated in the Calverley Grounds, with the exception of the Sunshine Recorder, which is established on the roof tower of the Earl's Court Hotel, Mount Ephraim, and of the Standard Barometer, kept in the Health Office.

The Meteorological Office decided in favour of the site in the Calverley Grounds near the bowling green, and readings of all instruments except the sunshine recorder and the standard barometer, have been taken at this site since 1st January, 1931. It is not a perfect site for rainfall, and possibly not for ground temperatures, but will suffice until a better site is available. Duplicate rainfall readings were taken throughout the year at the old station and the new, for comparative purposes.

The readings are taken by Mr. W. P. Cave and Mr. E. J. A. Bettle, members of the Staff of the Health Department.

The annual inspection of the station by an inspector of the Meteorological Office took place on 18th August. In reporting that everything was in good order, he has taken occasion to remind the Corporation that the site is not entirely in accordance with the requirements of the Meteorological Office, and for that reason the usual Certificate is withheld, and that the question of obtaining a satisfactory site should be kept in mind.

The total amount of sunshine recorded was 1,450 hours 24 minutes. The mean amount is 1,561 hours 24 minutes. The most sunny days were June 27th and July 9th, 14 hours 42 minutes being recorded on each date. There were 70 sunless days, 61 being the average.

The highest temperature in the sun was 138 degrees, on 30th July.

The mean temperature in the shade for the year was 48.2 degrees, 49.2 degrees being the average.

The mean daily range was 14.1, the average being 14.6.

The temperature in the shade four feet above the ground, was highest, 82 degrees, on June 14th, and lowest, 16 degrees, on 11th March.

The temperature in the shade first reached :—

60 degrees on 19th March.

70 " " 26th May.

80 " " 14th June.

last reached—

80 " " 14th June.

70 " " 29th August.

60 " " 3rd November.

The hottest night was 5th August, when the temperature did not go below 62 degrees.

The last frost in the air in spring was on 1st April, and the first in the autumn was on 21st October. The last on the grass in spring, was on 10th May, and the first in the autumn was on 21st October.

The rainfall amounted to 28.61 inches, the average being 30.62 inches. It fell on 178 days, the average being 173.

The most rain that fell on one day was 1.28 inches on 3rd May.

The wind at 9 a.m. was N. 40 days, N.E. 42 days, E. 13 days, S.E. 32 days, S. 18 days, S.W. 97 days, W. 49 days, N.W. 74 days.

The mean amount of cloud at 9 a.m. was 7.1, 6.8 being the average ; ten representing overcast sky. Thunder and lightning occurred on 11 days.

There were 13 fogs, and it was misty on 31 other mornings.

METEOROLOGICAL NOTES, 1931.

Months.	Sunshine.		Rainfall. In Inches.		Mean Temperature. In shade, 4ft. above ground.		Temperature Underground.			
	1931.	17 Year Average.	1931.	51 Year Average.	1931.	41 Year Average.	One Foot.		Four Feet.	
							1931.	31 Year Average.	1931.	17 Year Average.
January ...	Hrs. Mins. 64 0	Hrs. Mins. 49 24	2.43	2.60	•F 37.5	•F 38.6	•F 37.9	•F 39.6	•F 42.5	•F 43.9
February ...	64 6	70 6	2.53	2.29	37.9	39.3	37.7	39.4	41.2	42.9
March ...	137 36	119 6	0.45	2.27	39.3	41.7	39.5	41.8	41.2	43.5
April ...	121 24	138 36	4.11	2.03	46.2	46.4	46.7	46.6	45.8	45.9
May ...	172 54	214 36	2.84	1.94	52.6	52.9	53.6	54.1	50.0	50.7
June ...	209 0	207 24	1.30	1.97	58.9	57.8	61.7	60.0	57.1	55.9
July ...	180 42	203 36	2.41	2.33	60.0	61.4	63.1	63.1	60.3	58.9
August ...	155 36	186 36	3.87	2.44	59.4	62.3	62.1	62.6	60.7	60.3
September ...	126 42	152 6	2.31	2.23	52.6	57.0	57.1	58.7	58.0	59.1
October ...	118 54	112 12	0.59	3.58	48.5	50.1	50.9	52.5	54.5	55.9
November ...	63 54	65 42	5.00	3.54	45.5	43.3	45.5	45.6	48.9	50.6
December ...	35 36	42 0	0.77	3.40	40.5	40.1	42.1	41.8	46.0	46.0
WHOLE YEAR	1450 24	1561 24	28.61	30.62	48.2	49.2	49.8	50.5	50.5	51.1

4.—Social Conditions.

Tunbridge Wells is a residential town to which many persons retire from business to spend the latter part of their lives ; it also serves as a residential town for London business men, for whom there is a good train service to town in the morning, and back in the evening ; and it is a large shopping centre. The occupations of the inhabitants are governed by these conditions ; there are no large factories, but there are numerous motor works and garages ; amongst the workers are house painters, builders, builders' labourers, gardeners, drivers and conductors of motor chars-a-banc ; laundries and domestic service absorb a number of the female population. There are also many shop assistants of both sexes, as Tunbridge Wells is a shopping centre for a considerable area. Some of the inhabitants are employed at the Tunbridge Wells Brickworks situated just outside the Borough boundary.

5.—Recreations.

The large and breezy Commons in the centre of the town form a perpetual source of pleasure and of interest to visitors and inhabitants alike. Numerous healthful recreations are provided ; in Calverley Park, situated in the centre of the town, the Corporation provides an attractive pleasure ground in which tennis courts, a miniature golf course and a bowling green are all available. Bands play daily during the summer season. In addition, facilities for tennis and bowls are provided in other public parks. There are two golf courses within the Borough boundary, viz. :—the Culverden (18 holes) and the Spa (9 holes), and a third, Nevill Golf Course (18 holes) is situated within easy access just outside the Borough boundary. There are ample facilities for football and cricket, county matches being played here during Cricket Week in June. Facilities for swimming are provided at the Indoor Baths and at the Open-Air Bath.

VITAL STATISTICS.

Births.—From figures supplied by the Registrar-General the total number of births *registered* as properly belonging to Tunbridge Wells is 407 (197 males, 210 females). This corresponds to a rate of 11.7 per thousand, as compared with 11.6 per thousand in 1930. Fifteen males and 1 female were born out of wedlock, giving an illegitimate rate of 3.9 per cent. as compared with 5.9 per cent., in 1930.

The births *notified* during the year as occurring in the Borough numbered 491 and consisted of 227 males and 264 females; of these, 6 males and 8 females were stillborn.

The excess of notifications over registrations of births is largely accounted for by births in the Maternity Home, which caters for a wide district around Tunbridge Wells, as well as for the Borough itself.

Deaths.—488 deaths were registered in the Borough during 1931, and there were 74 outwardly transferable deaths and 122 inward transfers, thus making the total number of deaths belonging to the district 536. This gives a crude death rate of 15.5 per thousand, as compared with 14.1 in 1930.

The Registrar-General has supplied the proper correction figure (0.731) as obtained from the 1921 census returns, and the true or corrected death rate is thus seen to be 11.3 per thousand; this is a correction for age and sex distribution of the population. In the case of a health resort attractive to elderly persons and to invalids, it is necessary that the *corrected* death rate should be used in making comparisons with the death rate in the country generally. The uncorrected rate in the case of a town in which so many old people reside naturally gives a false impression of the health value of the

locality. Table I. on page 20 compares the births and deaths rates, etc., for England and Wales and various groups of towns, Tunbridge Wells figures being inserted below. The Borough death rate, 11.3, compares favourably with 12.3, the figure for the Kingdom generally.

The proportion of deaths over 65 years of age was 64.7 per cent. of the total number : and under 45 years of age it was but 13.6 per cent. of the total.

The Infant Death Rate fell from 59.1 to 49.1 per thousand. Eleven of the 20 deaths of infants under one year occurred during the first four weeks of life : only four were over six months old.

Table showing the average number of Deaths at several ages for consecutive periods of five years.

	1896 to 1900	1901 to 1905	1906 to 1910	1911 to 1915	1916 to 1920	1921 to 1925	1926 to 1930	1931*
Deaths at under 1 year ...	72	57	46	40	36	23	22	20
" 1 and under 2 } ...	25	29	23	16	{ 6	3	5	5
" 2 " 5 } ...	21	11	10	16	{ 9	5	5	1
" 5 " 15 ...	20	13	14	12	15	6	7	6
" 15 " 25 ...	121	141	141	145	21	10	10	11
" 25 " 45 } ...	107	104	118	116	{ 47	36	37	30
" 45 " 65 } ...	154	178	205	234	{ 107	104	118	116
" 65 and upwards					245	276	307	347

* Inserted for comparison.

Infectious Diseases.—Influenza was more prevalent than in 1930, 11 deaths being attributed to this disease ; only one was that of a person under 50 years of age. German Measles was the only minor infectious disease which appeared in epidemic form, the outbreak occurring from March to May. Four hundred and sixty-one school children were reported to have caught this disease : it had no complications and no mortality.

A table is appended shewing the actual number of deaths from certain causes in five yearly periods from 1886 onwards.

DEATHS FROM.

Five-Yearly Period.	Cancer.	Tubercu- losis		Infec- tious Diseases.	Vio- lence.	In- fluenza.
		Pul- mon- ary.	Non- Pul- mon- ary.			
1886 to 1890 ...	139	201	69	98	45	*
1891 „ 1895 ...	158	174	103	110	44	*
1896 „ 1900 ...	170	131	91	179	62	84
1901 „ 1905 ...	226	167	61	104	45	67
1906 „ 1910 ...	251	154	48	90	35	87
1911 „ 1915 ...	260	133	46	110	49	60
1916 „ 1920 ...	310	150	62	59	50	178
1921 „ 1925 ...	328	111	32	27	65	64
1926 „ 1930 ...	384	106	21	30	59	91
1931 ...	70	16	3	3	13	11

* Reliable figures not available.

Infant Mortality, 1931.—Twenty deaths of infants below one year of age occurred, being 49.1 per thousand born, as compared with an infant mortality of 66 per thousand in England and Wales generally. The still births numbered 13. The average infant mortality in Tunbridge Wells during the previous ten years was 52.3 per thousand. As usual, the majority of infant deaths were due to causes operating during the period of expectant motherhood, a period to which increasing attention is being given in the hope of lessening both ill-health and fatalities.

In Table IV. (page 24) is given in detail a list of the causes of infant deaths in 1931.

The appended chart shows in graphic method the relative infant mortality in England and Wales and in Tunbridge Wells from 1896 to 1931 inclusive. From this it is evident that even in a healthy non-industrial town such as ours, there is great scope for improving the conditions in which infants are reared. The chief means to which improvement in health during the first year of life may be attributed, in my opinion, are as follows:—

- (a) Education of the mothers. (This includes the whole of the facilities provided by the Local Authority's Child Welfare Centres).
- (b) The use of dried milks during the warm months of the year, as well as the employment of greater care in handling and storing liquid milk.
- (c) Better housing conditions, and
- (d) Greater facilities for immediate assistance in cases of illness.

INFANT MORTALITY

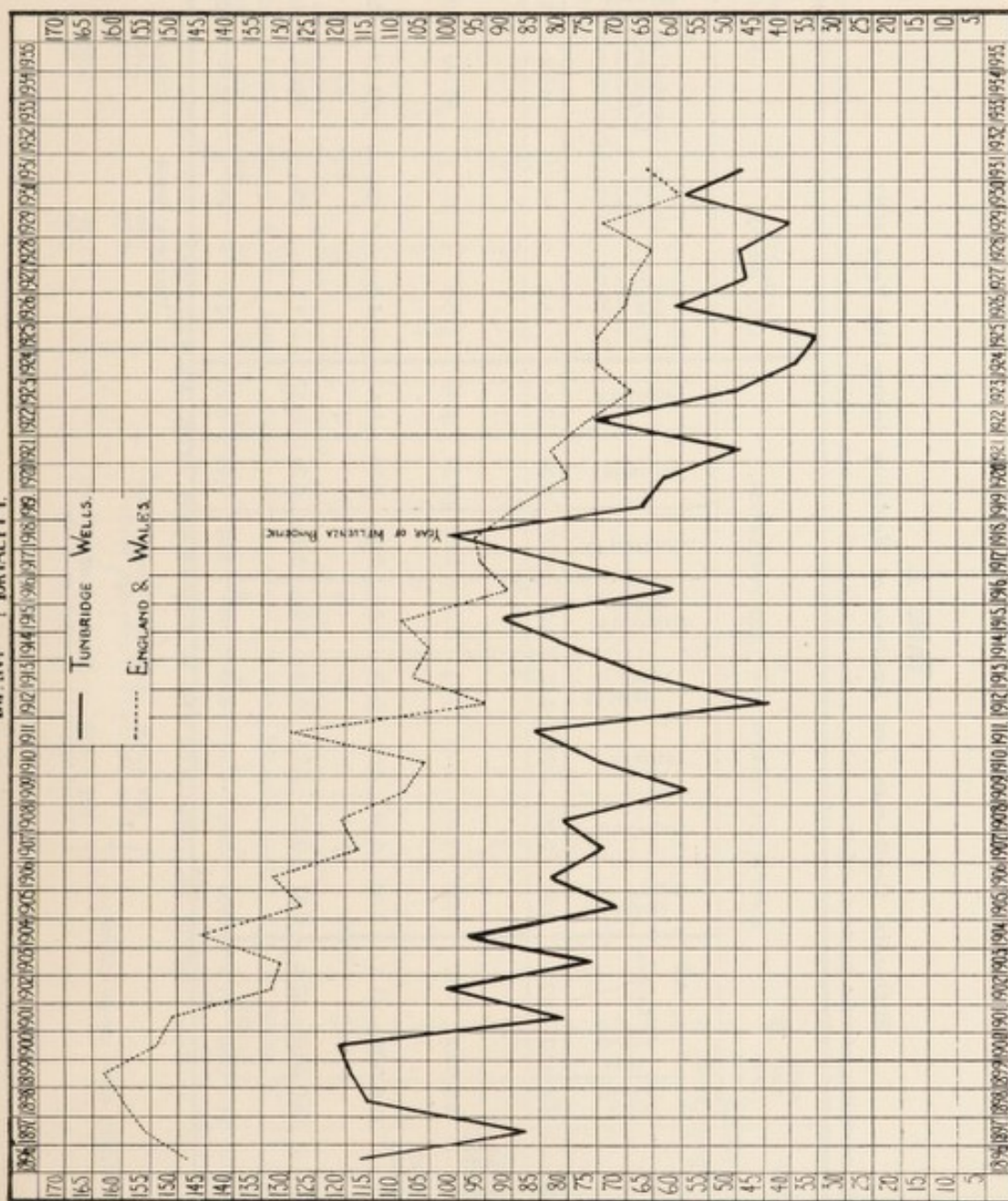


Table I.
Birth-rate, Death-rate, and Analysis of Mortality during the Year 1931.

(The mortality rates for England and Wales refer to the whole population, but for London and the towns to civilians only).

	RATE PER 1,000 TOTAL POPULATION.		ANNUAL DEATH-RATE PER 1,000 POPULATION.										RATE PER 1,000 BIRTHS.		PERCENTAGE OF TOTAL DEATHS.			
	Live Births.	Still-Births.	All Causes.	Enteric Fever.	Small-pox.	Measles.	Scarlet Fever.	Whooping-cough.	Diphtheria.	Influenza.	Violence.	Diarrhoea and Enteritis (under 2 Years).	Total Deaths under One Year.	Certified by Registered Medical Practitioners.	Inquest Cases.	Certified by Coroner after P.M.	No Inquest.	Uncertified Causes of Death.
England and Wales ...	15.8	0.67	12.3	0.01	0.00	0.08	0.01	0.06	0.07	0.36	0.54	6.0	66	91.18	6.17	1.70	0.95	
107 County Boroughs and Great Towns, including London ...	16.0	0.67	12.3	0.00	0.00	0.10	0.01	0.07	0.08	0.33	0.48	8.4	71	91.43	5.84	2.24	0.49	
159 Smaller Towns (1921 Adjusted Populations 20,000—50,000) ...	15.6	0.73	11.3	0.00	0.00	0.07	0.01	0.05	0.05	0.36	0.43	4.0	62	92.17	5.49	1.25	1.09	
London ...	15.0	0.50	12.4	0.01	0.00	0.03	0.02	0.07	0.06	0.26	0.57	9.7	65	89.52	6.23	4.24	0.01	
Tunbridge Wells ...	11.7	0.38	11.3	0.00	0.00	0.00	0.00	0.00	0.03	0.40	0.32	0.0	49	91.99	5.22	2.42	0.37	

The maternal mortality rates are as follows:—

<div> <div>per 1,000 Live Births</div> <div>per 1,000 Total Births</div> </div>	England and Wales	Tunbridge Wells	England and Wales	Tunbridge Wells	Puerperal Sepsis.	Others.	Total.
	...	...	...	...	1.66	2.45	4.11
	...	...	...	...	0.00	4.91	4.91
	...	...	...	...	1.59	2.35	3.95
	...	...	...	...	0.00	4.76	4.76

Table II.—NOTIFIABLE DISEASES FOR YEAR 1931.

DISEASE.	Total cases notified (All ages.)	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.	5 years and under 10 years.	10 years and under 15 years.	15 years and under 20 years.	20 years and under 35 years.	35 years and under 45 years.	45 years and under 65 years.	65 years and over	Cases admitted to hospital.
Diphtheria	19	...	...	...	...	1	9	5	2	2	...	...	...	19
Scarlet Fever	22	...	1	...	1	1	8	6	2	2	1	...	...	22
Enteric Fever (including Paratyphoid)	6	...	...	...	...	...	...	...	...	2	2	1	...	5
Pneumonia	39	2	5	...	2	3	3	...	2	7	2	3	10	3
Erysipelas	13	...	...	...	...	...	1	...	...	5	1	6	...	2
Encephalitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lethargica	0	...	...	...	...	...	...	...	...	...	...	...	...	0
Cerebro-Spinal Fever	0	...	...	...	...	...	...	...	...	...	...	...	...	0
Puerperal Fever	7*	...	...	...	...	...	...	...	...	7	...	...	...	6
Puerperal Pyrexia	5*	...	...	...	...	...	...	...	1	3	1	...	...	3
Anterior Poliomyelitis	0	...	...	...	...	...	...	...	...	...	...	...	...	0
Ophthalmia Neonatorum	2	2	...	...	...	...	...	...	...	...	...	...	...	0
Other Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Of these, six cases of Puerperal Fever and three cases of Puerperal Pyrexia occurred amongst outside cases in institutions in the Borough.	0	...	...	...	...	...	...	...	...	...	...	...	...	0

* Of these, six cases of Puerperal Fever and three cases of Puerperal Pyrexia occurred amongst outside cases in institutions in the Borough.

Table IIa.—DEATHS FROM NOTIFIABLE DISEASES FOR YEAR 1931.

DISEASE.	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.	5 years and under 10 years.	10 years and under 15 years.	15 years and under 20 years.	20 years and under 35 years.	35 years and under 45 years.	45 years and under 65 years.	65 years and over
Diphtheria ...	1	...	...	...	...	...	...	...	1	...	...	...	...
Scarlet Fever ...	0	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever (including typhoid) ...	0	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia ...	29	6	3	...	...	...	...	...	2	...	2	6	10
Erysipelas ...	0	...	...	...	...	...	...	...	...	...	...	2	...
Encephalitis Lethargica ...	2*	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Fever ...	0	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ...	0	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis ...	0	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases generally notifiable	0	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases notifiable locally ...	0	...	...	...	...	...	...	...	...	...	...	...	...

* Not notified : both died in the General Hospital.

TABLE III.
Causes of, and Ages at Death during the Year 1931.

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.												Total Deaths whether of Residents or Non-Residents in Institutions in the District.	
	ALL AGES.	Under 1 year.	1 and 2 years.	2 and 3 years.	3 and 4 years.	4 and 5 years.	5 and 10 years.	10 and 15 years.	15 and 20 years.	20 and 35 years.	35 and 45 years.	45 and under 65 years.		65 years upwards.
All Causes	534	20	5	1	...	...	3	3	5	15	21	116	345	144
	2	...	...	...	...	...	...	...	...	...	...	...	2	0
Enteric Fever	0	...	...	...	...	...	...	...	...	...	...	...	...	0
Small Pox	0	...	...	...	...	...	...	...	...	...	...	...	...	0
Measles	0	...	...	...	...	...	...	...	...	...	...	...	...	0
Scarlet Fever	0	...	...	...	...	...	...	...	...	...	...	...	...	0
Whooping Cough	0	...	...	...	...	...	...	...	...	...	...	...	...	0
Diphtheria	1	...	...	...	...	...	...	...	1	...	...	...	...	3
Influenza	11	...	...	...	...	...	...	...	...	...	...	...	...	0
Encephalitis lethargica	2	...	...	...	...	...	...	...	...	...	...	...	...	2
Meningococcal meningitis	0	...	...	...	...	...	...	...	...	...	...	...	...	0
Tuberculosis of respiratory system	16	...	...	...	...	...	...	...	...	2	2	9	3	2
Other Tuberculous diseases	3	...	...	...	...	...	...	1	...	2	...	...	...	5
Cancer, Malignant disease	70	...	...	...	...	...	...	...	...	...	1	22	47	21
Rheumatic Fever	3	...	...	...	...	...	...	...	...	...	...	2	1	0
Diabetes	4	...	...	...	...	...	...	...	...	...	...	...	...	2
Cerebral haemorrhage, etc.	32	...	...	...	...	...	...	...	...	...	1	2	4	2
Heart disease	118	...	...	...	...	...	...	1	...	1	1	20	95	13
Arterio-sclerosis	45	...	...	...	...	...	...	...	...	...	1	4	40	3
Bronchitis	38	...	...	...	...	...	...	...	...	...	...	5	33	3
Pneumonia (all forms)	29	6	3	...	...	...	...	...	2	...	2	6	10	13
Other respiratory diseases	3	...	...	...	...	...	...	...	...	...	...	...	3	1
Ulcer of stomach or duodenum	0	...	...	...	...	...	...	...	...	...	...	...	...	1
Diarrhoea, etc. (under 2 years)	0	...	...	...	...	...	...	...	...	...	...	...	...	1
Appendicitis and Typhlitis	1	...	...	...	...	...	...	...	...	...	...	1	...	7
Cirrhosis of liver	2	...	...	...	...	...	...	...	...	...	...	2	...	0
Acute and Chronic Nephritis	31	...	...	...	...	...	1	...	...	1	1	12	16	8
Puerperal sepsis	0	...	...	...	...	...	...	...	...	...	...	...	...	1
Other accidents and diseases of pregnancy and parturition	2	...	...	...	...	...	...	...	...	1	1	...	...	2
Congenital debility and malformation, premature birth	10	9	1	...	...	...	...	...	...	...	...	...	...	4
Suicide	11	...	...	...	...	...	...	...	1	...	...	6	...	0
Other deaths from violence	13	2	...	...	...	...	1	...	...	2	1	...	7	15
Other defined diseases	91	3	1	...	...	...	...	1	...	4	8	19	32	33
Causes ill defined or unknown	0	...	...	...	...	...	...	...	...	...	...	...	...	0

NETT BIRTHS IN THE YEAR :—
Legitimate ... 391
Illegitimate ... 16

NETT DEATHS IN THE YEAR :—
Certified ... 534
Uncertified ... 2

TABLE IV.

INFANT MORTALITY.

1931. Nett Deaths from stated causes at various Ages under 1 Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under 1 Year.
All causes { Certified	7	2	2	—	11	2	3	4	—	20
{ Uncertified	—	—	—	—	—	—	—	—	—	—
Small-pox	—	—	—	—	—	—	—	—	—	—
Chicken-pox	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—
Diphtheria and Croup...	—	—	—	—	—	—	—	—	—	—
Whooping-cough	—	—	—	—	—	—	—	—	—	—
Diarrhoea	—	—	—	—	—	—	—	—	—	—
Enteritis	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis	—	—	—	—	—	—	—	—	—	—
Abdominal Tubercu- losis	—	—	—	—	—	—	—	—	—	—
Other Tuberculous Diseases	—	—	—	—	—	—	—	—	—	—
Congenital Malforma- tions	1	1	—	—	2	1	—	—	—	3
Premature Birth	3	1	—	—	4	—	1	—	—	5
Atrophy, Debility and Marasmus	—	—	—	—	—	—	—	—	—	—
Atelectasis	1	—	—	—	1	—	—	—	—	1
Injury at Birth	1	—	—	—	1	—	—	—	—	1
Erysipelas	—	—	—	—	—	—	—	—	—	—
Syphilis	—	—	—	—	—	—	—	—	—	—
Rickets	—	—	—	—	—	—	—	—	—	—
Meningitis (not Tuber- culous)	—	—	—	—	—	—	—	—	—	—
Convulsions	—	—	—	—	—	—	—	—	—	—
Gastritis	—	—	—	—	—	—	—	—	—	—
Laryngitis	—	—	—	—	—	—	—	—	—	—
Bronchitis	—	—	—	—	—	—	—	—	—	—
Pneumonia (all forms) ...	—	—	1	—	1	—	2	3	—	6
Suffocation (overlying)	1	—	—	—	1	—	—	—	—	1
Other causes	—	—	1	—	1	1	—	1	—	3

Poor Law Relief.—The approximate amount of Poor Law Relief in the Parish of Tunbridge Wells for the year ending 31st March, 1932, was £4,605, as compared with £5,210 in the previous year. It should be noted that the

Parish of Broadwater Down is now included with the rest of Tunbridge Wells in this return.

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

Hospitals provided or subsidised by the Local Authority or by the County Council :—

1.—**Fever.**—The Borough has its own Fever Hospital which is situated on its southern boundary, 450 feet above sea level. The site is an excellent one, airy and open, with a southern exposure and wide view over valleys and woodland. There is accommodation in the wards for 38 adults and 6 children, allowing 12 feet wall space, and 144 square feet floor space for each adult, and slightly less for each child. Sixty beds and cots are available, and as most patients are children, this number can be accommodated without overcrowding. The Wards have each electric heating fires, and a coal-fire central stove ; also coke stoves giving hot water circulation for baths have been installed in each block. There is electric lighting throughout, and during 1930 the laundry was fitted with electrically driven machinery and the larder equipped with a “Frigidaire” electric cooler. In 1931, the drainage system was modernised by the construction of a settling tank and filter bed with mechanical sprinkling arm.

The Hospital has a large garden which supplies vegetables for most of the year for the patients and staff, also a fairly large amount of fruit in summer time, thus saving expense in catering : its flowers form one of the amenities of convalescence in the summer months.

Patients are taken from Tunbridge Wells, and also from the adjacent northern portion of the Ticehurst Rural District of East Sussex ; the enteric group of diseases from Southborough U.D. is also treated here.

2.—Smallpox.—A conjoint Smallpox Hospital is situated at Capel some four and a half miles from Tunbridge Wells. It has accommodation for 16 adult patients and is under the administration of a Board representing Tunbridge Wells, Tonbridge and Southborough Urban Districts and the Tonbridge Rural District. The situation of this Hospital is an excellent one for the purpose, being well away from human habitation in the midst of open and high lying country. A caretaker and his wife live in the house on the premises and are responsible for keeping the Hospital in good order and ready for use in case it should be required. SENTRY stoves and hot water circulation have now been installed in both blocks, thus providing hot water for baths, etc., whenever required. Hot water formerly had to be taken by hand labour from the laundry copper to the ward, an unsuitable arrangement for a Smallpox Hospital as hot baths are of paramount importance in treating the disease. Additional facilities for staff bathing before leaving the Wards for the cottage have now been introduced, and in 1931 an electric lighting system was installed in the wards and outbuildings, and also in the staff cottage. Additional accommodation for staff is required.

No case of Smallpox occurred in the districts served by this Hospital during 1931.

3.—Tuberculosis.—There is no hospital for the treatment of tuberculosis in the neighbourhood of Tunbridge Wells. The County Council makes arrangements for the treatment of suitable cases in hospitals situated in other parts of the county.

4.—Maternity.—The treatment of maternity cases is undertaken by agreement with the Tunbridge Wells and District Maternity Home, to which adequate reference is made on page 34.

5.—Children.—No children's hospital is provided or subsidised by the Local Authority or by the County Council.

in Tunbridge Wells. Children are treated in the General Hospital, Eye and Ear Hospital, and Homoeopathic Hospital. Fees are paid by the Local Authority to these hospitals in the case of operative treatment upon elementary school children for enlarged tonsils and adenoids. Fees are also paid to the General Hospital for massage, remedial exercises, ultra-violet ray treatment, etc., in orthopaedic cases referred for treatment by the Borough Medical Officer.

6.—Provision for Unmarried Mothers.—No special institutional provision is made for unmarried mothers, illegitimate infants or homeless children. The Pembury Institution, under the direction of the Public Assistance Committee, deals with most of these cases.

PROFESSIONAL NURSING IN THE HOME.

(a) **General.**—The Tunbridge Wells District Nursing Association, which is affiliated to the Queen's Jubilee Nursing Association and supported by voluntary contributions, undertakes home nursing when required. A report of its work is given on page 34.

(b) **For Infectious Diseases.**—So far as the Borough Council is concerned, an arrangement is made whereby the services of a District Nurse can be obtained for attending in the homes of cases of ophthalmia neonatorum, measles, whooping-cough, etc., under the Maternity and Child Welfare Act, 1918. It is in the discretion of the Medical Officer of Health to call for these services as required; no calls were made during 1931, a year free from outbreaks of measles or whooping cough.

(c) **Midwives.**—In May, 1928, one of the midwives belonging to the Tunbridge Wells District Nursing Association took up residence as a nurse-midwife in Rusthall, a subsidy being paid by the Borough Council in order that this out-lying district might be supplied with a skilled midwife whose services

would be more quickly available than in the past. The subsidy is payable for midwifery services only. The control of midwives in the Borough is vested in the Kent County Council; the Child Welfare work, Ante-Natal work and supervision of Nursing Homes are duties of the Borough Council.

The number of midwives who notified their intention to practise in the Tunbridge Wells area during the year was stated by the Kent County Council to be ten: at the end of the year, nine names were supplied as practising. Notifications of births were received from 14 practising midwives, amongst whom were nine of the ten on the list of the Kent County Council: three were members of the staffs of private nursing homes and the cases were taken under medical direction.

LABORATORY FACILITIES.

The number of specimens examined in the Borough Laboratory during 1931, viz.:—660, shews a slight decrease in comparison with the numbers examined in 1930. The nature of the examinations is set out in the following table:—

Specimens examined for presence of Diphtheria					
Bacillus	...	...	...	...	652
	Positive.		Negative.		
From Isolation Hospital					
cases	...	...	87	212	
From outside sources	...	22	331		
Hairs examined for presence of Ringworm	...				6
Blood for Malaria	...	...	...	...	1
Other specimens examined	...	...	...	...	1
<hr/>					
Total	...	...	...	...	660

In addition to the above, 177 specimens were examined

at the County Laboratory, Sessions House, Maidstone, as follows :—

	Positive.	Negative.
65 specimens for Tubercle Bacillus	16	49
26 Blood Examinations for Typhoid or Para-Typhoid ...	4	22
16 Faeces for ditto ...	6	10
6 Urine for ditto ...	2	4
45 Swab Examinations for Diph- theria ...	4	41
5 Virulence tests for Diphtheria ...	4	1
2 Faeces Examinations for Dysen- tery ...	0	2
1 Blood Examination for B. Aer- trycke ...	1	0
8 Throat swabs for Streptococcus haemolyticus ...	4	4
	—	—
	41	133
	==	==

Also three cervical swabs were sent for examination.

Chemical Work.—Chemical analyses of specimens of water, milk, and other forms of food, and drugs, are carried out by the Public Analyst, Mr. A. H. Mitchell Muter, of the South London Laboratories. The work done is reviewed under the Food and Drugs Acts.

LEGISLATION.

The Tunbridge Wells Improvement Act of 1890, to which Royal Assent was given on 14th August, 1890, is in force. Parts 2, 3, 4, 6, 7 and 12 relate to Public Health, dealing with water supply, sanitary provision of buildings and streets, common lodging houses, infectious diseases, slaughter-houses and public baths.

The Public Health Acts Amendment Act, 1907.—Of this Act, which was declared to be in force within the Borough on 3rd April, 1911, the following sections have been adopted :—

Part	I.	Sections 1-14.
„	II.	„ 17, 21, 24, 26-30, 32 and 33.
„	III.	„ 34-42, 45, 47-51.
„	IV.	„ 52-66, 68.
„	V.	„ 69-75.
„	VI.	„ 76 and 77.
„	X.	„ 93 and 95.

In 1930, in response to an application made to the Ministry of Health, Part II., Section 25, of this Act was declared to be in force in the Borough as from the 1st July, 1930, by an Order of the Minister of Health dated the 5th June, 1930. This section related to the paving of yards, etc.

By an Order of the Home Secretary, the following additional sections of the above Act were put into force in the Borough during the year 1928 :—

Part	VII.	Sections 80, 81, 83, 85 and 86.
„	VIII.	„ 87-90.
„	IX.	„ 91.

By reason of the operation of these sections, sections 122 and 291 of the Tunbridge Wells Improvement Act, 1890, are repealed.

The following parts of the **Public Health Act, 1925**, were adopted and put into force on 1st March, 1926 :—Parts II., III., IV. and V. (with the exception of sections 14, 20, 29, 34 and 35).

Section 20 of the Public Health Act, 1925, was declared by the Minister of Health to be in force from the 1st September, 1930. This relates to the paving and draining of courts, and supplements the powers acquired under Part II., Section 25, of the Public Health Acts Amendment Act, 1907, referred to above.

Fresh Bye-Laws relating to Slaughter-houses came into force in the Borough in March, 1925. Under these, use of the humane killer for slaughtering all animals is obligatory.

A Bye-Law relating to the Fouling of Footways by Dogs, which came into force for one year from 1st August, 1927, was made permanent as from 1st August, 1928.

Two fresh sets of Bye-Laws were adopted by the Council at the instance of the Health Committee during 1930, viz. :—

- (a) Bye-Laws relating to nuisances : these were adopted on the 5th March, and allowed by the Minister of Health on the 19th May, 1930.
- (b) Bye-Laws relating to Common Lodging Houses. These were adopted by the Council on the 2nd July, 1930, and allowed by the Minister of Health on the 5th September, 1930.

In December, 1928, the Town Council passed a resolution deciding to prepare a Town Planning Scheme. The Minister of Health has since notified his approval of this resolution. On the 30th July, 1930, a preliminary statement of proposals for development was prepared and adopted by the Town Council.

The Tunbridge Wells Electricity (Extension) Order, 1928, became operative on 26th February, 1929.

The Tunbridge Wells Corporation Act, 1929, received the Royal Assent on 10th May, 1929.

The Bye-Laws with respect to **Nursing Homes** were allowed by the Minister of Health on 10th September, 1929.

GRATUITOUS MEDICAL RELIEF.

The Tunbridge Wells General Hospital caters for the population of Tunbridge Wells and for a wide district around. Efforts have been continued during 1931 to realise the

sum needed for building the New Hospital on the site acquired on Mount Ephraim ridge. During 1931, the number of In-patients treated was 1,444; Out-patients numbered 5,834, making 48,704 attendances. There is a large and well-equipped electrical department which offers radiant heat, radiant light, X-ray and radium treatment, also massage and electrical treatment. The orthopaedic centre at which remedial exercises is carried out, continues to cater satisfactorily for the treatment of children attending the Infant Welfare Centres and Elementary Schools in the Borough. Payment has been made by the Corporation to the Hospital for such treatment, subsequent to 1st April, 1928. The total number of patients attending for remedial exercises was 27, having 1,253 treatments: in addition, three children were admitted as In-patients under the Orthopaedic scheme, two for periods of 19 days and the other for six days.

The Tunbridge Wells Eye and Ear Hospital deals with a greatly increased number of patients since the advent of an aural surgeon, in addition to an ophthalmic surgeon. The following Table gives details of the work in recent years:—

Year.	Out-Patients.	Attendances.	In-Patients.	Theatre Operations.
1921	2,339	5,115	303	284
1922	2,144	4,718	282	257
1923	2,105	4,736	289	265
1924	2,303	7,314	391	348
1925	2,615	8,917	478	476
1926	2,702	9,390	556	522
1927	2,675	9,927	713	666
1928	2,891	11,927	814	748
1929	2,966	11,900	773	745
1930	2,841	10,967	728	675
1931	2,972	11,595	757	736

This Hospital will be amalgamated with the General Hospital when the hospital extension scheme is completed.

The **Homoeopathic Hospital** was extended in the autumn of 1931, comfortable, airy, modern wards being now available

for the public ; there were 137 In-patients during 1931, and 76 theatre operations were performed. Three thousand, three hundred and seventy-seven attendances took place in the Out-patients' department, apart from dental cases.

The Local Branch of the **Royal Surgical Aid Society** continues its useful services to the community. In 1931, 705 appliances were supplied at a cost of £1,372 9s. 4d. I desire to acknowledge the continuance of the privilege afforded to me of sending school children whose parents are unable to afford glasses when ordered by the ophthalmic surgeon, to the optician, with the Society's letters, initialled by myself as School Medical Officer. Such letters are only given after due enquiry into the home circumstances, and the optician does not accept letters for school children unless thus initialled.

The Provident Dispensary, 106, Upper Grosvenor Road. The number of members of this institution for the year 1931 was as follows :—Above the age of 14 years, 594 ; under the age of 14 years, 231 ; total, 825.

Tunbridge Wells Central Aid Society.—The financial crisis has added to the quota of unemployment and has greatly increased the calls upon this useful Society. Two hundred and fifteen cases were assisted in 1931 (98 in 1930). The amount of money disbursed in pensions and special cases was £921 12s. 1d., as compared with £633 16s. 9d. in 1930.

The Invalid Children's Aid Association.—This Association keeps in close touch with the School Medical and Child Welfare Services. It has rendered valuable service during the year. Forty children in need of treatment were sent through its good offices to convalescent homes. Twenty children were given additional nourishment, and hospital or Surgical Aid letters were provided in 18 instances. One hundred and four cases in all received assistance, at a cost of £116 18s. 11d.

Members of the School Nursing and Child Welfare Staff

of Nurses have been appointed honorary members of the Committee of the Invalid Children's Aid Association : they attend to bring to the Association's notice any cases requiring assistance. Thus co-ordination is thorough.

The Tunbridge Wells District Nursing Association has a staff of six nurses, one of whom is resident in the outlying parish of Rusthall. A subsidy is paid by the Corporation for the services of this nurse in the capacity of midwife. The subsidy in 1931 amounted to £22 5s. 0d. ; £47 15s. 0d. being paid in fees by the patients. Extracting from the District Nursing Association's Report for the period April, 1931, to March, 1932, " 78 midwifery and 595 general cases were undertaken, 18,708 visits being paid of which 15,794 were general, 2,193 to maternity and midwifery cases, and 721 ante-natal." The Corporation also has an arrangement with the District Nursing Association whereby the services of a nurse may be obtained for visiting in the case of certain specified diseases, ophthalmia neonatorum, measles or whooping-cough with broncho-pneumonia, where, in the opinion of the Medical Officer of Health, the home conditions require such services. The nurse acts under the direction of the Medical Attendant, a fee being paid to the Association for her services.

Tunbridge Wells and District Maternity Home, 10 and 12, Calverley Park Gardens.—The year was characterised by expanding activity in the new and beautifully situated premises, into which a move was made on the 5th January, 1931. Two hundred and six confinements took place in the Home in 1931, an increase of 21 upon the 1930 figures. Of these, 116 mothers were residents of Tunbridge Wells, and these formed 28.5 per cent. of all Tunbridge Wells births. This figure would have been higher had it not been necessary to close the Home to admissions from the 11th to the 21st December, and again from the 30th December, 1931, to the

9th January, 1932. As it is, the percentage is the highest during the seven years of the Home's existence.

During 1931, payments were made by the Corporation, under the terms of the agreement with the Committee of the Home, in seven instances : these are in addition to a subsidy of £50, per annum, contributed towards the cost of upkeep.

Cases of Puerperal Fever, six in number, occurred in the Home during the month of December, 1931. All were removed to the Borough Isolation Hospital, and all made a complete recovery save the first case, which was complicated and obscured in the early stages by the presence of other disease, leading to a fatal issue. Investigation of the source of infection, carried out with the assistance of the Kent County Laboratory acting in conjunction with the staff of the Research Laboratory of Queen Charlotte's Special Hospital for Puerperal Fever, pointed to an unhealthy throat in one of the nursing staff as a possible source of the trouble. The necessary steps to isolate all members of the staff suffering from unhealthy conditions had been taken long before test results were obtained. The Home had been fortunate in escaping infection of any sort for a period of seven years.

Co-ordination and cordial co-operation has been fully maintained in connection with the excellent work done in the Maternity Home by the appointment of the Borough Medical Officer of Health to serve on the Committee of Management and also to act as Honorary Administrative Officer to the Home.

Other Homes in Tunbridge Wells.—There is a branch of Dr. Barnardo's Home in Park Road, Hurstleigh Holiday Home in Bishops Down, and a Convalescent Home at Hawkenbury, in which a residential open-air school for L.C.C. children has been established.

These institutions deal almost entirely with children

from London, though "Hurstleigh" has proved useful in taking local children on several occasions when a request has been made. There is also a small Rescue and Preventive Home in Upper Grosvenor Road.

There is also St. Christopher's Nursing College where children's nurses are trained and in which a number of children reside.

Tuberculosis Dispensary.—The Kent County Council has a branch Dispensary for tuberculous cases at 34, Calverley Street. The attendances at this Dispensary during 1931 numbered 1,538, and were as follows :—

Insured.		Uninsured.	
Male.	Female.	Male.	Female.
151	102	535	750

Tunbridge Wells and District Public Dental Service.—This is an association of legally qualified dental practitioners. Persons who are unable to afford large fees are treated here for small sums. The number of new patients attending in 1931 was 151, and the total number of attendances, 1,156.

MATERNITY AND NURSING HOMES.

Two applications were received for registration, of which one was granted and one refused as the premises (semi-detached house with basement, with a portion let off) were not such as to comply with the requirements of a nursing home. The following action was taken during the year :—

Number of applications for registration	...	...	2
Number of Homes registered	...	...	1

Number of Orders made refusing or cancelling registration	1
Number of Appeals against such Orders	0
Number of cases in which such Orders have been	
(a) confirmed on appeal	0
(b) disallowed	0
Number of applications for exemption from registration	4
Number of cases in which exemption has been	
(a) granted	4
(b) withdrawn	0
(c) refused	0

On the 31st December, 1931, there were eight such homes registered under the Nursing Homes Registration Act, 1927, all of which were visited and fully inspected during the year.

AMBULANCE FACILITIES.

(a) **For Infectious Cases.**—During 1931 the second-hand motor ambulance purchased in 1929 for use in removing cases to the Fever Hospital has been of great service. It is a boon both to patients and staff, as the time spent in journeys is now small. There is thus little interference with Ward work, and much less journey risk to patients seriously ill. The Ambulance is an old one, but carries out its duties adequately so far. Cases are now admitted from a wider area than formerly, owing to the making of an agreement with the Ticehurst Rural District Council to admit patients from the major part of its area—a district extending beyond Burwash about 12 miles in a S.S.E. direction from the Borough.

(b) **For Non-infectious and Accident Cases.**—The Borough Police Force has a motor ambulance which proves of great service for cases of this type. In addition, the St. John Ambulance Brigade has ambulances which can be hired for removal of sick persons, etc.

CLINICS AND TREATMENT CENTRES.

Maternity and Child Welfare Centres.—The chief Maternity and Child Welfare Centre is situated at 35, Calverley Street, and is provided by the Tunbridge Wells Borough Council. It consists of a detached house with seven rooms. The main waiting room is large, consisting of two rooms made into one. There is a branch centre at Rusthall where meetings are held in the St. John Ambulance Brigade (Rusthall Section) Room.

Day Nurseries.—There are none in Tunbridge Wells.

School Clinics.—The School Clinic is at the Public Health Offices, 9 and 10, Calverley Terrace. The premises consist of four rooms and a dark room, provided by the Borough Education Committee.

Tuberculosis Dispensaries.—The Tuberculosis Dispensary is provided by the County Council and consists of a detached house at 34, Calverley Street, next door to the Maternity and Child Welfare Centre; its accommodation is similar to that of the Child Welfare Centre.

Treatment Centres for Venereal Diseases.—Venereal Diseases are treated at the General Hospital, Tunbridge Wells, there being one consultation day per week for men and one for women. The arrangements are under the control of the Kent County Council.

PUBLIC HEALTH STAFF.

A list of the staff of the Public Health Department is given at the beginning of this Report.

In addition to the regular members of the Public Health Department mentioned on the front page of the Report, Dr. C. Elliott, M.R.C.S., L.R.C.P., is appointed to take holiday duty during the Medical Officer's annual leave.

All four of the nursing staff act for one-fifth of their time as Health Visitors.

The changes in the staff were two in number. Miss M. G. Cornish commenced duties as Health Visitor and School Nurse on the 1st June, 1931, in succession to Miss E. A. Meakins, who resigned on 31st May to take up a similar appointment under the Buckinghamshire County Council. Consequent upon the increasing clerical work in the Department, a Junior Clerk (C. H. Weekes) was appointed in December, 1931.

Contributions are made :—

- (a) Under the Public Health Act towards the salaries of the Medical Officer of Health and of the Sanitary Inspectors.
- (b) By Exchequer grants towards the salaries of the School Medical Officer, Ophthalmic Surgeon, Aural Surgeon, Orthopaedic Surgeon, Dental Surgeon, School Nurses, and the three Clerks of the Health Offices. There is also a contribution towards the part-time services of Dr. C. Elliott, who assists with school medical inspections up to the number of one thousand routine inspections annually.
- (c) By Exchequer grant towards the salaries of the Medical Officer for Maternity and Child Welfare and of the Maternity and Child Welfare Nurses.
- (d) By Exchequer grant towards the fees of the Analyst under the Food and Drugs Act.

MATERNITY AND CHILD WELFARE.

The Council has made the following arrangements for administering the provisions of the Maternity and Child Welfare Acts in the Borough :—

Infant Welfare Centres.—It has purchased and maintains a Centre at 35, Calverley Street. Leases the St. John Ambulance Brigade Room at Rusthall as a subsidiary Centre on Wednesdays. An additional room has been taken as a waiting room at this latter Centre because the number of attendances has increased since the new houses have been built at Rusthall. The staff employed in 1931 was as follows :—Miss Rice Oxley devotes four-fifths of her time to Child Welfare duties, Miss Donaldson two-fifths and Miss Maclaren two-fifths. Many voluntary helpers assist on consultation days at the Centres ; in Rusthall, these voluntary helpers are members of the St. John Ambulance Brigade ; at the main Centre, there are members of the St. John Ambulance Brigade and others.

The attendance figures at the Centres during 1931 were as follows :—

	Rusthall.	Tunbridge Wells.
Infants under 1 year ...	345	2,049
Children 1 to 5 years ...	469	1,781
Expectant Mothers ...	38	131
Mothers	546	3,876

Total consultations with Medical Officer, 1,210 (excluding all ante-natal and orthopaedic consultations).

Ante- and Post-Natal Clinic.—This Clinic is held at 35, Calverley Street, and Dr. Margaret Emslie attends once each month for consultations. One hundred and fifty-three attendances were made by 66 mothers.

Orthopaedic Treatment.—Dr. P. L. Richardson is employed to see any orthopaedic cases referred to him from

the Centres, and arrangements have been made with the Tunbridge Wells General Hospital whereby treatment is obtained for such cases under his direction, and payment is made to the Hospital for such treatment.

Dental Treatment.—Mr. Fox, School Dental Surgeon, sees children under school age and expectant mothers at the School Clinic once a month, the children being referred to him by myself, as I act as Medical Officer to the Centres on the two chief consultation days, viz. :—Thursday at Calverley Street, and Wednesday at Rusthall, and the mothers chiefly by Dr. Emslie from the ante-natal clinic meetings. During 1931, the total number of attendances made by these mothers to see the Dental Surgeon was 59, and the number of attendances made by children was 42. The following is a summary of the dental treatment given :—

Teeth extracted.		Teeth filled.		Other operations.		Administrations of Gas.
Perm.	Temp.	Perm.	Temp.	Perm.	Temp.	
65	106	24	5	7	—	21

Health Visiting.—The following home visits were paid by the Nursing Staff during the year :—

First visits to infants	...	...	...	412
Subsequent visits to infants	...	...	...	2,511
Visits to children 1 to 5 years	...	...	...	4,118
Visits to expectant mothers	...	...	...	171
Visits where infants have died	...	...	...	14
Visits—found no one at home	...	...	...	544

Reviewing the adequacy of the arrangements for health visiting in general, regard must be had to the increasing duties devolving upon the health visiting staff. For instance, in 1931, the Open-Air School was established in May and

since then it has been necessary for one Health Visitor to spend each morning from 9 to 1 at this School. The duties have been re-adjusted as far as possible to meet this, but additional assistance for routine clinics will shortly have to be considered if the nursing staff is to be able to perform all the duties as satisfactorily as in the past.

Action taken under Memo. 156/M.C.W.—In March, 1931, the following resolution was passed by the Council :—

(1) That the Ante-Natal sessions be extended from two to three hours per month, and that a certain amount of Post-Natal work be undertaken in suitable instances.

(2) That Midwives be invited to attend the Ante-Natal Clinic with their patients and that they be paid a fee of 2s. 6d. for first attendance with a patient and a fee of 1s. for a second or subsequent attendance with the same patient, when such second or subsequent attendance is made at the request of, or with the approval of, the Clinic's Medical Officer.

(3) That the services of the Consultant in cases of Puerperal Fever be available for any doctor who needs assistance in difficulties or complications arising during pregnancy or at or after confinement, such assistance to be given only with the express authorisation of the Medical Officer of Health. The Consultant's fees to be recovered from the patient where possible.

(4) That sterilised maternity outfits be provided for loan in suitable cases, such outfits to be renewed and sterilised by the Local Authority before re-issue.

(5) That suitable women be provided as Home Helps where required, the fees to be paid by the patient, but, if necessary, assistance to be given by the Local Authority.

At the Council Meeting held in December, 1931, it was resolved :—

(6) That a fee of 5s. as agreed to by the Local Divi-

sion of the British Medical Association, be paid for Ante or Post-Natal examinations of women in their homes at the request of the Medical Officer of Health in cases in which the examination, for one reason or another cannot be made at the Ante-Natal Clinic.

Infant Life Protection.—The functions of the late Board of Guardians under Part I., of the Children Act, 1908, which provides for the supervision of children under the age of seven years of age, the maintenance of whom is undertaken for reward apart from their parents, were transferred to the Borough Council on the 1st April, 1930.

During the year, Miss Rice Oxley paid 216 visits of inspection. On December 31st, 1931, there were 60 children under the care of foster mothers, as compared with 65 at the end of 1930.

Assistance in Necessitous Cases.—A Sub-Committee of the Maternity and Child Welfare Committee met each Monday morning in order to deal with applications for assistance under the Maternity and Child Welfare Act. Orders for 5,345 pints of fresh milk were granted. There were also issued free of cost :—159 lbs. dried milk ; 86 lbs. of cod liver oil and malt ; 19 tins of Ovaltine ; 39 cartons of Virol ; 25 cartons of Radio Malt ; 5 cartons of Marmite ; 10 cartons of Bemax ; 3 tins of Lactagol and small quantities of some other foods and drugs.

The Medical Officer also issued 26 certificates for milk to be supplied through the Guardians.

The Corporation pays a subsidy to the funds of the Tunbridge Wells and District Maternity Home, in which 28.5 per cent. of Tunbridge Wells mothers had their babies during 1931 ; direct assistance with fees was also given in seven instances.

SANITARY CIRCUMSTANCES.

Sanitary Conveniences.—Modern public conveniences for both sexes were completed in 1931 ; these are situated close to the Five Ways—a busy central position in the town : they are underground, and fulfil a long felt want in this neighbourhood. They were opened for public use on 16th July, 1931. In addition, the Council upon the recommendation of the Health Committee, purchased Fonthill, a property situated on the lower part of the Common opposite the junction of several roads near the Pantiles : a convenience for ladies was opened here on the 10th September, 1931—a further important step towards providing suitable sanitary accommodation for both resident and visiting members of the public.

Housing.—The extensive and exhaustive survey of old and dilapidated housing property carried through in 1929, saved the Staff of the Department much labour in the preparation of a programme of housing construction and demolition for the forthcoming five years, required to be submitted to the Ministry of Health under the provisions of Section 25 (2) of the Housing Act, 1930. The bulk of the data required in making this estimate had already been gathered, and a joint sub-committee of members of the Health and Housing Committees of the Council had obtained valuable personal knowledge of the chief needs of the town by sharing in the visits to a large amount of the poorer class of property. During 1931, arising from the above inspections, recommendations to serve closing orders with respect to various properties, were adopted by the Council at its meetings in January, March and November, and a demolition order in December of that year.

Water Supply.—The water supply of Tunbridge Wells is a soft water, drawn from springs issuing from the stratum known to geologists as the Tunbridge Wells Sandstone. The

springs are situated in unfrequented woodland areas, in which inhabited buildings are few and distant ; the risk of pollution is well guarded against. The water supply is a constant one and the number of dwelling houses supplied is 9,121 in the Borough and 545 outside.

For roughly one-half of the year the supply of water from the springs meets the requirements of the Borough. During the remaining portion of the year, artesian borewells, seven in number, give an ample and pure supply of water to supplement the flow from the springs. The Artesian Wells are situated at Pembury, where there is a large reservoir, capable of holding 42,000,000 gallons. From this reservoir the water is pumped to a distributing reservoir at Blackhurst, Pembury, 500 feet above sea level. Thence it is distributed through the mains by force of gravity to the areas supplied. A certain amount of iron contained in solution in this deep well water is effectively removed by the use of Candy Oxidising Pressure Filters, seven in number. The Artesian Wells are bored through the Wadhurst Clay and take their supply from the underlying Ashdown Sands ; the nearest point at which the Ashdown Sands reach the surface is some miles distant from the borewells. The water from the springs enters four open filter beds at Pembury, having an area of about one acre. A report, made by the Borough Analyst, dated the 8th June, 1931, reads as follows :—

Specimen from 15in. Main in Pembury Road.

Bacteriological Statement.

No. of Organisms per cubic centimetre capable of growing.		B. Coli Communis Presumptive test.		
On Standard Gelatin in 4 days at 22°C.	On Standard Agar-Agar in 24 hours at 37/38°C.	100 c.c.	10 c.c.	1 c.c.
20	0	—	—	—

Chemical Analysis.

<i>Determination.</i>	<i>Parts per 100,000.</i>
Free and Saline Ammonia	0.0010
Albuminoid Ammonia	0.0010
Oxygen absorbed } in 15 minutes	0.0050
} in 4 hours	0.0100
at 80° F.	
Nitric Nitrogen	0.35
Chlorine	2.5
Equivalent to Sodium Chloride	4.1
Total Solid Matter (Dried at 180° C.)	14.0
Temporary Hardness	4.12
Permanent Hardness	2.5
Appearance in two-foot tube	Colourless and clear.
Metals (Lead, Copper, Zinc, Iron)	Iron—0.005 parts per 100,000.

Remarks.

Free CO ₂	None.
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The results of both chemical and bacteriological analyses show the water to be remarkably pure and to be a drinking water of excellent quality. Until the dry season of 1921, the sources of water supply already mentioned fully sufficed to meet all needs, not only of the Borough, but of the neighbouring villages of Langton, Speldhurst, Stockland Green, and part of Pembury. Further consideration of the supplies after 1921 has resulted in the selection of a fresh site for boring an artesian well at Saint's Hill, between Fordcombe and Penshurst, the layer to be tapped being the same as at Pembury, viz. :—the Ashdown Sands, but at a point about seven miles distant, on the opposite side of the boundary, situated N.W. of the Borough. The application made to the Ministry of Health for this purpose was sanctioned early in 1926, and this work has now been completed. A borewell was sunk in 1927-28 through the Wadhurst Clay to the Ashdown Sands, to a depth of 407 feet. The Borewell is 24 inches in diameter at the top, 15 inches at the bottom and affords an ample supply of water which on chemical and bacteriological test proved itself to be a drinking water of excellent quality (see page 10). After filtration through six mechanical pressure filters to remove iron in solution, the water is pumped direct to the distributing mains. The new station was formally opened on 5th October, 1931.

Rivers and Streams.—All the water courses in the Borough are small in volume, and specially careful supervision is needed to prevent their contamination by trade effluent.

Drainage and Sewerage.—The Borough sewage drains towards two sewage farms, one at the northern end and the other at the southern end of the town. The North Sewage Farm is 187 acres in extent, and the South Farm 197 acres. At the South Farm a portion of the sewage is treated by means of percolating bacteria beds. The effluents from both Sewage Farms are frequently analysed and give results which are not always satisfactory. The whole question of extending and improving the arrangements for dealing with the Borough sewage is under consideration. Sewage from a portion of the town lying north of Mount Ephraim is dealt with by pumping across to join the sewage which proceeds to the South Farm. Pollution of the River Medway is under the careful consideration of the County Council, and Tunbridge Wells, like other authorities draining to the Medway, has been requested to consider methods by which its effluent may be improved before joining the waters of this stream.

Closet Accommodation.—There are no privies in the Borough. Six pail closets are in use in houses situated in the rural outskirts of the Borough. Seventy-four water closets are connected to properly constructed cesspools, all the rest being connected to the public sewers.

Scavenging.—Refuse, both domestic and trade, is collected and removed in motor vehicles or covered carts once weekly. Trade refuse is collected daily from premises where this is necessary. Covered dustbins are very largely in use and where fixed brick receptacles are found to be defective, efforts, usually successful, are made to abolish them and substitute galvanised iron bins of which 1,930 have been provided in the past six years. Refuse is conveyed to a tip

situated near High Brooms Brickworks. Modern motor dust collectors are now largely used in substitution for the antiquated covered carts formerly in use. Arrangements have now been made for the collection of garden refuse, thus doing away with the necessity for burning large quantities to the annoyance of neighbours.

Disposal of Refuse.—There has been a marked improvement in the condition of the refuse dump since the visit of the Ministry of Health's representative in November, 1926. The method adopted at the City of Bradford was studied on the spot by the Corporation's Superintendent of Refuse Disposal, who has since proceeded to carry it out in the best manner in which local conditions here would allow. The layers of refuse are deeper than those recommended in the Bradford Report, but apart from this the method is closely adhered to, with the result that no nuisance now arises.

In addition, an active campaign against rats was carried out at the dumps, poison gas, ratting dogs, etc., being used. Rat runs in the neighbourhood of the dumps are noted to be little in evidence now.

Schools.—All schools in the area are supplied with town water, and—with the exception of Rusthall Boys' School, which drains to a cesspool in private grounds—are connected to the public sewers. Several of the buildings are not well adapted to use for educational purposes, having been erected before considerations of health played much part in the minds of those concerned with school architecture. Two of them have been marked by the Board of Education as unsuitable for further use as schools, so that other provision will shortly be needed to accommodate the displaced scholars.

There was no closure of schools or classes on account of infectious disease during 1931.

Rag Flock Acts, 1911 and 1928.—There are no premises

in the Borough on which rag flock is manufactured, used or sold.

Sanitary Inspection of Area.—During 1931, visits were paid to inspect houses, farms, Public Baths, refuse dumps, diseased food, etc., as time allowed, and many points requiring improvement were brought to the notice of the parties concerned. Most of the results of the sanitary inspection of the area are set out in the attached report made to me by the Senior Sanitary Inspector, Mr. H. T. Taylor, to whose alertness in attending to all sanitary matters likely to affect adversely the health of the town it gives me pleasure to pay tribute.

A noteworthy point is the excellence of the results obtained from milk sampling—a direct consequence of the active steps taken to keep the milk supply under close observation.

The total number of houses generally inspected was somewhat less than in 1930, but the inspection of houses with reference to dustbin accommodation was made the subject of special attention, 995 being inspected and 388 new dustbins being supplied in consequence.

Mr. Taylor's report also shews that much time and care were devoted to meat inspection by the sanitary staff.

*To the Medical Officer of Health for the
Borough of Royal Tunbridge Wells.*

I beg to submit the following report on the work of the Sanitary Department for the Year 1931.

The following Table gives a general statement as to the principal number of inspections made and other work done throughout the year.

Houses inspected under Housing Act ...	...	...	...	292
" " " other Acts ...	...	...	...	188
" " respecting dustbin accommodation (ex- cluded above) ...	...	...	...	995
Complaints investigated ...	...	...	...	148

Houses inspected for sanitary certificates	...	...	...	1
Fees received	"	"	"	£5 1s. 0d.
Visits to Slaughter houses	...	...	...	561
" " other food premises	...	...	...	300
" " Bakehouses	...	...	...	81
" " Kitchens	...	...	...	25
" " Dairies	...	...	...	167
" " Cowsheds	...	...	...	81
" " Ice cream premises	...	...	...	12
" " Factories	...	...	...	74
" " Workshops	...	...	...	186
" " Workplaces	...	...	...	16
" " Common lodging houses	...	...	...	4
" " Stables	...	...	...	22
" respecting keeping of animals	...	...	...	19
" " rats and mice destruction	...	...	...	92
" " applicants for Council houses	...	...	...	10
Interviews respecting property, etc.	...	...	...	188
Secondary visits to houses under notice	...	...	...	3,884
Visits respecting infectious cases	...	...	...	48
Rooms disinfected	...	...	...	77
Loads of bedding removed for disinfection or destruction	...	...	...	11
Other visits	...	...	...	259
Houses at which chemical test was applied to drains	...	...	...	257
Occasions on which smoke	"	"	"	29
" " water	"	"	"	144
Informal notices served 382 respecting 600 houses	...	...	...	—
Formal " " 12 " 10 "	...	...	...	—
Defects remedied	...	...	...	3,585
Carcases examined (home killed)	...	...	...	2,616
Food condemned and destroyed—3 tons 12 cwts. 3 qrs. 22 lbs.	...	...	...	107
Samples of food and drugs submitted for analysis	...	...	...	107

HOUSING INSPECTION.

As much time as possible was again devoted to the detailed inspection of houses and the number inspected and recorded under the Housing Acts was 292. Defects were found at 260 houses and notices were served in respect of these. In addition 188 houses were inspected for various reasons such as following cases of infectious diseases, complaints, notices from builders and work was carried out at 126 of these houses. At the request of the Borough Surveyor no less than 995 houses were visited respecting dustbin accommodation when 379 were found to be without proper dustbins.

Arising out of the inspections made with you to certain property, joint representation was made that Nos. 13 and 15, Warwick Road, and the basement flat at No. 1, Lime Hill Road, were unfit for human habitation

and were not capable at a reasonable expense of being made so fit. Notice was given to the owners to show cause why they should not be demolished or closed and undertakings were given by the owners that they would discontinue the use of the premises for human habitation. At the time of writing this report the three houses are unoccupied.

Nos. 5, 6 and 7, Culverden Street, which were condemned and have been unoccupied for a considerable period were being demolished at the end of the year.

Other closing orders are still under review the tenants of these houses finding great difficulty in obtaining other accommodation.

There is still a shortage of houses in the Borough which are available and suitable for the working classes, especially those receiving the lowest wages, which is greatly affecting the housing question. People are forced to live in sub-let houses which means that houses constructed for use by one family are now housing two or more families, and this is now one of the most vexed questions in connection with housing conditions. So-called flats are springing into existence in most towns and people are forced to sleep in rooms which were never intended for this purpose. Owing to this, certain landlords do only the minimum amount of repairs knowing full well they can obtain tenants for the houses in whatever state of repair the houses may be, and this means additional work for the department. On the other hand, many houses are insanitary owing solely to the neglectful habits of the tenants as one can inspect two identically constructed houses and find one in every way satisfactory while the other may appear to warrant a closing order due to it being occupied by people of neglectful habits and of no self-respect. The financial crisis has also

placed a difficulty in the way of obtaining repairs to houses particularly in the case of the owners who are widows depending upon a few houses for their income.

The following is a Table of housing statistics set out in accordance with Circular 1206 of the Ministry of Health :—

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)	480
(In addition 995 houses were visited <i>re</i> dust-bin accommodation.)	
(b) Number of inspections made for the purpose ...	—
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	292
(b) Number of inspections made for the purpose ...	—
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	4
(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	386
(In addition 379 houses were found to be without sufficient ashpit accommodation.)	

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	344
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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	10
(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	28
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—	
(a) By owners	28
(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	Nil.
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	Nil.

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	1
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(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	Nil.
E.— <i>Proceedings under section 3 of the Housing Act, 1925 :</i>	
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	Nil.
(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 to close	Nil.
F.— <i>Proceedings under sections 11, 14 and 15 of the Housing Act, 1925 :</i>	
(1) Number of dwelling-houses in respect of which Closing Orders were made	Nil.
(2) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-house having been rendered fit	Nil.
(3) Number of dwelling-houses in respect of which Demolition Orders were made	Nil.
(4) Number of dwelling-houses demolished in pursuance of Demolition Orders	Nil.

*Note :—*Sections 11 to 15 of the Housing Act, 1925, have been repealed by the Housing Act, 1930, but the proviso to section 64 of the Act of 1930 continues in force any Closing Orders and Demolition Orders made before the operation of the Act (15th August, 1930) and houses subject to those Orders must continue to be dealt with under the relative provisions of the Act of 1925.

Arising out of the various inspections defects numbering 3,585 were remedied and particulars of same are given hereunder :—

Houses redrained	38
Houses at which drains were repaired	38
Intercepting traps fixed	4
Inspection chambers constructed	63
Cesspools abolished	2
Inspection chambers repaired	10
New Vent pipes fixed to drains	41
New Soil pipes provided	15
Soil and Vent pipes repaired	13
New glazed gullies fixed	123
Defective bell traps removed	3
Obstructions removed from drains	16
New W.C.'s constructed	23
Defective W.C. pans and traps removed	80
W.C.'s provided with water supply	—
Flushing cisterns repaired, or renewed	59
Rain water pipes disconnected from drains	24
Rain water pipes and gutters repaired	101
Roofs repaired	113
Paving to yards repaired or renewed	153
Galvanised dustbins provided	388
Ashpits discontinued	1
Accumulations of rubbish removed	8
Nuisances from animals abated	6

New sinks provided	...	...	...	...	...	60
Sink wastes repaired or renewed	...	...	...	...	...	103
Rooms stripped and distempered or repapered	...	...	...	...	...	354
Ceilings cleansed and distempered	...	...	...	...	...	173
Rooms and bedding cleansed (tenant)	...	...	...	...	...	6
Overcrowding abated	...	...	...	...	...	3
Rooms ventilated	...	...	...	...	...	55
Wall repaired (internally)	...	...	...	...	...	130
" " (externally)	...	...	...	...	...	70
Floors repaired	...	...	...	...	...	211
Space under ground floors ventilated	...	...	...	...	...	35
Windows repaired	...	...	...	...	...	79
New sash cords fixed	...	...	...	...	...	299
Dampness remedied	...	...	...	...	...	26
Coppers repaired	...	...	...	...	...	68
Chimneys repaired	...	...	...	...	...	26
Stoves repaired or renewed	...	...	...	...	...	106
Slaughter houses cleansed	...	...	...	...	...	4
Dairies limewashed	...	...	...	...	...	21
Cowsheds limewashed	...	...	...	...	...	10
Miscellaneous	...	...	...	...	...	359
New water services provided	...	...	...	...	...	14

FACTORIES AND WORKSHOPS.

During the year 74 visits were made to factories, 186 to workshops and 81 to bakehouses when defects numbering 51 were found. In sixteen instances it was necessary to call for the limewashing of bakehouses which is to be regretted as in these enlightened days one would suppose that the proprietors of this class of business would realise the necessity of a high standard of cleanliness and would not wish to have their failings pointed out to them.

DAIRIES, COWSHEDS AND MILKSHOPS.

During the year the number of inspections of cowsheds made was 81 and of dairies and milkshops, 167. No serious matters were found that required attention, but as I reported on previous occasions it is necessary to make frequent visits to certain premises to ensure that the Milk and Dairies Order is carried out while, in other cases, visits are hardly necessary owing to the high standard of cleanliness observed. Fortunately the latter are now in the majority.

As you are aware, it is not necessary to have elaborate cowsheds to obtain clean milk ; this can be obtained even if the buildings are old, providing cleanliness is observed and I am pleased to say that most farmers now begin to realise this.

FOOD SUPPLIES AND INSPECTIONS.

This branch of the work is responsible for a considerable amount of the time of the inspecting staff embracing as it does the inspection of carcases at time of slaughter. A memorandum issued by the Ministry of Health suggests that all animals be inspected before slaughter and that all viscera be examined as it is removed from the carcase. This is an impossibility where inspectors have several slaughter houses to visit and other duties to perform, however well staffed a department may be. I have aimed to have as many as possible of the carcases and the viscera examined and very few carcases of animals slaughtered in the Borough now escape examination. It is to be regretted that much of the meat retailed in the Borough is from animals slaughtered outside the district where the inspection cannot be as complete as it should be with the very limited staff available for this and other work and the considerable area covered. It is also to be regretted that a health resort of the standing of Tunbridge Wells has not a public abattoir where all animals used for human food could be slaughtered under good hygienic conditions and through which the meat from animals slaughtered outside the area could be passed for examination.

The number of slaughter houses remains the same, viz., five, and of these four are registered and one licenced. During the year 180 notices of slaughter were received these being in addition to the standing notices

of slaughter which appoint certain specified days for killing. In addition 61 notices were received from the Port of London Authority respecting carcasses of imported mutton which needed inspection for the detection of caseous lymphadenitis which necessitated the inspection of 471 imported carcasses of mutton.

Five hundred and sixty-one visits were made to slaughter houses and 300 visits to other food premises, such visits excluding those to bakehouses and milkshops and many of these visits had to be made after the ordinary office hours owing to the hours of slaughter.

Food weighing 3 tons 12 cwts. 3 qrs. 22 lbs. was condemned and destroyed as being unfit for human food, this comprising :—

Beef (home killed)	...	1,684 lbs. of which 1,260 lbs. was tuberculous				
Beef offals (home killed)	1,042	„ „ „	893	„ „ „		
Pork „ „	1,092	„ „ „	878	„ „ „		
Pigs heads „ „	119	„ „ „	119	„ „ „		
Beasts livers „ „	220	„ „ „	87	„ „ „		
Other offals „ „	339	„ „ „	170	„ „ „		
Mutton ...	304	„				
Imported beef ...	1,101	„				
„ offals ...	382	„				
Potatoes ...	1,904	„				
Ham ...	13	„				

The greater part of the diseased meat was detected at the slaughter houses during times of slaughter which makes apparent the necessity for stringent inspection.

No police court proceedings were instituted during the year although two orders were obtained from magistrates as a cautionary measure.

FOOD AND DRUGS.

From the following Table it will be seen that 107 samples of foods and drugs were submitted for analysis during the year. In 48 instances the formalities of the Act were followed while the other 59 samples were taken

informally and without the knowledge of the vendors. All the samples taken formally were milk and six of these were found to be adulterated giving a percentage adulteration for milk samples alone of 12.4 which is exceedingly high, the figure for the County being only 2.1 per cent. Three of the adulterated samples were obtained during the course of delivery of milk to the purveyor.

No article of food or drugs other than milk, was found to be adulterated.

FOOD AND DRUGS ACTS.

Name of Article.	Examined.		Adulterated.		REMARKS.
	Formal.	Informal	Formal.	Informal	
Milk ...	48	1	6	—	No. 115 contained 17% extraneous water. Proceedings taken—fined 20/- and 13/6 costs. No. 118. Taken from same vendor as No. 115—contained 2% extraneous water. Case dismissed on payment of 13/6 costs. No. 141. 14% deficient in fat. Vendor appeared before Committee and was cautioned. No. 185 contained 3½% extraneous water—Vendor cautioned No. 191 taken from same vendor as No. 185, contained 2% extraneous water. Proceedings taken, fined £3 3s and 13/6 costs. No. 203 contained 15% extraneous water. Proceedings taken—fined £2 2s. and 13/6 costs.
Cream ...	—	6	—	—	
Butter ...	—	4	—	—	
Margarine ...	—	2	—	—	
Lard ...	—	3	—	—	
Cheese ...	—	6	—	—	
Sausages ...	—	6	—	—	
Coffee ...	—	4	—	—	
Tapioca ...	—	1	—	—	
Ground Rice ...	—	1	—	—	
Corn Flour ...	—	1	—	—	
Flour ...	—	1	—	—	
Cocoa ...	—	3	—	—	
Demerara Sugar ...	—	3	—	—	
Jam ...	—	2	—	—	
Dried Fruit ...	—	1	—	—	
Pepper ...	—	2	—	—	
Vinegar ...	—	2	—	—	
Sponge Cakes ...	—	3	—	—	
Beer ...	—	1	—	—	
Ammoniated Tincture of Quinine	—	2	—	—	
Campepated Oil	—	2	—	—	
Eucalyptus ...	—	2	—	—	
TOTALS ...	48	59	6	—	6

RATS AND MICE DESTRUCTION.

During the year it was necessary to make 92 visits respecting the destruction of rats and mice and in many cases advice was given as to the best methods to be employed for disinfestation. Many people are still under the impression that it is the duty of the Council to undertake the disinfestation of premises, whereas the Rats and Mice Destruction Act states that it is the duty of the occupier. The services of the nominated rat catcher were taken advantage of in several cases. This type of vermin appears to be on the increase throughout the County and requires dealing with in a systematic and comprehensive manner.

In conclusion, I again beg to express my indebtedness to you for the support and assistance given me throughout the year, which rendered my duties less irksome than would have been the case without this cordial and willing help.

(Signed) HARRY T. TAYLOR,

Chief Sanitary Inspector.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES.

A summary follows of the notifiable infectious diseases which occurred during each month of the year 1931. One hundred and thirteen cases were notified during the year, as compared with 138 in 1930.

Notifications of pneumonia numbered 39 as compared with 27 in 1930, diphtheria decreased from 27 to 19 and scarlet fever notifications decreased still further, only 22 cases being notified. Twelve cases of puerperal fever and puerperal pyrexia were notified—nine being institutional, and three amongst Borough residents.

Seasonal Incidence of Acute Infectious Diseases, 1931.

Month.	Scarlet Fever.	Diph- theria.	Enteric Fever Group.	Erysip- elas.	Ophthal- mia Neona- torum.	Pneu- monia.	Puer- peral Fever and Pyrexia
January ...	2	4	—	1	1	11	—
February ...	—	3	—	2	—	10	—
March ...	2	—	—	4	—	6	—
April ...	4	3	—	—	—	3	1
May ...	2	2	—	—	—	1	—
June ...	5	2	2	2	—	—	1
July ...	—	1	4	1	—	3	—
August ...	—	2	—	1	—	1	—
September ...	2	—	—	—	—	1	1
October ...	—	1	—	1	1	2	—
November ...	4	1	—	—	—	1	2
December ...	1	—	—	1	—	—	7
Total ...	22	19	6	13	2	39	12

Diphtheria.—The attack rate per thousand population was 0.55. Glancing at the Table appended it is noticed that in the years 1896 to 1900, Diphtheria was prevalent in the Borough; again in the years 1911 to 1915, it was prevalent, though not on so extensive a scale. There was a very slight rise in 1927-28, *i.e.*, after the lapse of another fifteen year interval.

The Corporation provides anti-toxin, free of charge, for use by medical practitioners practising in the town. This anti-toxin can be obtained at the Public Health Offices at any hour. Specimens taken from suspicious cases are examined at the Public Health Offices and speedy reports of the examinations are given. Carriers, if found, are treated until the germ of Diphtheria has either disappeared or lost its poisonous properties. All the cases and also seven "Carriers" were treated in the Isolation Hospital.

Neither Schick tests for susceptibility to Diphtheria nor Dick tests for Scarlet Fever were utilised during the year, both diseases being notably rare in their incidence.

Fatal cases still occur: the dangers attached to this disease should be kept fully in mind by members of the medical profession, and by all who have children in their care. Anti-toxin is ready, free of charge, for immediate use in any suspicious case: it should be given without awaiting bacteriological reports wherever the suspicion of Diphtheria is

entertained: waiting till the next day may mean the loss of a life. In 1931, one young person died of this disease: alert activity on the part of both parents and medical attendants would abolish all mortality from this disease.

Comparison of the Fatality, Incidence, and Mortality of Diphtheria in Different Years.

Year.	Estimated Population.	No. of Cases.	Deaths Registered.	Attack-Rate per 1,000 Population	Death-Rate per 1,000 Population ¹
1890	28,148	22	7	0.71	0.18
1891	27,984	17	5	0.57	0.14
1892	28,345	27	8	0.85	0.17
1893	28,705	42	10	1.40	0.31
1894	29,065	41	6	1.37	0.17
1895	29,535	44	8	1.49	0.27
1896	29,895	68	15	2.24	0.46
1897	30,255	118	11	3.86	0.33
1898	30,615	278	31	9.07	1.01
1899	30,975	120	7	3.87	0.23
1900	31,335	82	3	2.61	0.10
1901	33,443	31	1	0.92	0.03
1902	33,773	23	2	0.68	0.06
1903	34,073	10	1	0.26	0.00
1904	34,373	12	1	0.34	0.03
1905	34,673	17	0	0.49	0.00
1906	34,973	10	0	0.28	0.00
1907	35,273	27	6	0.76	0.17
1908	35,573	29	2	0.81	0.06
1909	35,873	11	3	0.31	0.08
1910	36,173	15	1	0.41	0.03
1911	35,778	69	8	1.92	0.22
*1912	36,038	91	10	2.52	0.28
1913	36,298	129	4	3.5	0.11
1914	36,460	154	1	4.2	0.02
1915	33,430	83	5	2.5	0.15
1916	32,316	53	7	1.6	0.22
1917	30,751	40	1	1.3	0.03
1918	32,297	23	1	0.8	0.03
1919	34,423	57	4	1.6	0.20
1920	35,795	64	3	1.8	0.08
1921	34,270	32	1	0.9	0.03
1922	34,360	26	0	0.8	0.00
1923	34,370	11	1	0.3	0.03
1924	34,330	11	1	0.3	0.03
1925	34,080	14	1	0.4	0.03
1926	34,430	15	1	0.4	0.03
1927	33,870	42	1	1.2	0.03
1928	34,820	45	0	1.3	0.00
1929	35,040	10	3	0.3	0.09
1930	35,040	27	3	0.77	0.09
1931	34,660	19	1	0.55	0.03

* Since 1912, mild cases diagnosed by bacteriological examination are included: prior to that year they were unrecognised as cases of diphtheria. The attack-rate per 1,000 population, before 1912, was calculated without the aid of this method of detecting the presence of diphtheria.

Scarlet Fever.—The type of this disease continued mild and the cases numbered 22, as compared with 52 in 1930. The difficulty of diagnosing mild cases of this disease is well known. The average number of cases per annum in the quinquennium 1926-30 was 51. All cases were treated in the Isolation Hospital.

Enteric Fever.—Six cases of Para-Typhoid Fever were notified during 1931 as compared with 8 in 1930. As usual, these cases occurred in the ground fruit and raw vegetable season, viz., June and July. Three were members of one family.

Encephalitis Lethargica.—No cases were notified during the year.

Acute Poliomyelitis.—No cases were notified during 1931. This disease is more apt to occur in a hot summer than in a cool one.

Puerperal Fever and Puerperal Pyrexia.—Twelve notifications were received, three being Borough residents : one of these was a case of puerperal fever and made a good recovery. The other two were febrile illnesses of different type. Of the nine outside cases, two were inmates of the General Hospital—neither being a case of puerperal fever : the remaining seven occurred in the Tunbridge Wells and District Maternity Home in November and December, one being a febrile illness only, the others being cases of puerperal fever. Six were removed to the Borough Isolation Hospital, where five made complete recoveries. The first case, complicated and masked in its early stages by disease of the liver, proved fatal. The Home was closed to admissions for two periods of ten days whilst steps were being taken to trace and combat the source of infection. These efforts succeeded and no further cases occurred.

Ophthalmia Neonatorum.—Two cases of this disease were notified during 1931 : both recovered with unimpaired vision.

Non-Notifiable Acute Infectious Diseases.—Knowledge of these is chiefly obtained through schools in the first instance ; visiting at homes where school cases are notified, enables the Health Visitors to discover cases amongst younger children.

Four hundred and sixty-one cases of **German Measles** were known to have occurred amongst school children during 1931, the disease being most prevalent from March to May. Apart from the prevalence of this mild disease, there were singularly few infections of any description.

Eleven deaths were attributed to **Influenza**, of which 9 were those of old persons : the disease was not very prevalent.

There were no cases of **Epidemic Diarrhoea and Enteritis** during the year and no deaths occurred.

Tuberculosis.—Under **The Public Health (Tuberculosis) Regulations, 1930**, it is required that a register be kept of all tuberculous persons in the area, and that it be brought up to date each quarter when a statement of the number on the register is forwarded to the Health Authority of the Administrative County. The number of persons whose names were on the register at the close of the year 1930 was 101 Pulmonary and 60 Non-Pulmonary, and the number at the close of the year 1931, 107 Pulmonary and 57 Non-Pulmonary. The fresh cases and mortality during the year are set out in the accompanying Table.

TUBERCULOSIS.
New Cases and Mortality during 1931.

Age-Periods.	New Cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
0	—	—	—	—	—	—	—	—
1	—	—	—	1	—	—	—	—
5	—	—	—	3	—	—	—	—
10	—	—	—	—	—	—	—	1
15	1	—	—	—	—	—	—	—
20	1	3	—	—	—	—	—	1
25	4	4	—	2	1	1	—	1
35	3	1	—	—	2	—	—	—
45	3	2	—	1	4	2	—	—
55	1	—	—	—	3	—	—	—
65 & upwards	2	2	—	—	1	2	—	—
Totals ...	15	12	0	7	11	5	0	3

It has not been necessary to take any action under the "Public Health (Prevention of Tuberculosis) Regulations, 1925," and no action was taken under Section 62 of the "Public Health Act, 1925."

The death-rate for 1931, 0.55, is the lowest recorded during the 42 years of records, the death-rate from Tuberculosis of the lungs is also the lowest yet recorded in the Borough. The Table which follows this paragraph demonstrates clearly that the death-rate from Tuberculosis is slowly and steadily being reduced. In the 42 years shown in the Table, the mortality rate in the last quinquennium is 41 per cent. of that in the first quinquennium: so this disease has been more than half mastered.

Conditions which have favoured and which continue to favour its decrease are (1) Better housing accommodation with free access of light and air and with free use of the means of ventilation; (2) better economic conditions with less under-nourishment prevailing; (3) the spread of information upon the health-giving properties of sunlight and air and general teaching of personal hygiene; (4) greater care on the

part of the public to ensure a clean, healthy food supply for themselves, and to avoid spreading infection by promiscuous expectoration.

Deaths from Tuberculosis During the Last 42 Years.

Year.	Estimated Population.	Phthisis.	Phthisis. Death-rate	Other Forms of Tuberculosis.	Totals.	Tuberculosis Death-rate	Average Tuberculosis Death-rates
1890	28,148	37	1.32	12	49	1.38	1.77
1891	27,984	40	1.43	17	57	2.03	
1892	28,345	30	1.06	18	48	1.69	
1893	28,705	31	1.08	22	53	1.84	
1894	29,065	39	1.34	16	55	1.89	
1895	29,535	34	1.15	30	64	2.16	1.60
1896	29,895	25	0.83	21	46	1.54	
1897	30,255	25	0.82	11	36	1.19	
1898	30,615	21	0.68	20	41	1.35	
1899	30,975	40	1.29	15	55	1.77	
1900	31,335	20	0.63	24	44	0.85	1.24
1901	33,443	35	1.04	15	50	1.49	
1902	33,773	29	0.89	17	46	1.36	
1903	34,073	32	0.93	10	42	1.23	
1904	34,373	36	1.04	8	44	1.28	
1905	34,673	35	1.01	11	46	1.32	1.18
1906	34,973	28	0.80	8	36	1.03	
1907	35,273	35	0.99	8	43	1.22	
1908	35,573	20	0.56	14	34	0.93	
1909	35,873	43	1.19	7	50	1.39	
1910	36,173	28	0.77	11	39	1.08	1.00
1911	35,778	21	0.58	6	27	0.75	
1912	36,038	24	0.66	7	31	0.86	
1913	36,298	32	0.88	14	46	1.26	
1914	36,460	27	0.74	11	38	1.04	
1915	33,430	29	0.87	8	37	1.11	1.23
1916	32,316	28	0.87	12	40	1.24	
1917	30,751	30	0.97	13	43	1.40	
1918	32,297	36	1.11	17	53	1.64	
1919	34,423	29	0.87	10	39	1.16	
1920	35,795	21	0.59	12	33	0.92	0.84
1921	34,270	25	0.73	7	32	0.93	
1922	34,360	21	0.61	11	32	0.93	
1923	34,370	30	0.88	4	34	0.99	
1924	34,330	19	0.55	6	25	0.73	
1925	34,080	17	0.50	4	21	0.62	0.73
1926	34,430	26	0.76	3	29	0.84	
1927	33,870	20	0.59	3	23	0.68	
1928	34,820	20	0.57	6	26	0.75	
1929	35,040	19	0.54	4	23	0.66	
1930	35,040	21	0.60	5	26	0.74	
1931	34,660	16	0.46	3	19	0.55	

Tuberculosis and Venereal Diseases Schemes.—Arrangements for *treating* tuberculous persons and those suffering from venereal diseases are in the hands of the County Council

which has arranged times for consultations at the Tuberculosis Dispensary, and at the General Hospital respectively.

Disinfection and Disinfestation.—The Public Cleansing Station was removed from the stable in which it was housed in the Yard behind the Technical Institute, and was re-housed in September, 1931, in the basement of the new Health Offices, where there is more comfort and convenience for treatment. The Steam Sack Disinfector continues to do most efficient sterilisation of clothing, while the owner is having cleansing and disinfectant treatment in the adjacent bathing room. Disinfection of premises, bedding, etc., have been mainly carried out by the Caretaker of the Health Offices; some also being done by members of the Sanitary Staff. There is also a small disinfector at the Sanatorium used in connection with fever cases. Bedding is disinfected after enteric fever cases and, on request, after certain cases of cancer.

Washing and boiling of bed linen and personal wear, thorough airing and scrubbing of rooms which have been occupied by infected persons are advised: stripping of wall paper and re-decoration of rooms vacated after prolonged use by sufferers from pulmonary tuberculosis is required.

Small-pox and Chicken-pox are the only diseases readily carried in the clothing: the chief method of spread of infectious diseases is by direct contact with the human carrier, and disinfection of rooms and clothing occupies a less prominent position than it once did. Attention to building up the patient's health, and to abolishing unhealthy conditions of the throat, nose or ears, avoidance of crowding and close atmosphere, do more to diminish the spread of infection than does the fumigation of rooms.



