

[Report 1932] / Medical Officer of Health, Wakefield City.

Contributors

Wakefield (England). City Council.

Publication/Creation

1932

Persistent URL

<https://wellcomecollection.org/works/f4cs9at6>

License and attribution

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

Non-commercial use includes private study, academic research, teaching, and other activities that are not primarily intended for, or directed towards, commercial advantage or private monetary compensation. See the Legal Code for further information.

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



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

244642
CITY OF WAKEFIELD.

REPORT

ON THE

PUBLIC HEALTH

AND

SANITARY STATE

OF THE

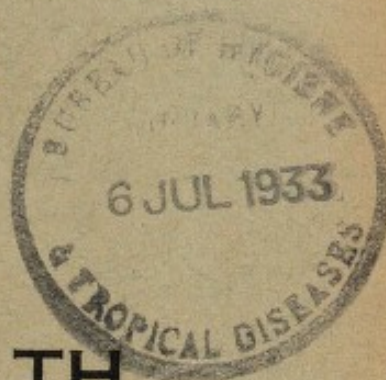
CITY OF WAKEFIELD

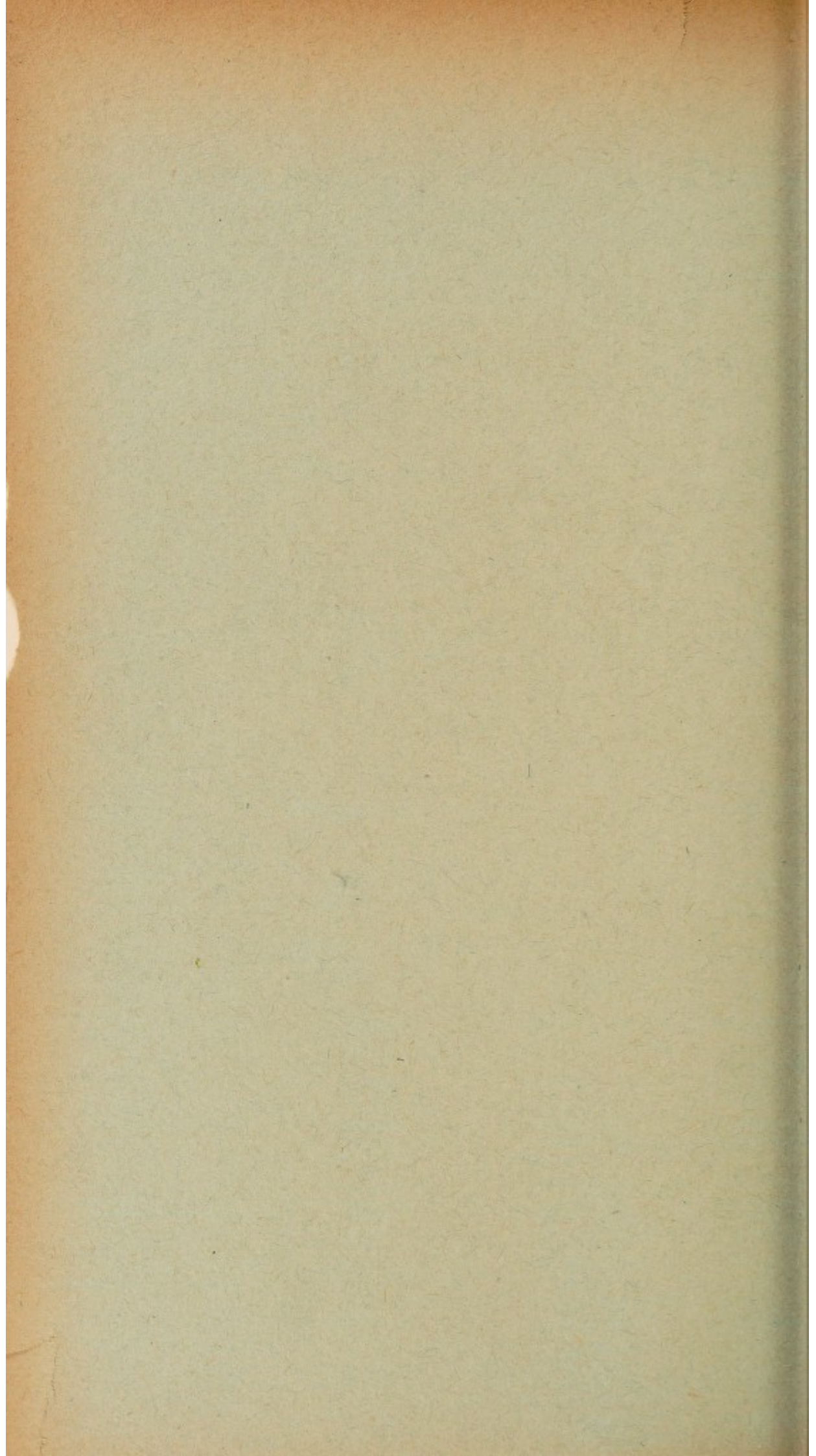
FOR THE YEAR 1932,

BY

THOMAS GIBSON, M.D., C.M., D.P.H.,

MEDICAL OFFICER OF HEALTH.





CITY OF WAKEFIELD.

REPORT

ON THE

PUBLIC HEALTH

AND

SANITARY STATE

OF THE

CITY OF WAKEFIELD

FOR THE YEAR 1932,

BY

THOMAS GIBSON, M.D., C.M., D.P.H.,

MEDICAL OFFICER OF HEALTH.

INDEX.

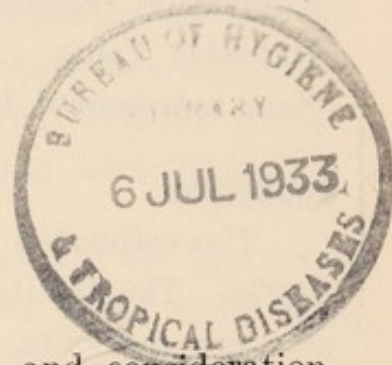
	Page.
Anti-Diphtheria Immunisation Clinic	19, 66
Ante-natal Clinic	92
Artificial Sunlight Clinic	106
Atmospheric Pollution	31
Bacteriological Reports	78
Births	9
Blindness	115
Cerebrospinal Fever	57
Child Welfare Centres	101
Common Lodging Houses	29
Deaths	10
Diphtheria	52, 59
Disinfection	78
Dysentery	56
Enteric Fever	55
Factories, Workshops and Workplaces	44
Food and Drugs—Analysis	37
Health Education	113
Health Visitors—Home Visiting	100
Hospital—Infectious Diseases	58
Hospital—Maternity	94
Health Services	18
Hospitals	20
Housing—General	46
Houses-let-in-lodgings	30
Infectious Diseases	52
Legislation in Force	19
Local Government Act	20
Marriages	8
Maternity and Child Welfare	91
Measles	56
Meat Inspection	40
Mental Deficiency	111
Midwives	18, 91
Milk Supply	33
Offensive Trades	43
Officers, Public Health	15
Ophthalmia Neonatorum	100
Orthopaedic Clinic	104
Pemphigus Neonatorum	57
Pneumonia	56
Postnatal Clinic	98
Public Health (Quinquennial) Survey	20
Puerperal Fever and Pyrexia	99
Sanitary circumstances of the Area	20
Sanitary Inspection	22
Slaughterhouses	39
Scarlet Fever	54, 59
School Medical Service	112
Statistics—General	4
Tuberculosis	79
Tuberculosis Dispensary	82
Tuberculosis—Sanatoria	84
Whooping Cough	56
Vaccination	78
Veneral Diseases	87

(15/12)
166-78

PUBLIC HEALTH DEPARTMENT,
TOWN HALL,
WAKEFIELD,

9th May, 1933.

*To the Mayor, Aldermen and Councillors
of the City of Wakefield.*



MR. MAYOR, LADIES AND GENTLEMEN,

I beg to submit for your information and consideration a Report on the Public Health and Sanitary State of Wakefield for the year 1932.

In the preparation of the Report, which follows the lines required by the Ministry of Health, I have received valuable assistance from many colleagues, particularly from Dr. Allardice, who has prepared the Report on Immunisation against Diphtheria, from Dr. Eeles, who has prepared the Maternity and Child Welfare Section, and from Mr. Roberts, who has prepared the Sanitary Administration Section.

I should like to take the opportunity of expressing my appreciation of the ungrudging help and loyal co-operation given me by all the Staff of this Department, both in the Town Hall and at the Hospitals.

I am,

Yours faithfully,

THOMAS GIBSON,

Medical Officer of Health.

(1).—GENERAL STATISTICS.

Area	4,970 acres.
Population (Census, 1931)	59,122.
Population (Estimated at middle of 1932) ..	59,678.
Rateable Value	£340,082.
Sum represented by a Penny Rate	£1,332.

Population.

The estimated total population at the middle of 1932 was 59,678. The Institutional population was 3,617, of which 3,128 were non-residents, and 489 were residents. The net population, excluding non-residents, was therefore 56,550, and this figure has been used as the basis for calculating the rates given in this Report, other than infectious disease attack rates.

The following table has been prepared to show the growth of the population in Wakefield since the first Census in 1801 :—

<i>Year.</i>	<i>Population.</i>	<i>Year.</i>	<i>Population.</i>
1801	10,581	1871	28,071
1811	11,393	1881	30,854
1821	14,164	1891	33,146
1831	15,932	1901	41,413
1841	18,842	1911	51,666
1851	22,057	1921	53,052
1861	23,150	1931	59,122

It will be seen from the above table that in the Century 1801—1901, the population of Wakefield increased to 41,413, a figure nearly four times as great as it was in 1801, and, taking the latest figure for the year 1931, we find that it has increased to five and a half times its number in 1801.

In this connection it is interesting to note that the population of England and Wales as a whole has increased from 8,892,536 in 1801 to 39,947,931 in 1931, and that of the

West Riding of Yorkshire from 590,506 in 1801 to 3,437,368 in 1931, the rate of increase of the latter being practically the same as that of Wakefield.

In considering the increase in the population of the City, it must be borne in mind that at various times during the 130 years since 1801, the boundaries of the City have been extended, the last of such extensions taking place in 1921, when a portion of the Township of Lupset was incorporated with Wakefield.

The latest increase in the population (*i.e.*, in the ten years 1921 to 1931) amounts to 6,070, or 11·4 per cent., which is a very gratifying figure, and one of the largest percentage increases recorded in the country. The percentage of increase in the West Riding of Yorkshire over the same period was 5·3; which is accounted for by the Registrar General as:—

gain by natural increase (excess of births over					
deaths)	..	..	..	..	.. 5·5 per cent.
loss by emigration	..	..	..	..	.. 0·2 per cent.

Wakefield's rise of 11·4 per cent. is shown as under:—

gain by natural increase (excess of births over					
deaths)	..	..	..	..	.. 6·0 „ „
gain by migration	..	..	..	..	.. 5·4 „ „

The percentage of increase in the whole of England and Wales was 5·4.

CENSUS, 1931.

The following information has been abstracted from the Registrar General's Report on the Census taken on 26/27th April, 1931:—

POPULATION OF THE CITY AND WARDS.—Table showing the Population of the City and of the various Wards in 1931, and also the corresponding Populations at the previous Census in 1921.

WARD.	Acreage.	POPULATION.					Private Families and Dwellings.			
		1921	1931				Private Families.	Population in Private Families.	Structurally separate Dwellings occupied.	Rooms occupied.
		Total.	Total.	Males.	Females.	Persons per Acre.				
Alverthorpe ..	640	4212	4717	2265	2452	7·4	1269	4711	1258	4931
Belle Vue ..	285	6351	5605	2750	2855	19·7	1411	5527	1400	5681
Calder	395	4562	4195	2041	2154	10·6	1197	4158	1182	4792
Eastmoor ..	252	6257	6647	3304	3343	26·4	1115	4272	1092	4188
Kirkgate ..	112	4872	3983	1997	1986	35·6	978	3713	945	3854
Northgate ..	96	4794	4168	2008	2160	43·4	1034	3906	1000	4249
North Westgate	687	5097	11416	5790	5626	16·6	2914	10876	2895	11923
Primrose Hill ..	302	5395	4595	2271	2324	15·2	1032	3861	1015	3762
St. Johns ..	231	4662	4314	1915	2399	18·7	1067	3737	1040	5028
Sandal	1338	2947	5545	2602	2943	4·1	1374	5512	1373	6580
South Westgate	632	3903	3937	1973	1964	6·2	1039	3740	1019	4145
Total City ..	4970	53052	59122	28916	30206	11·9	14430	54013	14219	59133

It will be observed that there is a tremendous increase in the population of North Westgate Ward, from 5,097 in 1921 to 11,416 in 1931. This, of course, is mainly due to the building during these ten years of the Lupset Housing Estate, and to the extension of the City boundary in 1921, taking in part of the Township of Lupset.

Dwellings and Private Families.

Turning to the section of the Registrar General's Census Report dealing with Dwellings, we find that the number of occupied dwellings in Wakefield in 1931 was 14,219, an increase

of 2,932 (or 25.98 per cent.) for the ten year period, and this is an increase for which we can congratulate ourselves, when we remember the great shortage of houses which prevailed ten years ago. The increase in the West Riding of Yorkshire was 126,044, or 16.81 per cent.

The number of private families in Wakefield in 1931 was 14,430, an increase of 25.10 per cent. since 1921, whilst the increase for the whole of the West Riding was 16.85 per cent. A private family is defined by the Registrar General as "any person or group of persons included in a separate return as being in separate occupation of any premises or part of premises."

The number of vacant unfurnished dwellings returned in 1931 was very low, namely, 153, or 1.05 per cent. of the total dwellings, the figures for the West Riding being 12,553, or 1.40 per cent. of the total dwellings.

The average size of the occupied dwellings in Wakefield, in rooms, is stated to be 4.16, and the figure for the West Riding 4.30. The average number of rooms occupied by each family is 4.10, the West Riding figure being 4.20. The number of families per occupied dwelling in Wakefield is 1.01, and in the West Riding as a whole, 1.02. The average number of persons per room is 0.91 in Wakefield, and 0.88 in the West Riding.

We now come to the average size of private families, and it is interesting to note that this has decreased from 4.25 persons per family in 1921, to 3.74 persons per family in 1931. The figures relating to the West Riding show a corresponding decrease, dropping from 4.14 persons per family in 1921 to 3.70 persons in 1931.

The table showing density of occupation by private families is of value, and here we see that in Wakefield the number of private families living in houses where the density of occupation was more than 2 persons per room was 645, a percentage of 4.47 of the total private families. The corresponding figure for the West Riding was 36,272 families, or 4.04 per cent. of the total families. The population in such families in Wakefield in 1931 was 4,454, a percentage of 8.25 of the total population. This figure shows a very welcome decrease on the 1921 figure, which was 6,848, or 14.01 per cent. of the total population, and it is largely due to the Corporation's housing schemes that this decrease has been brought about. The figure for the West Riding also shows a corresponding decrease, being 249,056 persons, or 7.49 per cent. of the total population, as against 364,723 persons, or 11.47 per cent. of the total population, in 1921.

Ages, Sexes and Marital Conditions.

As usual, females predominate in the Census returns, there being 1,290 more females than males in Wakefield in 1931, as compared with an excess of 1,058 in 1921. The number of females per 1,000 males was 1,045, compared with 1,041 in 1921, and 1,076 in the whole of the West Riding.

The average age of the population living in Wakefield in 1931 was 32·4 years (Males) and 32·8 years (Females), compared with 30·8 years (Males) and 30·8 years (Females) in 1921.

The number of persons over the age of 40 years in 1931 was 20,990 (35·5 per cent. of the total population) as against 17,401 (32·8 per cent. of the total population) in 1921.

Of the 28,916 males in Wakefield in 1931, 14,623, or 50·6 per cent. were single (as compared with 54·6 per cent. in 1921), 13,065, or 45·2 per cent. were married (as compared with 41·6 per cent. in 1921), and 1,228, or 4·2 per cent. were widowed or divorced (as compared with 3·8 per cent. in 1921).

Of the 30,206 females, 14,797, or 49·0 per cent. were single (compared with 52·0 per cent. in 1921), 12,909, or 42·7 per cent. were married (compared with 39·9 per cent. in 1921), and 2,500, or 8·3 per cent. were widowed or divorced (compared with 8·1 per cent. in 1921).

The number of married women aged less than 45 years per 1,000 women of all ages was 252, as compared with 246 in 1921, and 247 in the whole of the West Riding.

(2).—EXTRACTS FROM THE VITAL STATISTICS OF 1932.

(1) **Marriages.**

456 marriages were celebrated, equal to a marriage rate of 16·1 persons married per 1,000 of the population, as compared with 17·3 in 1931, 17·6 in 1930, and 16·8 the average for the past ten years.

(2) Births.

Excluding 104 non-resident births, and including 21 resident births which occurred outside the City, the total number of births registered in the City was 945 (495 males and 450 females) giving a birth rate of 16.71 per 1,000 of the population, as compared with 16.85 in 1931, and 18.40 the average for the past ten years. The number of births in 1932 was 3 less than in 1931. The birth rate in England and Wales in 1932 was 15.3, and in the large towns 15.4. 25 births (2.6 per cent.) were illegitimate.

Under the Notification of Births Act, 1,069 births were notified, 642 from dwelling houses, and 427 from institutions. Of the home confinements 445 were attended by doctors, and 197 by midwives. The Institution births include 368 in the Municipal Maternity Hospital, 26 in the County Hospital, 32 in a Private Maternity Home, and 1 in the West Riding Mental Hospital. 382 of the institution confinements were attended by midwives and 45 by doctors. 36 of the registered births (3.8 per cent.) were not notified, as compared with 6.0 per cent. in 1931, and 6.2 per cent. in 1930. 46 (4.3 per cent.) of the notified births were still births.

Remarks on the Birth Rate.

Although the birth rate for 1932 is practically the same as in the previous year, the trend, as in the country generally, is still downwards. The tremendous fall in the birth rate is clearly demonstrated by the fact that in 1883, or just fifty years ago, the rate in Wakefield was 33 per 1,000, or just double the rate for 1932. At the same time, our rate is still higher than that of the country generally, and it still provides a natural increase of the population—that is, an excess of births over deaths—which in 1932 was equal to 186 persons. There is a gratifying reduction in the proportion of illegitimate births, and also in the proportion of unnotified births.

CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1932.

Causes of Death. 1	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the district.									
	Total All Ages. 2	Under 1 year. 3	1 and under 2 years. 4	2 and under 5 years. 5	5 and under 15 years. 6	15 and under 25 years. 7	25 and under 45 years. 8	45 and under 65 years. 9	65 and under 75 years. 10	75 years. 11
All Causes { Certified .. { Uncertified ..	759 —	68 —	17 —	23 —	40 —	28 —	84 —	175 —	171 —	15 —
Enteric Fever	—	—	—	—	—	—	—	—	—	—
Measles	3	1	1	—	1	—	—	—	—	—
Scarlet Fever	5	1	2	2	—	—	—	—	—	—
Whooping Cough	4	2	1	1	—	—	—	—	—	—
Diphtheria	29	1	2	6	19	1	—	—	—	—
Influenza	20	1	1	—	1	1	—	7	5	—
Encephalitis Lethargica	1	—	—	—	—	—	1	—	—	—
Cerebrospinal Fever	5	1	—	—	2	—	2	—	—	—
Tuberculosis of Respiratory System	41	—	—	—	—	13	17	9	2	—
Other Tuberculous Diseases	9	—	2	2	3	1	1	—	—	—
Syphilis	6	4	—	—	—	—	1	—	—	—
General Paralysis of the Insane } Tabes Dorsalis	1	—	—	—	—	—	—	1	—	—
Cancer, Malignant Disease	75	—	—	—	1	—	10	26	28	1
Diabetes	9	—	—	—	—	1	1	2	3	—
Cerebral Haemorrhage, etc.	80	—	—	—	—	1	2	21	35	2
Heart Disease	126	—	—	—	2	2	8	34	39	4
Aneurysm	—	—	—	—	—	—	—	—	—	—
Other Circulatory Diseases	3	—	—	—	—	—	—	—	2	—
Bronchitis	49	2	1	—	—	—	2	10	17	1
Pneumonia (all Forms)	37	10	3	2	1	2	7	5	5	—
Other Respiratory Diseases	10	—	1	1	—	—	1	7	—	—
Ulcer of Stomach and Duodenum	4	—	—	—	—	—	1	3	—	—
Diarrhoea, etc. (under 2 years)	12	11	1	—	—	—	—	—	—	—
Appendicitis	10	—	—	—	1	—	3	5	1	—
Cirrhosis of Liver	1	—	—	—	—	—	—	1	—	—
Other Diseases of Liver, etc.	5	—	—	—	—	—	1	2	2	—
Other Digestive Diseases	15	1	1	1	1	—	—	5	4	—
Acute and Chronic Nephritis	32	1	—	—	2	4	3	10	9	—
Puerperal Sepsis	2	—	—	—	—	1	1	—	—	—
Other Puerperal Causes	5	—	—	—	—	—	5	—	—	—
Congenital Debility, Premature Birth, Malformations, etc.	29	28	—	—	1	—	—	—	—	—
Senility	46	—	—	—	—	—	—	—	5	—
Suicide	8	—	—	—	—	1	2	5	—	—
Other Violence	18	—	—	2	—	—	6	6	3	—
Other Defined Causes	58	3	1	6	5	—	9	16	11	—
Causes, ill-defined or Unknown	1	1	—	—	—	—	—	—	—	—
Totals	759	68	17	23	40	28	84	175	171	15

The total number of deaths registered in Wakefield was 1,121, including 382 non-residents. In addition 20 deaths of residents occurred outside the City. The number of resident deaths was therefore 759 (398 males and 361 females), giving a death rate of 13·4 per 1,000 of the population, as compared with 14·2 in 1931, and 13·0 the average for the past ten years. In 1932, the number of deaths was 39 less than in 1931. The

1932 general death rate in England and Wales was 12·0 and in the large towns 11·8. All the deaths were certified. 262 (34 per cent.) of the resident deaths occurred in Institutions.

The number and percentage of deaths at the various age periods were :—

Age period.	No. of Deaths, 1932.	Percentage 1932.	Percentage 1931.
Under 1 year	68	8·9	10·0
1—2 years	17	2·2	1·7
2—5 „	23	3·0	3·6
5—15 „	40	5·3	4·4
15—25 „	28	3·7	4·4
25—45 „	84	11·1	12·2
45—65 „	175	23·1	26·2
65—75 „	171	22·5	21·8
Over 75 years	153	20·2	15·7

The following Table gives the chief causes of death :—

Cause of Death.	No. of Deaths, 1932.	Males.	Females.	Percentage of total deaths in 1932.	Percentage of total deaths in 1931.
Heart Disease	126	58	68	16·6	14·9
Cerebral Haemorrhage	80	42	38	10·5	7·3
Cancer	75	40	35	9·9	11·3
Tuberculosis (all forms)	50	25	25	6·6	7·1
Bronchitis	49	35	14	6·5	8·4
Senility	46	17	29	6·1	2·8
Pneumonia (all forms)	37	22	15	4·9	7·8
Nephritis	32	13	19	4·2	2·3
Diphtheria	29	14	15	3·8	3·0
Congenital Debility, Premature Birth, Malformations, etc.	29	16	13	3·8	4·4

There were 126 deaths from Heart Disease (58 males and 68 females) giving a death rate of 2·23, as compared with 2·12 in 1931, and 1·83 the average for the past ten years. The number of deaths was 7 more than in 1931. 90·5 per cent. of the deaths were of persons 45 years of age and over, and 32·5 per cent. of persons over 75 years of age.

There were 80 deaths from Cerebral Haemorrhage (42 males and 38 females), giving a death rate of 1.41, as compared with 1.03 in 1931, 1.09 in 1930, and 1.01 in 1929. The number of deaths was 22 more than in 1931.

There were 75 deaths from Cancer (40 males and 35 females) giving a death rate of 1.33, as compared with 1.60 in 1931, and 1.38 the average for the past ten years. The number of deaths was 15 less than in 1931.

There were 50 deaths from Tuberculosis (all forms) (25 males and 25 females), giving a death rate of 0.88, as compared with 1.01 in 1931, and 1.02 the average for the past ten years. The number of deaths was 7 less than in 1931.

There were 41 deaths from Pulmonary Tuberculosis (20 males and 21 females), giving a death rate of 0.73, as compared with 0.82 in 1931, and 0.75 the average for the past ten years. The number of deaths was 5 less than in 1931.

There were 9 deaths from Non-pulmonary Tuberculosis (5 males and 4 females), giving a death rate of 0.16, as compared with 0.19 in 1931, and 0.27 the average for the past ten years. The number of deaths was 2 less than in 1931.

There were 49 deaths from Bronchitis (35 males and 14 females), giving a death rate of 0.87 as compared with 1.19 in 1931, and 1.11 the average for the past ten years. The number of deaths was 18 less than in 1931.

There were 46 deaths from Senility (17 males and 29 females), giving a death rate of 0.81, as compared with 0.39 in 1931, and 0.81 in 1930.

There were 37 deaths from Pneumonia (22 males and 15 females), giving a death rate of 0.65, as compared with 1.10 in 1931, and 1.10 the average for the past ten years. The number of deaths was 25 less than in 1931.

There were 32 deaths from Acute and Chronic Nephritis (13 males and 19 females), giving a death rate of 0.57, as compared with 0.32 in 1931, and 0.41 in 1930. The number of deaths was 14 more than in 1931.

There were 29 deaths from Diphtheria (14 males and 15 females), giving a death rate of 0.51, as compared with 0.43 in 1931, and 0.13 the average for the past ten years. The number of deaths was 5 more than in 1931.

There were 12 deaths of infants under 2 years of age from Diarrhoea and Enteritis, giving a death rate of 12·7 per 1,000 births, as compared with 15·8 in 1931, and 13·3 the average for the past ten years. The corresponding rate in England and Wales during 1932 was 6·7.

The number of infantile deaths (*i.e.*, under one year of age) was 68 (41 males and 27 females), giving an infantile mortality of 72 per 1,000 births, as compared with 84 in 1931, and 79 the average for the past ten years. The corresponding rate for England and Wales in 1932 was 65, and in the large towns 68.

In the first quarter of the year, the rate was 93, in the second quarter 59, in the third quarter 46, and in the fourth quarter 89. The legitimate infantile mortality was 71 per 1,000 births, and the illegitimate 120 per 1,000 births. The neonatal mortality (*i.e.*, the mortality during the first month of life) was 30 per 1,000 births, as compared with 40 in 1931, and 35 the average for the past ten years.

The infantile mortality in the various Wards was as follows :—

Northgate	.. 108	North Westgate	81	St. John's	.. 48
Kirkgate	.. 92	Eastmoor	.. 68	Sandal	.. 48
Alverthorpe	.. 86	Calder	.. 68	Primrose Hill	41
South Westgate	85	Belle Vue	.. 59		

The causes of infantile mortality were :—Congenital debility, premature birth, malformations, etc., 28; Diarrhoea and Enteritis 11; Pneumonia 10; Syphilis 4; Whooping Cough 2; Bronchitis 2; Measles 1; Scarlet Fever 1; Diphtheria 1; Influenza 1; Cerebro Spinal Fever 1; Nephritis 1; and other causes 5. 31 per cent. of the infantile deaths occurred in the first week of life, 41 per cent. during the first month, and 79 per cent. during the first six months of life. The mortality amongst males was 83 per 1,000 male births, and amongst females 60 per 1,000 female births.

There were 7 maternal deaths from diseases and accidents of pregnancy and parturition, giving a mortality of 7·41 per 1,000 births, as compared with 7·38 in 1931, and 5·89 the average for the past ten years. There were 2 deaths from Puerperal Sepsis included in the above, and in one of these the illness followed an abortion. Three of the deaths occurred in the Maternity Hospital, two in the Clayton Hospital, one at home, and one in a London Hospital.

The 18 deaths from Violence included 10 from vehicular accidents, one from a railway accident, 3 from falls down steps, one from a colliery accident, and 3 from drowning.

There were also 8 suicidal deaths, comprising 2 from hanging, 2 from coal gas poisoning, one from cut throat, and 3 from drinking poisonous liquids (ammonia 1, disinfectant 1, liniment 1).

106 inquests were held during the year, 58 on residents and 48 on non-residents.

Remarks on the Death Rate.

The death rate is satisfactory in so far as it is lower than that of 1931, but it is unsatisfactory in so far as it still exceeds the death rate of the whole country, as well as that of the great towns. One satisfactory feature of the statistics is a reduction in the proportion of infantile deaths, and an increase in the proportion of deaths at advanced ages.

With regard to the main causes of mortality, Heart Disease still heads the list, although it will be noted that nearly one third of these deaths occurred among persons over 75 years of age.

It is gratifying to note a reduction of the number of deaths from Respiratory Diseases generally, from Tuberculosis, and from Cancer. The reduction in the Cancer Mortality is notable, because it has been steadily increasing during past years. The Tuberculosis mortality is the lowest on record for the City. The Diphtheria mortality, on the other hand, is the highest on record. The Infantile Mortality is lower than that of 1931, and also lower than the average for the past ten years, but it is higher than it was in 1930, 1928 and 1925. The Maternal Mortality shows no signs of improvement. It is just the same as in 1931, and remains above the average for the past ten years. The investigations made into these deaths were not very fruitful in suggesting possibilities of prevention, although in three instances the deaths might possibly be regarded as avoidable.

GENERAL PROVISION OF HEALTH SERVICES.

Public Health Officers.

The following are the Officers of the Public Health Department :—

Name.	Qualifications.	Office held.
Thomas Gibson ..	M.D., C.M. (Edin.) D.P.H.	Medical Officer of Health. School Medical Officer. Tuberculosis Officer. Medical Officer for Maternity Hospital and Child Welfare Centres. Medical Superintendent of the Fever Hospital. Medical Officer under the Mental Deficiency Act. Police Surgeon.
Frank Allardice ..	M.D., Ch.B., D.P.H. (Edin.)	Deputy Medical Officer of Health. Assistant School Medical Officer and School Ophthalmologist. Assistant Medical Officer for Maternity and Child Welfare.
Jessie Eeles ..	M.D., Ch.B. (Edin.) ..	Assistant Medical Officer. Assistant Medical Officer for Maternity and Child Welfare. Assistant School Medical Officer.
J. W. Thomson ..	M.B., C.M. (Aberdeen) ..	Consulting Obstetric Surgeon (Part time).
A. W. Frew ..	L.R.C.P., L.R.C.S., L.R.F.P.S., D.P.H., R.C.P.S. (Edin.).	Medical Officer for Venereal Diseases (Part time).
H. L. Crockatt ..	M.B., Ch.B. (Leeds) ..	Consulting Orthopaedic Surgeon (Part time).
William Roberts ..	Certificates of Royal Sanitary Institute for (1) Inspector of Nuisances and (2) Inspector of Meat and other Foods.	Senior Sanitary Inspector. Inspector of Meat and other Foods. Inspector under the Hous- ing Regulations. Inspector of Canal Boats.

Name.	Qualifications.	Office held.
Harold F. Jowett ..	Certificates of Royal Sanitary Institute for (1) Sanitary Inspectors. (2) Inspector of Meat and other Foods. Certificate of Company of Plumbers.	Deputy Senior Sanitary Inspector. District Sanitary Inspector. Inspector of Meat and Other Foods. Inspector under the Housing Regulations.
William V. Hargreave.	Certificates of Royal Sanitary Institute for (1) Sanitary Inspectors. (2) Inspector of Meat and other Foods. (3) Sanitary Science.	District Sanitary Inspector. Inspector of Meat and other Foods. Inspector under the Housing Regulations.
William Dawson	Certificates of Royal Sanitary Institute for (1) Sanitary Inspectors, and (2) Inspector of Meat and other Foods. (3) Smoke Inspection. Certificate of the Company of Plumbers.	Ditto.
Arthur Seaton ..	Certificate of Royal Sanitary Institute for (1) Sanitary Inspectors. (2) Inspector of Meat and Other Foods. (3) Sanitary Science.	Ditto.
Sarah S. Thorp ..	Certificate of Royal Sanitary Institute for (1) Inspector of Nuisances (2) Maternity and Child Welfare, and (3) Health Visitor and School Nurse. C.M.B. Certificate. New Certificate of Royal Sanitary Institute for Health Visitors.	Senior Health Visitor. Superintendent, Belle Vue Child Welfare Centre. School Nurse. Tuberculosis Nurse.
Hilda Staniforth ..	Trained Nurse C.M.B. Certificate. Certificate of Royal Sanitary Institute for (1) Inspector of Nuisances (2) Health Visitor, and (3) School Nurse. New Certificate of Royal Sanitary Institute for Health Visitors.	Health Visitor. School Nurse. Tuberculosis Nurse. Superintendent, Eastmoor District Child Welfare Centre (held at Principal Centre).

Name.	Qualifications.	Office held.
Hilda Robertshaw ..	Trained Nurse C.M.B. Certificate. New Certificate of Royal Sanitary Institute for Health Visitors.	Health Visitor. School Nurse. Tuberculosis Nurse. Superintendent, Thornes Lane District Child Welfare Centre (held at Principal Centre).
Maggie Dearden ..	Trained Nurse C.M.B. Certificate New Certificate of Royal Sanitary Institute for Health Visitors.	Health Visitor. School Nurse. Tuberculosis Nurse. Superintendent, Snape-thorpe Hall Child Welfare Centre.
Jennett Gardner ..	Trained Nurse C.M.B. Certificate. New Certificate of Royal Sanitary Institute for Health Visitors.	Health Visitor. School Nurse. Tuberculosis Nurse. Superintendent, South Westgate District Child Welfare Centre (held at the Principal Centre).
Ethel W. Farrar ..	Trained Nurse. C.M.B. Certificate. New Certificate of Royal Sanitary Institute for Health Visitors.	Health Visitor. School Nurse. Tuberculosis Nurse. Superintendent, Northgate District Child Welfare Centre (held at Principal Centre).
Olive I. Burton ..	Trained Nurse Certificates of Chartered Society of Massage and Medical Gymnastics for (1) Massage, and (2) Swedish Remedial Exercises.	Orthopaedic and Ultra-Violet Ray Clinic Nurse. Nurse at Principal Child Welfare Centre.
A. J. Peck	Trained Fever Nurse	Matron of City Fever Hospital.
Kate P. Perkins ..	Trained Nurse C.M.B. Certificate.	Matron of Maternity Hospital.
Herbert Pollard ..	M.R.C.V.S.	Veterinary Surgeon. Veterinary Inspector of Dairy Cows (Part-time Officer).
F. W. Richardson	F.I.C	Analyst of Food, Drugs and Fertilizers (Part-time Officer).

The Clerical Staff consists of:—

General.

William V. Morris, Chief Clerk and Vaccination Officer.
 Ronald Shaw.
 Edward Land.

Maternity and Child Welfare.

Beatrice Lake (Part-time School Medical Service).
 Mary T. Kelly, Clerk and Assistant at the Principal Child
 Welfare Centre.

School Medical Service.

Herbert W. Tate.

Sanitary Inspector's Office.

George O. Allen.

The Corporation also employs two Salaried District
 Midwives.

Professional Nursing in the Home.

(a) General.

This is chiefly provided by the local Nursing Association, which employs five Nurses. The Corporation has an arrangement with the Association for the home nursing of cases of puerperal pyrexia when required. One large engineering firm employs a Nurse to attend to their employees and their families.

(b) Infectious Diseases.

The Health Visitors render assistance in the home nursing of cases of Measles, Whooping Cough, Ophthalmia Neonatorum, Pneumonia, etc.

Midwives.

During 1932 17 midwives gave notice of intention to practice, including 3 at the Maternity Hospital, 6 at the County Hospital, and 2 at a Private Maternity Home.

Laboratory Facilities.

By arrangement with the West Riding County Council, the Wakefield Corporation is provided with facilities for pathological examinations at the County Hall Laboratory. These arrangements include the bacteriological examination of water, milk, and pathological specimens. Chemical and bacteriological examinations of the Wakefield Corporation water supply are made in the Laboratory of the West Riding

Rivers Board. The Chemical analysis of food, drugs and fertilisers is carried out by Mr. F. W. Richardson, F.I.C., of Bradford.

Legislation in Force.

There have been no changes or additions to the general and local public health legislation in force in the City, a summary of which appeared in my Annual Report for 1931.

Maternity and Nursing Homes.

There was one Maternity Home and one Nursing Home on the Register at the end of the year. No new applications for registration, or exemption from registration, were received.

Maternal Mortality.

Investigations are made into all maternal deaths and cases of puerperal fever and pyrexia by Dr. Jessie Eeles, Medical Officer for Maternity and Child Welfare. Special reports on maternal deaths are sent to the Ministry of Health Committee on Maternal Mortality.

Ambulance Facilities.

(1) For infectious cases, 2 motor ambulances are provided by the Corporation at the Fever Hospital. By arrangement with the Corporation, the Smallpox Motor Ambulance, belonging to the Wakefield and District Smallpox Hospital Committee is garaged at the Fever Hospital, and is worked by the Corporation driver.

(2) For non-infectious and accident cases, 2 Motor Ambulances are provided at the Police Station.

CLINICS AND TREATMENT CENTRES.

The full list of Clinics and Treatment Centres, given in my Annual Report for 1931, still stands good, except that the Monday afternoon session of the Tuberculosis Dispensary has been discontinued.

An Anti-Diphtheria Immunisation Clinic was commenced on 26th February, 1932. The Clinic is held at the Principal Child Welfare Centre, Margaret Street, each Friday afternoon. Towards the end of the year, owing to the large number of applicants for Immunisation, it was necessary to hold an additional weekly session on Wednesday afternoons.

LOCAL GOVERNMENT ACT, 1929.

The arrangements made under the above Act were described in my Annual Report for 1931, and no changes have taken place during the past year.

POOR LAW MEDICAL OUT-RELIEF.

No changes have taken place in the arrangements made for this service.

HOSPITALS.

No changes have occurred during the year.

Work was commenced in September, 1932, on the building of the new Fever Hospital at Snapethorpe, the provision of which, as stated in my last Annual Report, has been rendered possible by the magnificent generosity of an anonymous donor. The foundation stone of the Hospital was laid on 3rd November, 1932, by the Mayor of Wakefield (Samuel Butterworth, Esq., J.P.).

THE QUINQUENNIAL PUBLIC HEALTH SURVEY.

The first quinquennial public health survey, as required by the Local Government Act, 1929, was carried out at Wakefield during 1932, by Dr. D. J. Williamson, a Medical Inspector of the Ministry of Health. The Survey was a very careful and exhaustive inquiry into all the public health activities of the Corporation, and, as carried out by Dr. Williamson, it proved a very helpful and stimulating experience for your Medical Officer and his colleagues. I am sure these periodical surveys will prove of immense value to local authorities, and will be calculated to raise efficiency and promote economy in public health administration.

SANITARY CIRCUMSTANCES OF THE AREA.

Water Supply.

The water was regularly tested, both chemically and bacteriologically during the year, and the reports were all satisfactory.

Drainage, Sewerage, Rivers and Streams.

There are no changes to report.

Closet Accommodation.

See Sanitary Inspector's Report.

Public Cleansing.

I am obliged to the City Surveyor (L. Ives, Esq., M.Inst.M. & Cy.E.) for the following information :—

- | | |
|---|--|
| (a) The method of collecting dry house refuse. | The contents of the house bins are emptied into galvanised iron skips, and the refuse deposited into carts provided with canvas covers, also motor refuse collecting vehicles, fitted with roller canvas covers. |
| (b) The method of collecting refuse from earth closets and privies. | Earth closets and privies (of which there are now very few) are emptied at night. The tubs are taken away complete and returned in a special wagon with wooden doors, the contents of privies are loaded into a covered motor vehicle. |
| (c) The method of disposing of dry house refuse. | Controlled tipping on the same lines as at Bradford. |
| (d) The method of disposing of refuse from earth closets and privies. | Stacked and covered with soil on farm land and afterwards ploughed in. |
| (e) The method of cleansing cesspools. | Contents pumped into horse drawn steel sludge tank. |
| (f) Arrangements for the disposal of cesspool contents. | Mostly spread on to grass land, exceptional cases deposited into sewers which immediately afterwards are properly flushed. |
| (g) Ashbin maintenance under the Wakefield Corporation Act, 1924 (Section 125). | On the 31st March, 1933, the number of ashbins maintained by the Corporation was 4,578, for which a charge of 1/- per bin per year is made. |

SANITARY INSPECTION OF THE AREA.

By William Roberts, Senior Sanitary Inspector.

Number of Inspections made	11,984
„ „ Re-Inspections made	4,330
„ „ Complaints received	953
„ „ Complaints confirmed	871
„ „ Nuisances found	280
„ „ Informal Notices served	524
„ „ Statutory Notices served	84
„ „ Notices outstanding at end of 1932	7
„ „ Premises where work has been carried out by verbal notice or without notice	212
„ „ Letters sent	86
„ „ Matters referred to City Surveyor ..	192
„ „ Matters referred to Waterworks Engineer	26

SUMMARY OF INSPECTION WORK.

*Inspections. Re-Inspections.***Dwelling Houses.**

Ordinary	565	345
Infectious Disease	770	389
Housing Consolidated Regulations, 1925	374	840
Housing Act, 1930. (Special Surveys, Clearance, etc., Areas)	88	143

Sanitary Conveniences.

Water Closets	192	83
Privies and Tub Closets	16	1
Urinals	30	11

Refuse Storage.

Ashplaces	75	31
Ashbins	92	60

Drains.

Inspections	410	112
Smoke Tests	10	—
Chemical Tests	14	—

Sewers, etc.

Sewers	27	7
Street Gullies	133	22

Factories and Workshops, etc.

Factories	4	5
Workshops (excluding Bakehouses)	235	12

	<i>Inspections.</i>	<i>Re-Inspections.</i>
Workshops (including Restaurant Kitchens and Stables)	15	1
Bakehouses (Factory)	66	2
Bakehouses (Non-Factory)	192	6
Outworkers	—	—
Miscellaneous.		
Borough Market	241	—
Butchers' Shops	530	—
Cold Stores	46	—
Common Lodging Houses—Day ..	135	14
—Night	17	—
Canal Boats	30	—
Cowsheds	118	4
Cattle Market	24	—
Corporation Slaughterhouse ..	1,054	—
Dairies, Milkshops and Milk Stores	416	21
Dangerous Structures	3	4
Entertainment Houses	18	2
Fishmongers' Shops and Stalls ..	416	—
Houses Let in Lodgings	146	28
Ice Cream Premises	59	1
Meetings with Owners or Tradesmen	636	—
Miscellaneous (including Cesspools, Water Courses, Refuse Tips, etc.)	179	4
Offensive Trades (including Fish Frying Premises)	430	11
Piggeries	42	41
Private Slaughterhouses	2,735	—
Do. (Special Notices)	126	—
Smoke Observations	86	—
Schools	59	13
Streets or Back Roads	26	—
Special Visits	2,522	—
Sanitary Inspections	751	1,190
Van Dwellings	9	2
Visits under Rats and Mice Destruc- tion Act	59	14
Yards and Courts	62	46

SUMMARY OF SANITARY IMPROVEMENTS CARRIED
OUT UNDER PUBLIC HEALTH ACTS.

Dwelling Houses.

Cleansed or Limewashed	33
Overcrowding Abated	24
Ventilation Improved	23
Roofs Repaired	37
Eaves Spouts or Rain Water Fall Pipes Repaired	75
External Walls, Chimneys Repaired or Re-pointed	25
Inside Walls, Ceilings, etc., Repaired	68
New Floors Laid or Repaired	23
Doors Repaired	11
Fireplaces, etc., Repaired	39
Stairways Improved	1
Water Supply Improved	12
New Water Supply Laid on	1
Yards Paved	23
Yards Cleansed	16
Food Stores Improved	2
Washing Accommodation Improved	4

Drains.

Opened out for Inspection	31
Repaired	85
Re-constructed	14
Inspection Chambers Constructed	8
Drains Choked	1,187
Drains Cleansed by Corporation Drain Cleanser..	1,054
Drains Cleansed by Owners	133
Drains Ventilated	4
Drains Removed from inside Buildings	2
Rain Water Fall Pipes disconnected from Drains or Sewers	3
New Drains provided	23

Accumulations Removed.

Manure	17
Other	7
Manure Pits provided	5

Animals, Poultry, Etc.

Nuisances Abated	19
--------------------------	----

Ashbins, Ashplaces.

Movable Galvanized Iron Ashbins renewed (at Shops, Stores, etc.)	13
Movable Galvanized Iron Ashbins provided in lieu of Ashpits	44
Dry Ashplaces Abolished	9
Dry Ashplaces Repaired	20
Intimations sent to City Surveyor. (Movable Galvanized Iron Ashbins requiring renewal at Dwelling Houses)	85

Urinals.

Urinals Cleansed or Improved	1
New Urinals provided	2
Repaired	5
Abolished	2

Sinks.

New Sinks provided	46
Sink Waste Pipes Trapped	10
Sink Waste Pipes Repaired	45
Other Waste Pipes Repaired	4

Piggeries.

Swine Removed	6
Cleansed	1

Water Closets.

Cleansed or Limewashed	17
Repaired	143
Additional provided	19
Re-constructed	9

SUMMARY OF SANITARY IMPROVEMENTS CARRIED
OUT UNDER HOUSING ACT.

Dwelling Houses.

Lighting Improved	3
Ventilation Improved	224
Roofs Repaired	110
Eaves Spouts or Rain Water Fall Pipes Repaired	110
External Walls, Chimneys, etc., Repaired or Re-pointed	205
Inside Walls, Ceilings, etc., Repaired	194
New Floors, Laid or Repaired	213
Fireplaces, Ovens or Set Pots Repaired	163

Stairways Repaired	27
Doors Repaired	76
Washing Accommodation provided	14
Food Stores provided or Improved	99
Yards Paved	55

Drains.

Opened Out	3
Repaired	55
Disconnected from Sewer	1
Rain Water Fall Pipes disconnected from Drains or Sewers	5
Ventilated	2
New Drains Laid	2

Sinks.

New Sinks provided	42
Sink Waste Pipes Trapped	5
Sink Waste Pipes Repaired	21

Water Closets.

Additional provided	—
Repaired	63

Ashplaces.

Movable Galvanized Iron Ashbins renewed at Dwelling houses	6
Movable Galvanized Iron Ashbins provided in lieu of Dry Ashplaces	12
Dry Ashpits Repaired	18
Dry Ashpits Abolished	4

Closet Accommodation.

The Closet Accommodation in the City is as follows:—

Water Closets (including 345 Trough Closets) ..	15,025
Privies	35
Tub Closets	14
Number of Privy Closets converted into Water Closets during 1932	—
Number of Additional Water Closets provided in connection with the above	—
Number of Tub Closets converted into Water Closets during 1932	—
Number of Additional Water Closets provided in connection with the above	—

Number of Privy Closets in addition to the above dispensed with	12
Number of Tub Closets in addition to the above dispensed with	—
Total Privy Closets Abolished	12
Total Tub Closets Abolished	—
Total Trough Closets Abolished	10

The total number of Privy and Pail Closets remaining on the 31st December, 1932, was Privy Closets 35 (34 attached to dwelling houses and 1 used in connection with a workshop) and Pail Closets 14 (7 attached to dwelling houses and 7 used in connection with workshops).

The Closets are situate in the following Municipal Wards:—Alverthorpe (1 Privy Closet), North Westgate (1 Privy Closet), South Westgate (9 Privy Closets and 5 Pail Closets), Primrose Hill (1 Privy Closet and 7 Pail Closets), Calder (2 Privy Closets and 2 Pail Closets), Belle Vue (6 Privy Closets), Sandal (15 Privy Closets).

It will be noted that 12 Privy Closets were abolished at a factory during the year, and the number of Privy and Pail Closets remaining in the City, suitable for conversion is only 4 (1 Privy Closet and 3 Pail Closets), and owing to the properties being subject to legal and other difficulties, it has been deemed inexpedient to effect conversions.

We have, however, 34 Privy Closets and 11 Pail Closets situate in districts not provided with a public sewer, and in the majority of cases, the installation of sewerage systems for the purpose of effecting conversions would be an uneconomic proposition.

CANAL BOATS.

The number of Boats on the Register at the end of 1932, was 5, and 30 Boats were inspected during the year. An investigation was made during the year, to ascertain whether the Boats on our Register were still in commission, and this revealed that 4 of the Boats were not now used.

The Boats inspected were occupied by 46 males and 10 females, and 3 female children.

The Boats were all found to be in a clean condition, and in only 1 instance, it was necessary to draw attention to contravention of the Canal Boats Acts, and the defect was afterwards remedied.

STREET GULLIES.

A large number of complaints have been received by the Department during the year, as to offensive smells emanating from street gullies in various parts of the City. It is found that, on investigating the complaints referred to, the nuisance is mainly due to the street gully not being properly trapped, a number of which are still found to exist in various parts of the City.

The work in connection with the trapping of street gullies has been slow during the year, and the nuisance will continue to arise whilst such a large number of street gullies remain untrapped.

At the same time the nuisance could be somewhat mitigated if the objectionable practice of pouring slops and other foul liquids down street gullies was discontinued by the general public, this undoubtedly would lessen the tendency for offensive odours to emanate therefrom.

RAT REPRESSION.

During the week commencing 7th November and ending 12th November, arrangements were made for the observance of National Rat Week in the City.

The usual publicity was given to the need for co-operation by the issue of circulars, display of poisons, traps, etc., in chemists and hardware stores. The managers of Local Cinemas and Theatres very kindly caused slides to be displayed in the various places of entertainment in the City.

It is satisfactory to be able to report that regular attention is being given to rat repression, and it is found that the occupiers of the various premises subject to becoming infested, are fully alive to their responsibilities in the matter.

The older type of property, chiefly situate in the central area of the City, is still prone to infestation, and provides an attractive harbour for rats, and in consequence of this, it is at all times imperative that occupiers of such premises, should exercise precautions in preventing buildings becoming infested.

It is of the utmost importance that every citizen should do all he can in the extermination of these pests, not only during one week of the year, but by systematic action throughout the whole year.

PRIVATE STREETS AND PAVING OF YARDS.

The question of the paving of private streets has been considered during the year, and the Health Committee drew the attention of the General Works Committee to the need for speeding up the work in connection with same.

A large number of private streets are still in need of being properly paved, and from a public health point of view, it is very desirable that this work should be proceeded with.

It will be observed that a large number of private and common yards have been paved as a result of intimations sent from the Public Health Department during the year. The total number of yards paved or improved in this way was 78.

It cannot be too strongly emphasised that the carrying out of this work is a decided important sanitary improvement, and in addition to effecting an improvement in the general amenities of the dwelling house, is a means of providing a higher standard of cleanliness inside the house.

COMMON LODGING HOUSES.

Number on Register at end of 1932.	For both Sexes.	For Men only.	Number of Persons registered for.
17	9	8	719

One Licence was not renewed during the year, on account of the keeper discontinuing to use the premises as a Common Lodging House.

Defects.	Found.	Remedied.
Cleansing	21	21
Vermin Infestation	4	4
Ashbins Renewed	4	4
Drainage	2	2
Roof	1	1
Sink	1	1
Ventilation Improved	1	1
Damp Walls	1	1

All the houses have been regularly inspected, and the houses have been maintained in a satisfactory manner.

HOUSES LET IN LODGINGS.

Number on Register at end of 1932	..	..	27
Number taken off during year	..	..	1
Number put on during year	..	..	3
Total Accommodation (Adults) at end of year	..		494

Defects.	Found.	Remedied.
Cleansing	8	8
Water Closet	4	4
Drainage	4	4
Internal Walls	1	1
Vermin Infestation	1	1
Accumulation	1	1

Special attention has been paid to the condition of the houses on the register in connection with the compliance of the Byelaws during the year, and it was necessary to serve 10 notices requiring the remedy of contraventions of the Byelaws.

In 5 cases, it was necessary to ask for houses to be discontinued to be used as Houses Let in Lodgings, on account of the buildings being unsuitable for occupation by more than one family.

The occupation of dwelling houses by members of more than one family still continues to be carried on in the City, and difficulty is experienced in not always being able to discover all the houses so occupied. Indeed, it is only by carrying out systematic inspections that the District Sanitary Inspectors are able to come across such houses, and in consequence, a large number of houses continue to be occupied undetected. I am afraid that our powers of supervision over sub-let houses will continue to be limited until Local Authorities generally, are given powers to require this class of house to be subject to registration.

ATMOSPHERIC POLLUTION.
Emission of Smoke from Industrial Chimneys, 1932.

TABLE I.

No. of Boilers.	No. of Observations.	Dense Black Smoke.—Minutes in the Half-Hour.											
		Nil	$\frac{1}{2}$	1	2	3	4	5	5-10	10-15	15-20	20-25	25-30
1	37	24	—	8	4	—	1	—	—	—	—	—	—
2	13	7	1	5	—	—	—	—	—	—	—	—	—
3	12	6	1	2	1	1	—	—	—	—	—	1	—
4	7	4	—	2	—	—	—	—	—	1	—	—	—
5	3	1	—	1	1	—	—	—	—	—	—	—	—
7	7	3	—	2	—	—	1	1	—	—	—	—	—
Total	79	45	2	20	6	1	2	1	—	1	—	1	—

TABLE II.

No. of Observations.	Dense Black Smoke.—Minutes in the Hour.—Percentage.													
	Nil	1	2	3	4	5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45
257	34·6	11·2	7·3	5·8	6·6	7·7	11·6	5·0	4·2	3·5	1·1	8·3	0·3	—
740	44·7	10·4	7·1	7·0	5·1	4·8	10·6	6·0	2·4	0·8	0·4	0·2	—	—
318	52·2	12·2	10·6	9·6	3·4	3·4	5·0	1·5	0·6	0·9	—	—	—	—
315	48·6	14·6	5·7	4·1	4·1	2·2	13·7	1·9	1·5	1·5	0·9	—	0·3	0·6
925	57·9	9·5	8·6	2·2	5·4	0·2	8·8	4·7	0·6	1·2	0·1	0·3	—	—
532	77·1	6·0	5·2	2·4	2·8	0·9	2·6	1·8	0·3	0·5	—	—	—	—
76	59·21	5·26	13·1	6·6	2·6	2·6	—	—	—	—	—	—	—	—
93	65·59	2·15	9·7	4·3	4·3	1·1	6·5	4·3	—	3·2	1·1	—	—	—
55	60·00	16·36	3·63	1·81	1·81	1·81	1·81	—	—	3·63	—	—	—	—
79	57·00	25·31	7·59	1·25	2·53	1·25	—	1·25	—	1·25	—	—	—	—

TABLE III.
MONTHLY RECORD OF SOOT DEPOSITS IN
STANDARD GAUGES, 1932.

Month.	Tons of Total Solids per Square Mile.	
	Northgate Station.	Clarence Park Station.
January	17.69	5.80
February	14.00	4.49
March	29.02	10.39
April	25.32	10.40
May	22.35	16.86
June	12.37	7.01
July	21.72	9.38
August	16.76	8.38
September	15.93	6.03
October	23.02	8.85
November	16.76	7.44
December	14.30	5.50
Average per Month ..	19.10	8.38

During the year 1932, it was necessary to serve 3 Notices of Offence under the Public Health (Smoke Abatement) Act, 1926, regarding the emission of Dense Black Smoke. Further observations were made and improvements were found to have been effected.

It will be observed that an increased number of observations of factory chimneys have been made during the year, and it is gratifying to be able to state that an improvement in the pollution of the atmosphere is being steadily maintained. The records made of the standard gauges fixed at the Clarence Park and Northgate stations, show that the soot deposits throughout the year are slightly below those recorded for 1931.

At the same time we have to remember that during the year under review, certain industries have only been partially engaged in the various manufacturing processes, and no doubt, this, to a certain degree, has had some bearing on atmospheric pollution.

One of the most difficult problems to be encountered, in connection with the clarification of the atmosphere, is the question of the domestic chimney, and until a suitable smokeless fuel or other improved means of heating are available for every householder, it will not be possible to bring about any appreciable reduction in the nuisance from smoke emission.

It was only possible to hold one course of lectures on Boiler Efficiency and Smoke Abatement at the Technical College, during the year, owing to the fact that the total number of students enrolled was only nine. The lectures were given, as in previous years, by Mr. E. Dickenson, M.I.M.E. An examination, consisting of written and oral tests, together with a practical test in a boiler house, was held on the completion of the course, and 4 students received Certificates of efficiency which were also endorsed on behalf of the West Riding Regional Smoke Abatement Committee.

MILK SUPPLY.

Registration of Cowkeepers, etc.

Cowkeepers and Milk Purveyors Resident in the City	19
Milk Purveyors Resident in the City	162
Milk Purveyors from Districts outside the City	35

2 Cowkeepers were added to the Register during 1932.

2 Cowkeepers discontinued business during 1932.

64 Milk Purveyors were added to the Register during 1932.

25 Milk Purveyors discontinued business during 1932.

The following defects were remedied at Dairies and Cowsheds during 1932 :—

Dairies.

Defects.	Found.	Remedied.
Cleansing	10	10
Dairy Re-constructed	3	3
No Name on Churn	2	2
No Cover to Receptacle	1	1
Churns Cleansed	1	1

Cowsheds.

Defects.	Found.	Remedied.
Cleansing	8	8
Dirty Milking Stool	3	3
Animals Requiring Cleansing	1	1
Accumulation of Manure	1	1

Bacteriological Examination of Milk.

During 1932, 30 samples of Milk were taken in the City, and were bacteriologically examined at the County Hall Laboratory.

The following Table gives a summary of the results of the examinations as regards bacterial content:—

Total Bacteria in I c.c.	Number of Samples.
Under 5,000	4
5,000 and under 10,000	—
10,000 and under 50,000	11
50,000 and under 100,000	6
100,000 and under 500,000	7
500,000 and under 1,000,000	2

The samples taken included 20 from sources of production outside the City, and 10 from cowsheds situate inside the City Area.

All the samples of Milk were examined by animal inoculation for tuberculous infection, and 1 sample or 3·33 per cent. gave a positive result, as compared with nil in 1931, 14·28 per cent. in 1930, 14·28 per cent. in 1929, nil in 1928, 19 per cent. in 1927, and 10·5 per cent. in 1926. The infected Milk had been produced at a Cowshed situate outside the City Boundary.

Sediment in Milk

Parts per 100,000	Total Samples	Produced in City	Produced Outside
0—1	48	15	33
1—2	9	2	7
2—3	1	—	1
Total ..	58	17	41

The above figures show that 83 per cent. of the samples contained less than 1 part per 100,000 and 98 per cent. contained less than 2 parts per 100,000.

The results of the examinations again reveal that the production of a clean milk supply still continues to be maintained by the various dairymen and cowkeepers producing and distributing milk, both inside and outside the City Boundary.

Quality of Milk.

99 samples of New Milk were examined by the City Analyst for quality, and 5 (5.05 per cent.) were reported as adulterated, or not up to standard, as compared with 6.4 per cent., for that of England and Wales for 1931.

Composition of Milk Samples taken during 1932.

Month.	Number of Samples.	Average Fat.	Average Non-Fatty Solids
January	7	3.64	8.91
February	7	3.92	9.11
March	6	3.63	9.04
April	11	3.92	8.94
May	9	3.65	9.05
June	6	3.51	8.94
July	6	3.59	8.96
August	8	3.66	8.95
September	4	3.72	9.06
October	9	3.79	9.03
November	6	3.70	8.98
December	13	3.78	9.05
Total	94	3.71	9.00

The Milk (Special Designations) Order, 1923.

Number of Licences in Operation during 1932—9.

1 Licence is to retail Certified Milk.

5 Licences are to retail Grade " A " Milk.

2 Licences are to retail Pasteurised Milk.

1 Licence is to Pasteurise Milk.

All the milk sold under the Milk (Special Designations) Order is produced outside the City.

One new licence has been granted during the year to Pasteurise and Bottle Milk at premises situate inside the City.

Grade " A " (Tuberculin Tested) Milk is supplied to both Municipal Hospitals in the City.

The Cowsheds and Dairies situate in the City have continued to receive careful supervision during the year, and a steady improvement in regard to the methods of production and distribution has to be recorded. This is amplified by the records set out in the tables of samples obtained both for bacteriological examination and chemical sediment test.

The number of milch cows in the City shows a slight increase on the previous year.

The usual census of the quantity of milk sold in the City, was taken during the year, and shows that the average daily amount consumed per head of the population is 0.35 parts of a pint, and this figure is the same as in the previous year.

It is to be recorded that a new venture in the milk supply of the City was inaugurated by the installation of a pasteurisation plant in connection with one of the Industrial Co-operative Societies. The plant came into operation during the latter part of the year.

The distribution of milk in bottles is still on the upward grade, and it is disappointing to find that no dairy premises with the exception of two are equipped with proper means for sterilization.

Attention was drawn to this matter in the Annual Report for 1930, and I should like again to reiterate that the question of improved methods of cleansing receptacles for conveying milk, will in the near future, have to be seriously considered, especially in the case of milk sold in sealed bottles.

I should also like to draw attention to the need for special care being exercised by dairymen in the covering of vessels

used for the storage etc., of milk, which is frequently found to be subject to criticism. The old method of storing milk in ventilated vessels unprotected from the atmosphere still prevails, and in consequence, an unnecessary amount of sediment gains access to the milk after milking.

In order to bring to the notice of dairymen, the need for improvement in this direction, special tests have been made by means of a sediment tester, whilst obtaining samples of milk during transit. By carrying out this procedure, we have been able to bring to the notice of dairymen, in a practical manner, the fact that milk is subject to receiving a certain amount of deleterious matter, if the receptacle used in conveyance to the consumer is not efficiently protected.

The need for carrying out proper methods of cleansing of vehicles used in the distribution of milk is also receiving attention, and it is pleasing to note that milk floats and other such vehicles are being brought up to a more modern and hygienic standard.

ANALYSIS OF FOOD AND DRUGS.

(a) Samples Taken.

Nature of Article.	Total.	Number of Samples taken for Analysis.		Number found Adulterated.		Percentage Adulterated.	
		Informal.	Formal.	Informal.	Formal.	Informal.	Formal.
New Milk (Quality) ..	94	—	94	—	4	—	4.25
New Milk (Cleanliness) ..	58	—	58	—	—	—	—
Grade "A" T.T. Milk ..	1	—	1	—	—	—	—
Grade "A" Milk ..	1	—	1	—	1	—	100.00
Pasteurised Milk ..	1	—	1	—	—	—	—
Sterilized Milk ..	1	—	1	—	—	—	—
Dried Milk ..	3	3	—	—	—	—	—
Condensed Milk ..	1	1	—	—	—	—	—
Ammoniated Tincture of Quinine	1	1	—	—	—	—	—
Butter ..	5	5	—	—	—	—	—
Baking Powder ..	2	2	—	—	—	—	—
Bi-Carbonate of Soda	1	1	—	—	—	—	—
Beef Suet ..	1	1	—	—	—	—	—
Cream Ice ..	2	2	—	—	—	—	—
Cream ..	6	6	—	—	—	—	—
Cream, Tinned ..	2	2	—	1	—	50.00	—

Nature of Article.	Total.	Number of Samples taken for Analysis.		Number found Adulterated.		Percentage Adulterated.	
		Informal.	Formal.	Informal.	Formal.	Informal.	Formal.
Cream of Tartar ..	1	1	—	—	—	—	—
Corn Flour ..	1	1	—	—	—	—	—
Coffee ..	1	1	—	—	—	—	—
Cod Liver Oil ..	1	1	—	—	—	—	—
Cod Liver Oil and Malt, Extract of ..	1	1	—	—	—	—	—
Cake Powder ..	2	2	—	—	—	—	—
Custard Powder ..	2	2	—	—	—	—	—
Castor Oil ..	1	1	—	—	—	—	—
Camphorated Oil ..	1	1	—	—	—	—	—
Candied Peel ..	1	1	—	—	—	—	—
Cheese ..	1	1	—	—	—	—	—
Dripping, Beef ..	1	1	—	—	—	—	—
Epsom Salts ..	1	1	—	—	—	—	—
Fish Paste ..	1	1	—	—	—	—	—
Glycerine and Borax ..	1	1	—	—	—	—	—
Ground Ginger ..	1	1	—	—	—	—	—
Jam ..	3	3	—	—	—	—	—
Lemonade Powder ..	2	2	—	—	—	—	—
Liquorice Powder ..	1	1	—	—	—	—	—
Lemon Curd ..	1	1	—	—	—	—	—
Mixed Dried Fruit ..	1	1	—	—	—	—	—
Mince Meat ..	1	1	—	—	—	—	—
Mustard ..	1	1	—	—	—	—	—
Milk of Sulphur ..	1	1	—	—	—	—	—
Margarine ..	1	1	—	—	—	—	—
Oatmeal ..	1	1	—	—	—	—	—
Olive Oil ..	1	1	—	—	—	—	—
Pepper, White ..	1	1	—	—	—	—	—
Potted Meat ..	1	1	—	—	—	—	—
Paregoric ..	1	1	—	—	—	—	—
Raisin Wine ..	2	1	1	—	—	—	—
Sausage, Pork ..	4	4	—	—	—	—	—
Sausage, Beef ..	4	4	—	—	—	—	—
Sauce.. ..	1	1	—	—	—	—	—
Sponge Cakes ..	3	3	—	—	—	—	—
Salmon Cream ..	1	1	—	—	—	—	—
Self Raising Flour ..	1	1	—	—	—	—	—
Sweet Spirits of Nitre ..	2	2	—	—	—	—	—
Sultanas ..	1	1	—	—	—	—	—
Tea ..	3	3	—	—	—	—	—
Tincture of Iodine ..	1	1	—	—	—	—	—
Vinegar ..	1	1	—	—	—	—	—
Totals ..	240	82	158	1	5	1.22	3.16

(b) Particulars of Adulterated Samples.

No.	Article.	Defects.	Action taken.
22	New Milk ..	0·16 per cent. deficiency Milk Fat ..	Follow up Sample No. 28 taken and found to be genuine.
47	Cream ..	Deficiency in Fat	Town Clerk wrote Vendor for explanation. Satisfactory explanation received.
76	New Milk ..	0·14 per cent. deficiency Milk Fat ..	Follow Up Sample No. 126 taken and found to be genuine.
141	New Milk ..	Found to contain 6·1 per cent. added water.	Vendor prosecuted. Fined £2 10s. 0d. Costs £1 10s. 0d.
178	Grade "A" Milk.	0·04 per cent. deficiency Milk Fat ..	Follow Up Sample No. 42 taken and found to be genuine.
179	New Milk ..	Deficiency in Non-Fatty Solids equal in addition to ·47 per cent. added water.	Follow Up Sample No. 19 taken and found to be genuine.

SLAUGHTERHOUSES.

The following Table shows particulars of all private slaughterhouses in the City at the end of 1932 :—

	Number of Slaughterhouses.
Registered	8
Licensed	14
Total ..	22

During the year, one licensed slaughterhouse was discontinued.

The above figures do not include the Public Slaughterhouse owned by the Corporation.

The Slaughterhouses have been kept under careful observation throughout the year, and it has not been necessary to draw attention to any contravention of the Byelaws regarding same.

The provisions of the Public Health (Meat) Regulations, 1924, have continued to receive special attention, and it was necessary to require the following infringements to be remedied :—

Meat Marking	..	..	..	3
Cover to Stall	..	..	..	1

Number of Animals Slaughtered in the City during 1932.

	Beasts.	Calves.	Pigs.	Sheep.	Total.
Public Slaughterhouse ..	2651	231	3053	8016	13,951
Private Slaughterhouses ..	1717	182	4050	3421	9,370
Total for Year ..	4368	413	7103	11,437	23,321

The total number of animals slaughtered during the year showed an increase, mainly consisting of calves and sheep, whereas beasts and pigs showed a decline.

Condemnations of Unsound Food.

1,397 Meat	..	..	..	Weighing 8,994 $\frac{3}{4}$ Stones.
60 Rabbits	..	..	..
3 Fish	..	..	..	14 "
1 Fruit	..	..	..	11 $\frac{1}{4}$ Pounds
8 Tinned Goods	..	..	..	163 Tins.
1 Poultry	..	..	..
2 Vegetables	..	..	..	Weighing 112 Stones.

Where Condemnations Made.

11 Cold Stores	2 Butchers' Shops.
6 Borough Market	2 Vehicles.
10 Shops	1,003 Borough Slaughterhouse
6 Warehouses	376 Private Slaughterhouses

In 7 instances, it was necessary to seize the food by Statutory procedure, and to obtain a Magistrate's Order for the condemnation and destruction of same.

**Number of Carcases Condemned.
Condemnations due to Tuberculosis.**

Animals	Whole Carcases.		Part Carcases.	
	Boro. Slaughter-house.	Private Slaughter-house.	Boro. Slaughter-house.	Private Slaughter-house.
Cows	78*	4	8	4
Heifers	5	—	1	—
Bullocks	1	—	—	1
Calves	3	1	—	—
Pigs	14	9	—	1
Total	101	14	9	6

* Including one animal slaughtered under the Tuberculosis Order, 1925, from premises situate within the City.

Condemnations due to other Defined Disease.

Animals.	Whole Carcases.		Part Carcases.	
	Boro. Slaughter-House.	Private Slaughter-house.	Boro. Slaughter-house.	Private Slaughter-house.
Cows	7	—	3	—
Heifers	1	—	—	—
Sheep	12	2	—	—
Pigs	11	3	2	—
Calves	5	—	—	—
Total	36	5	5	—

Condemnations of Offals.

Animals.	Tuberculosis.				Other Conditions.			
	Boro. Sl. House.		Priv. Sl. House.		Boro. Sl. House.		Priv. Sl. House	
	Condem- nation.	Weight Sts.	Condem- nation.	Weight Sts.	Condem- nation.	Weight Sts.	Condem- nation.	Weight Sts.
Bovines ..	272	447	126	215 $\frac{1}{4}$	178	191 $\frac{3}{4}$	57	71 $\frac{1}{4}$
Sheep ..	—	—	—	—	38	34	11	3
Calves ..	—	—	—	—	—	—	—	—
Pigs ..	152	161 $\frac{1}{4}$	125	132 $\frac{1}{4}$	34	13 $\frac{3}{4}$	32	29
Totals ..	424	608 $\frac{1}{4}$	251	347 $\frac{1}{2}$	250	239 $\frac{1}{2}$	100	103 $\frac{1}{4}$

	1931	1932
Percentage of Condemnations due to Tubercular Disease	66.29	70.36
Percentage of Bovines affected with Tubercular Disease	13.80	13.53
Percentage of Pigs affected with Tubercular Disease	6.70	1.71
Percentage of all Animals slaughtered in the City affected with Disease ..	7.20	5.90
Percentage of all Animals slaughtered in Private Slaughterhouses affected with Disease	5.50	4.01
Percentage of all Animals slaughtered in Borough Slaughterhouse affected with Disease	10.6	7.1

The Public Slaughterhouse has continued to be utilized during the year for the slaughter of animals under the Tuberculosis Order, 1925, from districts situate in the administrative West Riding County Area. A total of 81 whole carcasses and parts of 2 carcasses were found to be unfit for human consumption, and the weight of the meat condemned was 409 cwts.

The condemnations made in respect of animals slaughtered under the Tuberculosis Order, 1925, brought to the Public Slaughterhouse from districts situate outside the City Boundary are not included in the above tables.

All the meat condemned at the Borough and Private Slaughterhouses is disposed of by incineration at the Corporation Depot.

The inspection and supervision of food supplies has taken up a large amount of time during the year, and it is found that there is a greater tendency for the food stuffs to be prepared and purveyed in a more hygienic manner.

During the year, special attention has been directed to the material used for wrapping articles for conveyance in connection with the distribution of food. In some instances, it has been necessary to direct attention to the unsatisfactory composition of the wrapping material, and as a result of representations, improvements have been effected.

I should like to draw attention to the increase in the number of domestic bakehouses in use in the City. This type of bakehouse is connected with the ordinary dwelling house, and it is a common practice for the occupiers to use the living room for the preparation and distribution of food stuffs. This particularly applies to bread and confectionery.

At the present time, many unsatisfactory premises are being used and until additional legal power is given to the Local Authorities, this unsatisfactory feature in connection with our food supplies will still remain. A certain number of this type of bakehouse have been voluntarily discontinued during the year, acting on the advice of the District Sanitary Inspectors.

RAG FLOCK ACTS, 1911 and 1928.

During the year, 3 samples of Rag Flocks were obtained and submitted for analysis under the Rag Flock Acts.

The Analyst reported that two of the samples were satisfactory, and one was unsatisfactory.

The unsatisfactory sample contained Chlorine in excess of the standard allowed by the Act, but on making investigations into the matter, it was ascertained that the material supplied was not subject to the provisions of the Act, and no further action was taken in regard to same.

The manufacture of Rag Flocks is not carried on within the City, and the samples were obtained at premises where the material had been used in the process of the businesses of upholstery, etc.

OFFENSIVE TRADES.

Offensive Trades on the Register at end of 1932.

Trade.	Number.
Tripe Boiling	5
Tallow Melting	1
Gut Scraping	2
Rag and Bone Dealing	4
Fish Fryer	67
Total	79
Offensive Trades taken off Register during 1932	
	4
Offensive Trades put on Register during 1932	
	6

Defects.	Found.	Remedied.
Cleansing	20	20
Accumulations	5	5
Cleaning Room Improved (Fish Fryer)	1	1
Water Closet	1	1
Structural	1	1

The Offensive Trade premises have been regularly supervised during the year, and the various businesses have been conducted in a satisfactory manner. In several of the Fish Frying Premises, modern appliances have been installed, and this has been the means of carrying on the business in a more hygienic manner.

ANNUAL REPORT on the Administration of the Factory and Workshops Act, 1901, in connection with :—

FACTORIES, WORKSHOPS AND WORKPLACES.**1.—Inspection of Factories, Workshops and Workplaces.**

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises. 1	Number of		
	Inspections. 2	Written Notices. 3	Occupiers Prosecuted. 4
Factories (including Factory Laundries) ..	9	5	—
Workshops (including Workshop Laundries) ..	267	14	—
Workplaces (other than Outworkers Premises) ..	15	—	—
Total ..	291	19	—

2.—Defects found in Factories, Workshops and Workplaces.

Particulars. 1	Number of Defects.			Number of Offences in respect to which Prosecutions were instituted. 5
	Found. 2	Remedied. 3	Referred to H.M. Inspector. 4	
Nuisances under the Public Health Acts :—				
Want of Cleanliness	30	30	—	—
Drains Repaired	3	3	—	—
Want of Ventilation	2	2	—	—
Walls	2	2	—	—
Overcrowding	—	—	—	—
Floors	4	4	—	—
Other Nuisances	4	4	—	—
Sanitary Accommodation. { Insufficient	8	8	—	—
{ Unsuitable or Defective	8	8	—	—
{ Not separate for Sexes	3	3	—	—
	64	64	—	—

OUTWORK IN UNWHOLESOME PREMISES.

SECTION 108.

Nil.

REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at the end of the Year.	Number.
Bakehouses (Factory)	10
Bakehouses (Workshops)	43
Dressmaking	8
Saddlery	2
Boot Repairing	12
Millinery	2
Upholstery	6

Workshops on the Register (S. 131) at the end of the Year.	Number.
Tailoring	7
Joinery	9
Other Workshops	51
Total ..	150

During the year, 7 Notices were received from H.M. Inspector of Factories regarding the following :—

Defects.	Found.	Remedied.
Insufficient Closet Accommodation	3	3
Insufficient Ventilation	2	2
Insufficient Lighting	1	1
Water Closet	1	1
Urinal	1	1

HOUSING.

(a) Statistics.

Number of New Houses erected during 1932.

Size of House according to number of Habitable Rooms.	Total.	Built by Corporation.	Built by Private Enterprise
3 roomed	10	10	—
4 „	322	319	3
5 „	25	14	11
6 „	73	—	73
7 roomed and over ..	9	—	9
Total ..	439	343	96

The number of New Houses erected in each of the Wards is as follows :—

Alverthorpe	85	Eastmoor	193
North Westgate	81	Northgate	4
(Municipal)			
South Westgate	4	Primrose Hill	1
St. John's	2	Calder	4
Belle Vue	59	Sandal	6

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) ..	644
(b) Number of Inspections made for the purpose	1,559
(2) (a) Number of Dwelling Houses included in Sub-Head (1) above, which were inspected and recorded under the Housing Consolidated Regulations, 1925	374
(b) Number of Inspections made for the purpose	1,214
(3) Number of Dwelling Houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ..	44
(4) Number of Dwelling Houses (exclusive of those referred to under the proceeding sub-head) found not to be in all respects reasonably fit for human habitation ..	329

2.—Remedy of Defects during the Year without Service of Formal Notice.

Number of Defective Dwelling Houses rendered fit in consequence of informal action by the Local Authority or their Officers	548
---	-----

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	73
(2) Number of Dwelling Houses which were rendered fit after service of Formal Notices.	
(a) By Owners	104
(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	23
--	----

(2) Number of Dwelling Houses in which defects were remedied after service of Formal Notices	
(a) By Owners	22
(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 ..	7
(2) Number of Dwelling Houses demolished in pursuance of Demolition Orders	3

(In addition to the above, 10 Houses were represented as unfit for human habitation, and undertakings were entered into between the Council and the Owners of the respective Properties, under Section 19 (2) that the dwelling houses should not be used for human habitation).

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	—
(2) Number of Separate Tenements or Underground Rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	—

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

(1) Number of Dwelling Houses in respect of which Notices became operative requiring repairs	14
(2) Number of Dwelling Houses which were rendered fit after service of Formal Notices.	
(a) By Owners	14
(b) By Local Authority in default of Owners	—
(3) Number of Dwelling Houses in respect of which Closing Orders became operative in pursuance of declarations by Owners of intention to close	—

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

(1) Number of Dwelling Houses in respect of which Closing Orders became operative ..	—
(2) Number of Dwelling Houses in respect of which Closing Orders were determined, the Dwelling Houses having been rendered fit	—
(3) Number of Dwelling Houses in respect of which Demolition Orders became operative	25
(4) Number of Dwelling Houses Demolished in pursuance of Demolition Orders	25

Housing.

The inspection of dwelling houses has taken up a large amount of the Sanitary Inspectors' time during the year.

In addition to the 374 houses inspected under the Housing Consolidated Regulations, 1925, a further 88 unfit houses were inspected for the purpose of being dealt with by Demolition or Clearance.

The 374 houses referred to were mainly comprised of that type of property which was capable of being made fit at a reasonable expense. Included in these houses, however, were 44, which were totally unfit for human habitation, and have been subjected to action by Demolition Orders.

During the year, 28 houses were demolished, 3 in connection with Demolition Orders made under the Housing Act, 1930, and 25 outstanding, which had been dealt with under the Housing Act, 1925, and the demolition of same had been upheld on account of the lack of re-housing accommodation.

As briefly stated in the Annual Report for 1931, 89 houses were represented under Section 51 (2) of the Housing Act, 1930, the properties concerned being situate in the New Street Area, and were dealt with by 6 Areas, 5 being subject to Compulsory Purchase Orders and 1 by Clearance Order.

The City Council, on the 6th February, 1932, made Orders in respect of each of the Areas referred to, and consisted of :—

Compulsory Purchase Order No. 1 ..	67	Houses.
" " " No. 2 ..	3	"
" " " No. 3 ..	4	"
" " " No. 4 ..	8	"
" " " No. 5 ..	4	"
Clearance Order No. 1	3	"

In order to provide re-housing accommodation for the displaced tenants in these areas, 88 houses were erected on the Darnley Estate.

The transference of the tenants has been under the direct control of the Health Department, and at the end of the year, 58 families had been re-housed on the new estate.

At the time of writing, all the families have been displaced from the New Street Area, giving a total of 70 families, with a population of 338 persons, 252 adults (over 10) and 86 children (under 10).

In addition 17 families have been re-housed from dwelling houses subjected to Demolition Orders.

During the whole of the time the houses have been occupied on the Darnley Estate, a regular inspection has been carried out with a view to the houses being maintained in a reasonable standard of cleanliness.

It is found that the majority of the families undoubtedly have responded to the improved facilities provided in the re-housing accommodation, this being borne out by the high standard of cleanliness exercised at the houses.

At the same time, it has however, been necessary to give special attention to a number of families in regard to matters of hygiene and the exercising of reasonable care of the premises. It is only by constant supervision in such cases, that it is possible to effect any improvement, and it is found that the families referred to, require re-educating on the question of hygiene, if we are to prevent them relapsing into their former mode of living.

Verminous Houses.

The Health Department has been actively engaged with the prevalence of vermin in dwelling houses during the year, and it has been necessary to take action in a large number of cases with a view to the premises becoming disinfested.

It should be explained that in dealing with infested houses, particularly those infested with bugs, the difficulties encountered make the work of disinfestation a long and tedious process, and the greatest care is necessary in order to secure satisfactory results.

In some instances, the houses affected, were infested with vermin to a serious degree, and in consequence, extensive

periods of fumigation have been put into operation, so as to entirely eradicate the vermin from these houses. Many of the infested houses have been occupied in that condition for considerable periods, and a great deal of time is taken up in carrying out preparatory work for the fumigation to be adequately applied.

It will therefore be seen that many factors have to be considered, and thorough and competent work is essential for success in getting rid of vermin from infested houses.

In order to enable the work to be thoroughly carried out, the Health Committee during the year, decided to adapt 4 houses situate in the New Street Area, to be used in connection with families requiring transitional treatment.

The type of family requiring transitional treatment is so severely infested with vermin, that before being allowed to occupy clean premises, it is essential to take such measures as will ensure the complete extermination of the vermin.

The houses now available are so fitted up as to give adequate facilities for this purpose, and allow for extended periods of fumigation.

This process has been of the utmost value in connection with the transfer of tenants from the New Street Area, and families from other parts of the City, which it has been necessary to re-house.

WILLIAM ROBERTS.

PREVALENCE OF, AND CONTROL OVER INFECTIOUS
DISEASES.

Notification of Infectious Diseases, 1932.

DISEASE.	Number of Cases Notified.											Number of Deaths.																
	At all Ages.	Under 1 yr.	1-2 yrs.	2-3 yrs.	3-4 yrs.	4-5 yrs.	5-10 yrs.	10-15 yrs.	15-20 yrs.	20-35 yrs.	35-45 yrs.	45-65 yrs.	65 & over.	Removed to Hospital.	At all Ages.	Under 1 yr.	1-2 yrs.	2-3 yrs.	3-4 yrs.	4-5 yrs.	5-10 yrs.	10-15 yrs.	15-20 yrs.	20-35 yrs.	35-45 yrs.	45-65 yrs.	65 & over.	
Smallpox																												
Cholera																												
Plague																												
Diphtheria (including Membraneous Croup)	416	1	11	14	10	32	187	93	29	34	3	2		402	29	1	2	1	1	5	15	3	1					
Erysipelas	30						2				2	20	6	13	3											1	2	
Scarlet Fever	385	5	11	17	30	36	168	65	18	28	5	2		269	5	1	2		2									
Typhus Fever																												
Enteric Fever	4								2		2			4	1										1			
Relapsing Fever																												
Continued Fever																												
Puerperal Fever	2													2	2									2				
Puerperal Pyrexia	11							1		7	3			10														
Cerebrospinal Meningitis	17	2	1		2		4	2	1	2	2	1		16	5	1				2			1	1				
Poliomyelitis																												
Ophthalmia Neonatorum	7	7												2														
Primary Pneumonia	71	3	2	2	1	3	5	3	2	16	11	11	12	27	37	10	3	1		1	1		1	4	4	5	7	
Influenzal Pneumonia	12								2		2	6	2	4	8		1					1				5	1	
Dysentery	7									1	2	4		7														
Pulmonary Tuberculosis	54								6	30	7	11			41							5	18	7	9	2		
Non-Pulmonary Tuberculosis	20		2	1	1	2	8	2	2	1		1			9		2	1	1		2	1		2				
Measles	21	6	8	4	1	2									3	1	1				1							
Whooping Cough	79	11	21	14	17	16									4	2	1		1									
Acute Polio-Encephalitis																												
Acute Encephalitis Lethargica															1									1				
Food Poisoning																												
Pemphigus Neonatorum	6	6																										
Totals ..	1142	41	56	52	62	91	374	165	63	121	39	57	21	756	148	16	12	3	5	6	21	4	8	28	13	20	12	

Diphtheria.

416 cases of Diphtheria were notified (178 males and 238 females), giving an attack rate of 6.99, as compared with 2.52 in 1931, and 1.64 the average for the past ten years. In 1932 there were nearly three times as many cases as in 1931, and nearly eight times as many as in 1930.

The cases occurred in the Wards as follows:—

Belle Vue ..	79	North Westgate	46	Alverthorpe ..	16
Eastmoor ..	55	Primrose Hill	37	Calder	15
Kirkgate ..	53	Northgate ..	31	South Westgate	11
Sandal	47	St. John's ..	18		
Clayton Hospital	6	County Hospital	2		

The number of cases notified monthly were as follows:—

January	39	} 1st Quarter	July	48	} 3rd Quarter
February	42		August	25	
March	34		September	23	
		115			96
April	28	} 2nd Quarter	October	31	} 4th Quarter
May	29		November	32	
June	45		December	40	
		102			103

The number of cases in the various age periods was as follows:—

Under 1 year	..	1	10—15 years	..	93
1—2 years	..	11	15—20	..	29
2—3	..	14	20—35	..	34
3—4	..	10	35—45	..	3
4—5	..	32	45—65	..	2
5—10	..	187	65 years and over	..	—

402 cases (96 per cent.) were removed to Hospital (339 to the City Fever Hospital, 43 to Oakwell Hospital, Birstall, 14 to Clifton Hospital, Brighouse, and 6 to Carr Gate Hospital, near Wakefield). 14 cases were isolated at home.

There were 29 deaths (14 males and 15 females) giving a case mortality of 6.95 per cent., and a death rate of 0.51 as compared with 0.43 in 1931, and 0.13 the average for the past ten years. The corresponding rate in England and Wales in 1932 was 0.06, and in the large towns 0.07.

The deaths occurred in the following age groups:—

Under 1 year	..	1	4—5 years	..	5
1—2 years	..	2	5—10	..	15
2—3	..	1	10—15	..	3
3—4	..	1	15—20	..	1

Diphtheria and Home Conditions.

Of the 366 ordinary dwellings affected, 57 had less than one person per room, 260 had between one and two persons per room, and 49 had more than two persons per room. 13 per cent. of the houses were overcrowded according to the standard of the Registrar-General:—

Home	{	Under 14 years of age—563 (Susceptibles—547).
Contacts		Over 14 years of age—1,065 (Susceptibles 1,026).

Amongst the 547 susceptible contacts under 14 years of age, there occurred 7 return cases and 21 secondary cases. Amongst the 1,026 susceptible contacts over 14 years of age, there occurred 4 return cases and 6 secondary cases.

Houses with Secondary Cases	{	Under 1 person per room ..	—
		1—2 persons per room ..	22
		Over 2 persons per room ..	5
Houses with Return Cases	{	Under 1 person per room ..	—
		1—2 persons per room ..	9
		Over 2 persons per room ..	2

Scarlet Fever.

385 cases of Scarlet Fever were notified (175 males and 210 females), giving an attack rate of 6.45 per 1,000, as compared with 4.45 in 1931, and 3.06 the average for the past ten years. There were 122 more cases than in 1931. The cases occurred in the Wards as follows:—

North

Westgate	85	South Westgate	30	Calder	7
Eastmoor ..	64	Northgate ..	23	County Hospital	7
Belle Vue ..	39	Primrose Hill	22	Clayton Hospital	6
Sandal ..	33	St. John's ..	18	Fever Hospital	1
Kirkgate ..	31	Alverthorpe ..	18	Maternity Hospital ..	1

The number of cases notified monthly was as follows:—

January	44	} 1st Quarter	July	32	} 3rd Quarter
February	33		August	24	
March	27		September	26		82
April	31	} 2nd Quarter	October	31	} 4th Quarter
May	38		November	31	
June	42		December	26		88

The number of cases in the various age groups was as follows:—

Under 1 year	5	} Under 5 years—99	5—10 years	..	168
1—2 years ..	11		10—15 ..	..	65
2—3 ..	17		15—20 ..	..	18
3—4 ..	30		20—35 ..	..	28
4—5 ..	36		35—45 ..	..	5
			45—65 ..	..	2

269 cases (70 per cent.) were removed to Hospital (240 to the City Hospital, 20 to Oakwell Hospital, Birstall, 7 to Carr Gate Hospital, and 2 to Clifton Hospital, Brighouse).

There were 5 deaths, giving a case mortality of 1.30 per cent., and a death rate of 0.09 per 1,000 of the population, as

compared with 0.04 in 1931, and 0.03 the average for the past ten years.

The corresponding rate in England and Wales in 1932 was 0.01 and in the Great Towns 0.02.

There were 25 return cases (6.5 per cent.), 20 relating to 19 Hospital cases (6.9 per cent. of discharges) discharged from all Hospitals, and 5 relating to 4 home isolation cases. There were also 33 secondary cases.

Scarlet Fever and Home Conditions.

Of the 296 ordinary dwellings invaded, 55 had less than one person per room, 205 had between one and two persons per room, and 36 had more than two persons per room. 12 per cent. of the houses were overcrowded according to the standard of the Registrar-General, as compared with 17 per cent. in 1931.

Home	{	Under 14 years—442 (Susceptibles—420).
Contacts		Over 14 years—808 (Susceptibles—734).

Amongst the 420 susceptible contacts under 14 years of age, there occurred 19 return cases and 21 secondary cases. Amongst the 734 susceptible contacts over 14 years of age, there occurred 5 return cases and 6 secondary cases.

		<i>Cases.</i>
Houses with Secondary Cases	{ Under 1 person per room	2
	{ 1—2 persons per room ..	20
	{ Over 2 persons per room	5
Houses with Return Cases	{ Under 1 person per room	2
	{ 1—2 persons per room ..	16
	{ Over 2 persons per room	6

In addition to the above, 6 secondary cases and 1 return case occurred in three Children's Homes (in the Regent Street Home, 1 return and 3 secondary cases; in the Quebec Street Home, 1 secondary case; and in the Garden Street Home, 2 secondary cases).

Enteric Fever.

4 cases of Enteric Fever were notified, giving an attack rate of 0.07 per 1,000 of the population, as compared with 0.05 in 1931, and 0.13 the average for the past ten years. 2 cases were patients in the West Riding Mental Hospital, both non-residents, and one of these died. The following are the particulars of the cases:—

No.	Sex.	Age.	Home Address.	Where Isolated.	Bacteriological Report.	Date.	Result.
1	F.	19	Belle Isle Crescent (County Hospital).	County Hospital.	B. Typhosus. B. Paratyphosus A. B. Paratyphosus B.	May ..	Recovered.
2	F.	43	West Riding Mental Hospital.	W.R.M.H. ..	B. Typhosus.	July ..	Do.
3	F.	41	Do.	Do.	B. Typhosus.	Do. ..	Died 1/8/32.
4	F.	19	Teall Street ..	Clifton Hospital, Brighthouse.	B. Paratyphosus B.	August ..	Recovered.

Pneumonia.

83 cases of Pneumonia were notified (71 Primary and 12 Influenzal), 40 in the first quarter of the year, 21 in the second, 4 in the third, and 18 in the fourth quarter. Of the notified cases, 16 died. There were 28 deaths from Pneumonia where the illness had not been notified.

Dysentery.

There were 7 cases of Dysentery notified, all patients in the West Riding Mental Hospital. There were no deaths.

Measles.

21 cases of Measles (all children under five years, and all first cases in the household) were notified, as compared with 366 in 1931, and 73 in 1930. 3 cases were notified in the first quarter of the year, 6 in the second, 7 in the third, and 5 in the fourth. In addition, 2 children under 5 years and 2 over 5 years of age were notified through the schools, and 6 cases were ascertained otherwise. There were 3 deaths from Measles, giving a death rate of 0.05 per 1,000 as compared with 0.12 in 1931, and 0.13 the average for the past ten years. The immediate causes of death were:—Bronchopneumonia 2, Oedema Glottidis 1.

Whooping Cough.

79 cases of Whooping Cough were notified (all children under 5 years of age, and all first cases in the household), as

compared with 32 in 1931. 10 cases were notified in the first quarter of the year, 11 in the second, 22 in the third, and 36 in the fourth quarter. 45 cases (27 over 5 years, and 18 under 5 years of age) were reported from the schools, and 87 (39 over 5 years, and 48 under 5 years of age) were ascertained otherwise. There were four deaths from Whooping Cough (2 under one year of age, 1 aged 1 year, and 1 aged 3 years), giving a death rate of 0·07 per 1,000 of the population, as compared with 0·11 in 1931, and 0·09 the average for the past 10 years. The immediate causes of death were:—Broncho—pneumonia 3, Bronchitis 1.

Pemphigus Neonatorum.

6 cases of this disease were notified during 1932, as compared with 1 in the previous year.

Cerebro-Spinal Fever.

17 cases of Cerebro-Spinal Fever were notified during 1932, but in three cases the diagnosis was afterwards revised. The particulars of the remaining 14 cases are as follows:—

No.	Date notified.	Sex.	Age.	Home Address.	Where treated.	Whether confirmed Bacteriologically.	Result.
1	10/1/32	M.	8	Wentworth Street.	County Hospital.	Yes	Died 14/1/32
2	15/1/32	F.	18	Do. . . .	Do. . . .	Yes	Recovered.
3	22/1/32	F.	13	Duke of York Avenue.	Do. . . .	Yes	Do.
4	5/4/32	M.	5	Waterton Road	Do. . . .	Yes	Do.
5	5/4/32	M.	4/12	Frobisher Grove	Do. . . .	Yes	Do.
6	6/4/32	F.	3	New Brunswick Street.	Do. . . .	Yes	Do.
7	14/4/32	M.	5	Tavora Street . .	Do. . . .	Yes	Died 16/4/32
8	26/4/32	F.	37	Waterton Road	Do. . . .	Yes	Died 1/5/32
9	2/5/32	F.	43	College Grove Road.	Do. . . .	Yes	Recovered.
10	13/6/32	M.	46	Stanley Road . .	Do. . . .	Yes	Do.
11	15/6/32	M.	8/12	Waterton Road	Do. . . .	Yes	Died 26/7/32
12	12/10/32	F.	20	Thornes Lane . .	Do. . . .	Yes	Recovered.
13	25/11/32	M.	10	Dickinson Street	At Home . .	Yes	Do.
14	23/12/32	M.	30	Peterson Road	County Hospital.	Yes	Died 25/12/32

INFECTIOUS DISEASES HOSPITAL.
Statistics, 1932.

Disease.	No. of Cases in Hospital at beginning of year.	No. of Cases admitted.	No. of Cases under treatment.	No. of Cases Discharged	No. of Deaths	Mortality percentage	No. of Cases remaining, end of year.
Scarlet Fever	28	240	268	238	8	3.4	22
Diphtheria ..	22	339	361	302	27	9.3	32
Diphtheria Carriers ..	—	8	8	8	—	—	—
For observation ..	—	3	3	3	—	—	—
Totals ..	50	590	640	551	35	6.5	54

The number of admissions was 243 more than in 1931, and 386 more than in 1930. The largest number of patients in Hospital on one day was 60 (December), and the smallest 38 (August), whilst the average throughout the year was 49. The Hospital has never in its whole history dealt with so many patients before, and was seriously, but unavoidably, overcrowded throughout the year. Our difficulties were increased by the lack of accommodation for cases of mixed infection, of which we had a considerable number. The large influx of patients, and the severity of many of the cases, imposed a great responsibility and strain on the Matron (Miss Peck) and her Staff, and I cannot speak too highly of the devoted and self sacrificing services of every member of the staff, nursing, domestic, ambulance and disinfecting. In order to supplement our own hospital accommodation, we were compelled to seek beds outside, and, thanks to the kindness of the hospital authorities concerned, we were enabled to send patients to the Oakwell Hospital of the Oakwell Joint Hospital Board, the Clifton Hospital of the Brighouse Joint Hospital Board, and the Carr Gate Hospital of the Wakefield Rural and Ardsley and Stanley Urban District Councils' Joint Hospital Committee.

The following particulars relate to patients treated in our own Hospital.

Scarlet Fever.

The maximum daily number of patients was 36 (July), the minimum 14 (April and May), and the average 22. The maximum period of stay (excluding fatal cases) was 88 days, the minimum 17 days, and the average 34 days. 17 patients were admitted on the first day of the disease, 105 on the 2nd, 62 on the 3rd, 24 on the 4th, 11 on the 5th, 3 on the 6th, 4 on the 7th, 1 on the 9th, 3 on the 10th, 1 on the 12th, 1 on the 14th, 2 on the 16th, 1 on the 18th, 1 on the 19th, 1 on the 25th, and 1 on the 29th day of disease. In 8 cases the diagnosis was revised. Complications occurred as follows:—

	On Admission.	After Admission.
Rhinitis	23 (10%)	30 (13%)
Otorrhoea	1 (0.4%)	18 (8%)
Cervical Adenitis	20 (8%)	38 (16%)
Rheumatism.. .. .	2 (0.8%)	12 (5%)
Tonsillitis	12 (5%)	—
Diphtheria	6 (2.5%)	8 (3%)
Nephritis	—	11 (5%)

One patient developed Chickenpox three days after admission, and 12 other patients contracted it. There were 8 deaths, but only 6 of these were directly due to Scarlet Fever, and all these were septic cases. The other two fatal cases had been admitted, one from the Clayton Hospital and the other from the County Hospital; one died from Empyema, and the other from Acute Pemphigus. The unusually high mortality and the high incidence of complications indicate that the type of Scarlet Fever was more severe than we have experienced for some years past.

Diphtheria.

The maximum daily number of cases was 36 (February and December), the minimum 18 (January), and the average 26. Excluding fatal cases, the maximum period of stay was 103 days, the minimum 18 days, and the average 33 days.

2 cases were admitted on the 1st day of disease, 68 on the 2nd, 104 on the 3rd, 59 on the 4th, 36 on the 5th, 17 on the 6th, 4 on the 7th, 5 on the 8th, 2 on the 9th, 1 on the 10th, and 1 on the 13th day of disease.

In 40 cases, the diagnosis of Diphtheria was revised, and the figures which follow refer only to confirmed cases. Complications occurred as follows:—

	On Admission.	After Admission.
Rhinitis	48 (17%)	—
Cervical Adenitis	94 (32%)	6 (2%)
Albuminuria	38 (13%)	6 (2%)
Paralysis	2 (0.7%)	54 (19%)
Tonsillitis	—	8 (3%)
Scarlet Fever	—	13 (4%)

The type of disease continued to be severe, as is shown by the above table. Altogether, 5,834,000 units of antitoxin were administered, with a maximum dose of 60,000 units, and an average of 20,000 units per patient. Protective doses of antitoxin were also administered to all Scarlet Fever cases. In severe cases glucose and insulin were administered, as well as strychnine, hypodermically. The glucose-insulin treatment, combined with the antitoxin, appeared to carry many bad cases over the early toxic stage, but some of these eventually died from late paralysis. There were only three laryngeal cases, and of these, only one required tracheotomy.

There were 27 deaths, including a non-resident, giving a case mortality of 9 per cent. Fourteen died from Toxaemia (including 9 haemorrhagic cases), 7 from Cardiac Paralysis, 5 from General Paralysis, and 1 from Laryngeal and Bronchial Diphtheria (Tracheotomy). Four of the Paralysis cases survived as long as six weeks.

The following Table gives the results (recoveries and deaths) according to the day of illness on which the patients

were admitted, and confirms the well established fact that the earlier the patient is treated the better the chance of recovery.

Relation of Deaths and Recoveries to the Duration of Illness prior to Admission to Hospital.

Day.	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Total
Admitted	2	69	96	62	32	18	4	4	2	289
Recovered	2	68	88	52	27	16	4	4	1	262
Died	—	1	8	10	5	2	—	—	1	27
Mortality (per cent.)	—	1.45	8.3	16.12	15.6	11.1	—	—	50.0	9.3

In addition to the 27 deaths in our own Hospital, there were 2 deaths in the Oakwell Hospital, both from Cardiac Paralysis, and 1 death at home, from Paralysis.

1932.—WAKEFIELD PATIENTS TREATED IN INFECTIOUS DISEASES HOSPITALS
OUTSIDE THE CITY.

	ALL HOSPITALS.				CARR GATE HOSPITAL.			OAKWELL HOSPITAL, BIRSTALL.			CLIFTON HOSPITAL, BRIGHOUSE.			
	Total.	Scarlet Fever.	Diph- theria.	Enteric Fever.	Total.	Scarlet Fever.	Diph- theria.	Total.	Scarlet Fever.	Diph- theria.	Total.	Scarlet Fever.	Diph- theria.	Enteric Fever.
In Hospital on 1st Jan., 1932	9	7	2	—	9	7	2	—	—	—	—	—	—	—
Admitted, 1932	93	29	63	1	13	7	6	63	20	43	17	2	14	1
Total Treated	102	36	65	1	22	14	8	63	20	43	17	2	14	1
Discharged, 1932	99	36	62	1	21	14	7	61	20	41	17	2	14	1
Died, 1932	2	—	2	—	—	—	—	2	—	2	—	—	—	—
Remaining 31st Dec., 1932	1	—	1	—	1	—	1	—	—	—	—	—	—	—

Remarks on Infectious Diseases.

During 1932 we had the unfortunate experience of suffering from two concurrent epidemics, one of Diphtheria and one of Scarlet Fever. This is the first time in my experience that we have had both diseases epidemic at the same time, and I sincerely trust it will be the last. The concurrence of the epidemics not only threw a great strain on administration and on hospital accommodation, but it helped to produce a large number of mixed cases, and we had the unusual experience of getting return cases of Diphtheria after Scarlet Fever, and return cases of Scarlet Fever after Diphtheria. If our new and larger Hospital at Snapethorpe had been available, we could have filled most of the beds during the greater part of the year. The epidemic of Diphtheria which began in 1931 continued, in an aggravated form during 1932, and proved to be, so far as our records show, the most severe visitation of the disease that Wakefield has yet experienced. The disease prevailed, without any marked intermission, throughout the year, and also continued throughout the first quarter of 1933. At the time of writing (April), the prevalence has considerably abated, and the signs point to the epidemic having run its course. Although no district escaped, the disease was most prevalent in Belle Vue Ward, and least prevalent in Calder and South Westgate Wards. The incidence was heaviest between 5 and 10 years of age, and next between 10 and 15 years. 67 per cent. of the cases were children between 5 and 15 years of age, whilst 70 per cent. of the patients were school children, and no doubt the association of children in the schools must have been a factor in the dissemination of the disease, yet this does not appear to have been a very marked one. There was only one instance of what one might designate as a school epidemic, and that was in connection with Sandal Council School during the last quarter of the year, when 32 cases occurred, out of a total of 52 for the year. This school (two departments) was closed from the 28th October to the 7th November, including two days of the mid-term holiday, and during this period the whole school was disinfected. In most of the schools, the cases were spread over the year, with occasional slight rises.

Although we had great difficulties in connection with hospital accommodation, we were able to remove 96 per cent. of the cases to Hospital. 339 cases were removed to our own Hospital in Park Lodge Lane, and 63 cases to outside Hospitals, 43 to Oakwell Hospital, 14 to Clifton Hospital, and 6 to Carr Gate Hospital.

I think the Corporation may take some credit for having done everything possible, involving a very considerable financial outlay, to provide hospital accommodation for over 400 cases of Diphtheria, as well as 300 cases of Scarlet Fever. Diphtheria is a disease which should almost always be treated in hospital, unless the home circumstances are excellent, and trained nurses available.

The type of disease continued to be severe. There were comparatively few mild cases, and two-thirds of the cases might be described as moderately severe, and one-third very severe. The death rate (0.51) was even higher than that of the preceding year (0.43), and was four times higher than the average for the past 10 years. The case mortality (7 per cent.) was, however, much less than that of 1931 (16 per cent.), and indicates that the results of treatment were more satisfactory than in the previous year. For one thing, cases were, on the whole, admitted earlier to hospital. 58 per cent. of the cases were admitted within three days of the onset, as compared with 40 per cent. in 1931. The public had come to realise more fully the seriousness of the epidemic, and medical advice was generally sought much sooner than previously. The doctors helped us very greatly by promptly notifying their cases by telephone, so that the patients were mostly removed to hospital within an hour or two of being seen by the doctor. Also, most doctors acted on the wise principle that a really suspicious case should be removed without waiting for bacteriological confirmation. If the case proved to be non-diphtheritic no harm was done, for the patient was always protected against a fresh infection by the anti-toxin administered on admission. On the other hand, if the case proved to be diphtheritic, the patient had the enormous advantage of early treatment. As a matter of fact, 12 per cent. of the admissions proved to be non-diphtheritic. In my last Report I mentioned that the anti-toxin treatment appeared to have, in some degree, lost its efficacy in severe cases, but the experience of 1932 restored our confidence in this remedy. Although we had a considerable number of deaths, the case mortality was considerably reduced, and we had the satisfaction of pulling through many patients whose condition had been extremely grave. Several of these patients had most extensive paralysis, including cases with respiratory paralysis, which, as a rule, is a fatal complication. All these patients had received large doses of anti-toxin, up to 60,000 units, and I am convinced that, without antitoxin, we should have lost all of them.

With regard to the causation of the epidemic, it is difficult to point to any local conditions which can be regarded as responsible, unless it be that a long period of comparative immunity from the disease has enhanced the susceptibility of the community. It also became clear, as the epidemic went on, that the Diphtheria prevalence was only part of a much wider prevalence of acute throat affections. In investigating family histories and school absentees during the epidemic, one found that among a large number suffering from throat affections, the majority were cases of follicular tonsillitis and other septic conditions, with an occasional case of genuine Diphtheria. The high prevalence of Scarlet Fever, which disease is also one of throat infection, is also suggestive of some unknown condition or conditions operating in the same direction. It may be that we will once more have to resort to the old-fashioned theory of epidemic constitutions, which modern bacteriology had persuaded us to discard.

With regard to Scarlet Fever, the epidemic which commenced in 1931, continued still more extensively during 1932. The attack rate was about 50 per cent. more than that of 1931, and was twice the average for the past ten years. The disease was also of a more severe type than we have experienced for a long time, and the mortality, mostly from septicaemia, was increased. The incidence was greatest between 5 and 10 years of age, and next under 5 years of age. The incidence was highest in North Westgate Ward, and lowest in Calder Ward.

There was an increase of Cerebro-Spinal Meningitis during the year, but it did not amount to an epidemic. The 14 cases were scattered over the year, and except for two families with 2 cases each, there was only one case in a house, and no known association with other cases. There were five deaths, giving a case mortality of 36 per cent. With one exception, all the cases were removed to the County Hospital, and I should like to express our indebtedness to the authorities concerned for providing the accommodation and skilled treatment which we ourselves were unable to supply. The mortality was unusually low for this highly fatal disease, and this was due, I am sure, to the very great trouble taken at the Hospital to give the very specialised treatment now required for this disease.

We had only four cases of Enteric Fever during the year, and two of these occurred in the Mental Hospital. One of the remaining two cases appeared to have been infected when on a visit to a seaside town, and the source of infection of the

other cases was not ascertained. There was only one fatal case.

There was a very low prevalence of Measles during the year, with three deaths, and only a moderate prevalence of Whooping Cough, with four deaths. There was also a reduction in the number of Pneumonia cases notified.

PROPHYLAXIS OF DIPHTHERIA BY ACTIVE IMMUNISATION.

By Dr. F. Allardice.

The Clinic for Active Immunisation against Diphtheria was opened at the Principal Child Welfare Centre, Margaret Street, on 26th February, 1932. One session per week was devoted to this preventive therapy, the treatment consisting of testing for susceptibility and the immunisation of susceptibles being carried out each Friday afternoon, except that, during a short period towards the end of the year, it was necessary to institute a second weekly session, to keep pace with the public demand for protection against the disease.

The total number of persons who attended the Immunisation Clinic during the year was 827, and the number of attendances registered was 2,580. The number of completed treatments was 632, and there were 115 persons in process of immunisation at the end of the year. Of the total number attending, 63 failed to complete the treatment for unknown reasons, and 17 for the following reasons :—

(1) In three cases, Immunisation was not desired, although the Schick re-actions were strongly positive.

(2) In four cases, Immunisation had to be discontinued, because of marked General Re-actions (Temperature, Headache, Pains in Joints, Vomiting, and in two cases accompanied by great swelling and hyperaemia at the site of the inoculation).

(3) Two cases were intractable.

(4) Four cases left the City.

(5) One adult, with a violently positive Schick re-action, refused treatment for domestic reasons.

(6) One case contracted Diphtheria seven days after being Schick tested.

(7) In one instance it was considered inadvisable to treat, because of the presence of multiple tuberculous lesions, and because all the other members of the family (five in all) were Schick-negative.

(8) One child developed Catarrhal Jaundice during the treatment.

The 827 persons who attended the Clinic for Immunisation against Diphtheria were divisible into the following groups, viz. :—

(1) Under 5 years	280
(2) Between 5 and 14 years ..	441
(3) Over 14 years	106
	<hr/>
Total	827

Those cases in which treatment had been either completed or was in process of completion (747 in all) showed the following Age Distribution :—

(1) One year old or under 1 year	37 persons
(2) Between 1 year and 2 years of age ..	65 ..
(3) .. 2 years and 3	54 ..
(4) .. 3 4	41 ..
(5) .. 4 5	43 ..
(6) .. 5 6	48 ..
(7) .. 6 7	48 ..
(8) .. 7 8	57 ..
(9) .. 8 9	43 ..
(10) .. 9 10	44 ..
(11) .. 10 11	41 ..
(12) .. 11 12	45 ..
(13) .. 12 13	54 ..
(14) .. 13 14	28 ..
(15) Over 14 years of age	99 ..
	<hr/>
Totals	747 ..

The test for susceptibility to Diphtheria (the Schick test) was carried out wherever possible, but the vast majority of the children under the age of five years were not so tested, chiefly for two reasons :—

(1) The performance of the Schick test requires that the person being tested should remain still during the operation, if the results are to be reliable.

(2) Children under five years of age, who have been tested during experimental investigation of the reliability of the Schick test have been found, in a very large percentage of instances, to be liable to contract Diphtheria, if brought into contact with it.

Altogether, 552 persons were Schick tested. The test is a painless one, and comprises the introduction of a small amount of the toxin manufactured by the Diphtheria germ, into the layers of the skin (an intra-cutaneous injection). The actual dose of the toxin is so small as to cause no upset of the general health, and the manner of its administration is a further safeguard against any untoward effects. The reliability of the test is necessarily proportionate to the expertness with which it is carried out; a good deal of practice is usually necessary before the person testing may safely discard a strong bias towards a positive result in the interpretation of doubtful re-actions.

The following Table is an analysis of the results of the Schick tests carried out during the year :—

TABLE I.

Age.	No. of Persons Tested.	No. of Positive Reactions.	Percentage of Positive Reactions.	No. of Negative Reactions.	Percentage of Negative Reactions.
2—3 yrs. ..	5	4	80	1	20
3—4 „ ..	2	2	100	Nil	Nil
4—5 „ ..	22	17	77·3	5	22·7
5—6 „ ..	49	38	77·6	11	22·4
6—7 „ ..	50	37	74·0	13	26·0
7—8 „ ..	59	41	69·5	18	30·5
8—9 „ ..	46	30	65·2	16	34·8
9—10 „ ..	47	30	63·8	17	36·2
10—11 „ ..	43	26	60·5	17	39·5
11—12 „ ..	48	25	52·1	23	47·9
12—13 „ ..	54	30	55·6	24	44·4
13—14 „ ..	28	16	57·1	12	42·9
Over 14 years ..	99	40	40·4	59	59·6
Totals ..	552	336	60·9	216	39·1

The foregoing Table shows that the tendency for the Schick re-action to be negative increased with age. The findings

were in keeping with those of experimental investigators and also with modern knowledge of the method by which persons become immune to Diphtheria, namely, by being subjected to repeated subliminal doses of the causative organism; doses which, although insufficient to set up a disease process in the body, are nevertheless capable of stimulating the formation of antitoxin in the body fluids to such an extent as to render the person relatively insusceptible to the disease.

Because of modern knowledge regarding the acquisition of Active Immunity to Diphtheria, it was thought advisable to review the Positive and Negative Re-actors, grouping them according to the size of the family to which each belonged, and these results were obtained:—

TABLE II.

Number of Persons under 14 years of age in the family.	No. of Persons Tested.	No. of Positive Reactions.	Percentage of Positive Reactions.	No. of Negative Reactions.	Percentage of Negative Reactions.
1	74	63	85.7	11	14.3
2	120	86	71.7	34	28.3
3	89	65	73.0	24	27.0
4	48	28	58.3	20	41.7
5	54	30	55.6	24	44.4
6	19	12	63.2	7	36.8
7	6	3	50.0	3	50.0
8	6*	—	—	6	100.0
9	11†	6	54.5	5	45.5
Totals ..	427	293	68.6	134	31.4

* All members of the same family.

† Members of two families only. In one of the two families, the Schick re-actions were all positive, and in the other, all negative.

It will be noted that only 427 of the available 552 persons who were Schick tested could be included in the above table. Unfortunately, the size of the family was not noted in the other 125 cases.

Table II. shows that there was a decrease in the percentage of positive re-actors to the Schick test, as the size of the family increased. While it is necessary to keep in mind that large

families in working class homes tend to produce conditions of relative domestic congestion which, in turn, make the acquisition of immunity to Diphtheria more probable by increasing the number of opportunities for sub-infection with the causative organism, there is also the fact that the testing of large families includes a large percentage of older children. Many of these would, in all likelihood, have become Schick-negative by the time the test was carried out, irrespective of the size of the family to which they belonged.

Amongst the negative re-actors to the Schick test, there were eight who had had Diphtheria at some time previously. But on the other hand, there were several positive re-actors who also gave a history of definite Diphtheria in the past. One negative case—a boy of 10 years and a member of a family, in which all the other members were Schick-positive—had suffered from recurrent sore throat for a few years, but not recently. There were also two interesting negative cases; they were sisters, and at the time when one was in hospital suffering from Diphtheria, the other was also undergoing hospital treatment for Scarlet Fever.

The fact that persons who have had Diphtheria in the past may still be susceptible to the disease, should make it a routine practice for all convalescents from Diphtheria to be Schick-tested. The antitoxin used in the treatment of the actual disease simply provides a passive and temporary immunity; active and relatively permanent immunity depends, for its production, on the stimulation of the antitoxin-producing functions of the body by actual toxin, or at least that fraction of the toxin capable of acting as an antigen. It is possible, indeed probable, that the introduction of ready-made antitoxin, although unquestionably valuable in combating an attack of Diphtheria, may actually hinder the production of active immunity. This is mentioned so that persons who have passed through an attack of the disease should not have a feeling of security—a security which may be entirely false—without first being tested for susceptibility after recovery.

The fact that no case of Diphtheria occurred among persons who had completed the course of Immunisation three months prior to the onset of the disease is a striking testimony to the efficacy of this form of preventive therapy. The only instance of Diphtheria occurred in a child, in whose case only one month had elapsed since the final dose of Toxoid-Antitoxin Mixture. Diphtheria had been very prevalent during the year, and many cases were severe, so it may be assumed that opportunities of

contracting infection were considerable; yet our statistics, carefully checked regarding notifications of Diphtheria, show a complete absence of infection in all who completed the treatment, and where the generally accepted minimum period of three months, required for the full development of active immunity, had elapsed.

Only 118 out of the total of 632 persons completing the Immunisation Treatment, presented themselves to be re-tested by means of the Schick Test for susceptibility to Diphtheria after a period of three months from the time of the last injection. The following Table gives the results of the First Re-test. It was found useful to reverse the order of the arms used for test and control respectively, because the residual staining from a positive Schick Re-action may require a good many months' time for its complete disappearance. The left arm was always used for the primary test and the right arm for the first re-test.

TABLE III.
Re-testing for Susceptibility to Diphtheria, three months after the completion of Immunisation Injections.

Age Groups.	2-3 yrs.	3-4 yrs.	4-5 yrs.	5-6 yrs.	6-7 yrs.	7-8 yrs.	8-9 yrs.	9-10 yrs.	10-11 yrs.	11-12 yrs.	12-13 yrs.	13-14 yrs.	Over 14
Positive Re-actors ..	—	—	1	8	4	6	2	3	1	3	2	—	2
Negative Re-actors ..	2	3	6	6	10	11	9	11	7	7	6	3	5
Totals ..	2	3	7	14	14	17	11	14	8	10	8	3	7

There were 32 positive re-actions among the 118 re-tested, *i.e.*, just over 27 per cent. Most of these re-actions, although definitely positive were only weakly so, which meant that immunity to Diphtheria was being acquired, and that there was the likelihood of relatively complete protection having developed after the lapse of a further period of time. All who showed positive re-actions to the first re-test were given 1.0 c.c. of a Flocculated Toxoid Antitoxin Mixture, as a further safeguard against contracting Diphtheria, this particular variety of injection being used, so as to minimise the possibility of untoward local or general re-actions which sometimes occur

when a considerable period has elapsed since the last introduction of a serum preparation into the body. Six of the positive re-actors belonged to two families (3 persons in each), which seemed to suggest that there may be family as well as individual idiosyncracies in the development of immunity to the disease.

Special mention should be made of one case, that of a boy aged 6 years 11 months at the commencement of treatment. When re-tested three months after the completion of a full course of immunising injections, there was still a markedly positive Schick Re-action. A dose of 1 c.c. of Toxoid Antitoxin Floccules was given, and the Schick Test repeated after the expiry of two months. The result was again violently positive. The same treatment with Toxoid Antitoxin Floccules was repeated, but at the end of a further two months, the Schick Re-action showed practically no diminution of intensity. Another dose of "Floccules" was given and at the end of the year, the case had not been Schick-tested again.

Those persons who were still susceptible to Diphtheria at the end of three months after the completion of the course of Immunisation were invited to have the test carried out again after the further lapse of from two to three months, all of them having meantime had a dose (1.0 c.c.) of Toxoid Antitoxin Mixture. Only a small proportion availed themselves of this opportunity of ascertaining whether they were now immune, but all of those tested, with the exception of the boy noted above, now gave a negative response to the Schick Test.

Observations on Immunisation against Diphtheria.

It is almost unnecessary to say at the outset that the last year has brought Diphtheria more forcibly to our notice as an epidemic disease than did the previous years of a generation. So much has the disease been in evidence all over the country that the Ministry of Health thought fit to issue in November, 1932, a pamphlet urging the more universal adoption of Diphtheria Prophylaxis by Specific Therapy, prefacing their remarks for the guidance of Medical Officers with some of the salient facts about the disease, viz. :—

“ Diphtheria is essentially a disease of children under
 “ the age of fifteen years. About 60,000 cases are notified
 “ annually in England and Wales, and the average annual
 “ number of deaths is approximately 3,000. It is generally
 “ recognised that whenever possible, diphtheria patients
 “ should be removed to hospital, and the average period of
 “ hospital treatment is about six weeks. The interference

“with school life is, therefore, considerable, and the cost of treatment a heavy charge on ratepayers.”

The pamphlet goes on to state that—

“It is, therefore, desirable that attention should be paid to the advantages of diphtheria immunisation and where practicable to offer to the parents or guardians of children of over one year of age the necessary facilities for protection.”

As in most other Preventive Measures, there are limitations to the usefulness of Diphtheria Immunisation, and it may be useful to quote a further paragraph of the Ministry's pamphlet to emphasise the fact that the treatment is entirely prophylactic and plays no part in combating an attack of the disease.

“It should be added, to prevent misconception, that immunisation is not a way of dealing with an individual attack of diphtheria or with the “carrier” condition. Unlike the passive immunity produced by diphtheria antitoxin which is immediate but transient, active immunity requires several weeks or months for its full development, but endures for years and perhaps throughout life.”

In October, 1931, the Health Committee of the League of Nations approved the resolutions of a Conference for considering the Prevention of Diphtheria, held in London in June, 1931. The following extracts from these resolutions clearly indicate that the Health Committee of the League of Nations hold no half-hearted views about the efficacy of diphtheria immunisation :—

“**Resolution 1.**—Immunisation against diphtheria, when carried out under suitable conditions and with efficient prophylactics, effects a large reduction in the diphtheria mortality and morbidity rates among children thus treated. This is proved by studies carried out under strictly comparable conditions, such as those observed during the recent enquiries.”

“**Resolution 2.**—The re-actions sometimes observed after the injection of diphtheria prophylactics give no cause for alarm, and should not interfere with the campaign for the immunisation of children, including tuberculous children, nor should they prevent the choice of the most active prophylactics.”

“ **Resolution 10.**—It is recommended that immunisation against diphtheria should be carried out not later than during the pre-school period, after the end of the first year of life. If the children have not been immunised during the pre-school period, they should be immunised, if possible, during the first year of school attendance.”

“ **Resolution 14.**—In the opinion of the experts, diphtheria immunisation should form the subject of active public education on the part of the health administrations of the different countries in order to bring home to everyone the advantages of this method of protection in safeguarding the public health.”

The method of educating the public in Wakefield with regard to the advantages of having their children immunised against Diphtheria did not comprise any elaborate publicity propaganda. The existing channels for conveying information were made use of, and these fall under three headings:—

(1) The Health Visitors and School Nurses lost no opportunity of keeping the subject of immunisation before the parents when visiting in connection with the supervision of infants or the treatment of defects in school children. Such a method is certainly an unassuming one, but perhaps a day's work by skilled Health Visitors may win more converts to a proposed preventive measure than will a thousand handbills.

(2) The Child Welfare Centres provided fertile soil for the sowing of fruitful suggestions to parents. The atmosphere in the Child Welfare Centres is a homely one, and makes the guidance of parents, who wish to be guided, comparatively easy.

(3) The School Medical Service provided both direct and indirect methods of approach to the parents; direct in that the findings during the medical inspection of the school children themselves paved the way to the discussion of immunisation; indirect in that mothers frequently brought toddlers or infants along with them, making it easy for the Medical Officer to enquire if immunisation was desired for them.

Educative procedures were substantially reinforced in their arguments by the continued prevalence of severe cases of the disease—a compelling factor in hastening decisions in favour of immunisation in many instances.

Consent to have children treated was, so far as was discernible, given freely in the great majority of instances, when the aim of the treatment was thoroughly explained.

There is nothing to be gained by pressing for a decision in favour of immunisation, for if a parent consents very reluctantly, and there should happen to be some general malaise following an injection, the Immunising Clinic will certainly lose a good deal of prestige and a considerable number of prospective candidates for treatment.

The results of Immunisation against Diphtheria are, from the point of view of the community in Wakefield, negligible at present, because so far this preventive therapy is simply nibbling at the young population of the City. But where the treatment has become popular, there is overwhelming evidence that vast populations may be practically completely protected against diphtheria and epidemics of the disease are unknown. Certain of the United States of America are outstanding examples of the efficacy of prophylactic injections; there are many others, in England as well as in other countries, and perhaps not the least striking usefulness of immunisation is in the protection of the medical and nursing staffs of Hospitals for Infectious Diseases.

The need for preventive measures with reference to Diphtheria is probably greater to-day than it was ten or fifteen years ago. The re-housing of the working classes has provided an environment for their children—usually distributed in smaller families than hitherto—comparable in respect of spacing of dwellings and free movement of air in and around the houses, with the type of surroundings which used to be found only in so-called Residential Districts inhabited by the middle and upper classes. The children of these latter showed a very high percentage susceptibility to Diphtheria compared with children from the then existent type of working-class homes in the early days of Schick-testing. The simplest, and I think, most likely explanation was that the probability of acquiring repeated subliminal immunising doses of infection varied in direct ratio with the congestion of the population. It can be inferred, with reasonable certainty, that to-day we have in our Housing Estates, a greater proportion of susceptible children than in the more congested parts of the City. There is, then, increasing urgency for the acquisition and maintenance, by active preventive measures, of a relatively immune young population, for unless the amount of "virgin soil" is kept at a minimum, the ravages of Diphtheria are likely to increase,

rather than diminish. The degree of dilution of susceptibles by immunes in a community goes far in determining the extent and severity of epidemics. There are other factors of great importance in the epidemiology of diphtheria, but I think it has been proved beyond doubt that a knowledge of the percentage of children who are immune to the disease makes it possible to prophesy with considerable accuracy the behaviour of a community during an epidemic period.

In America, for example, one particular State in which diphtheria has practically died out so far as epidemic prevalence is concerned, has 30 per cent. of its school population immunised and 50 per cent. of the pre-school population. Emphasis is laid on the absolute necessity for maintaining a high percentage of immunes among the children under 5 years, this appearing to have a very definite value in keeping the disease at bay. In Wakefield, we have a very long way to go before such a satisfactory state is reached, and the maximum benefits cannot be derived from immunisation, from the Public Health point of view, until everyone realises the tremendous possibilities of effective prevention of diphtheria, from the communal as well as from the individual aspect.

It would be foolish to claim that the conversion of an initial positive Schick Re-action into a negative one by means of prophylactic injections indicated complete insusceptibility to diphtheria. All immunity is probably relative. But even if there is a faint possibility of acquiring the disease after immunisation, that is still no argument against such preventive treatment, for at least two weighty reasons:—

(1) The disease is likely to be mild.

(2) The virulence of the germ capable of causing a moderately severe attack of diphtheria in an "immune" person is almost certainly so extreme that the disease would have progressed to a fatal issue but for the degree of immunity acquired prior to the illness.

With regard to illnesses primarily diagnosed as diphtheria in persons in whom the Schick re-action is negative as the result of active immunisation, it is well to remember that the course of these attacks often warrants revision of the diagnosis. During the year, three cases of diphtheria were notified as occurring in "immune" persons, but only one was finally proved to be diphtheria, and this patient developed the disease 25 days after immunisation had been completed and before immunity had time to develop. Of the other two, one

was an ordinary tonsillitis and one had no illness at all, and was simply a temporary carrier of the germs of diphtheria. It may be stressed here that the retesting for susceptibility to the disease after immunisation is a very important procedure; in the first place because the knowledge that one is Schick-negative gives a sense of personal security, and in the second place, the occurrence of a throat condition in a person known to be Schick-negative will not readily suggest Diphtheria as a diagnosis, unless clinical evidence and not laboratory findings leads unmistakably to such a conclusion. On these grounds, it is urged that the public of Wakefield should make full use of the post-immunisation Schick test, and not leave insusceptibility to be inferred from the completion of the routine course of treatment.

The occasional local or general re-actions following immunising injections should not give rise to any anxiety. There is no doubt that such do occur in a very small minority of cases, but they are always transient and are never serious. Many so-called re-actions are far-fetched, and indeed occasionally ludicrous. During the year, I have been repeatedly told of children who developed a cough next day or who had diarrhoea and sickness sometime or other during the period intervening between two injections and I doubt very much whether I succeeded at all in persuading the parents that any of these slight indispositions were co-incidental or extremely unlikely to be the result of immunisation. Presumably, mankind's eternal search for causes for otherwise unexplained (but frequently far from unexplainable on common-sense investigation by appropriately trained persons) happenings, coupled with a sense of the mystical inevitably accompanying innovations, the rationale of which is imperfectly or not at all understood by the average man in the street, explains why all manner of minor departures from the usual health were attributed to immunisation. Suffice it to say that immunisation against diphtheria is long past the experimental stage, and if the drawbacks to the treatment, in the matter of serious re-actions to the injections, had been worthy of notice, there would not have been such unanimity among the experts, all of whom advocate whole-heartedly the widest possible use of this valuable preventive measure. One authority (Dr. Griswold) goes so far as to say that "parents who allow their children to remain unprotected in communities of this kind (where immunisation is offered) are unfit to be parents, and each death which occurs from diphtheria under these circumstances should be referred to the coroner for investigation." That

is perhaps going to the extreme, but at any rate it conveys to us that Dr. Griswold does not view immunisation as something which will help a little in overcoming diphtheria, but that he considers it an essential in the protection of human life against that disease.

FRANK ALLARDICE.

Disinfection.

During 1932, the following disinfection work was carried out:—

No. of Houses disinfected	897	No. of Pillows disinfected	2005
„ Rooms „	..1460	„ Bolsters „	.. 980
„ Schools „	.. 25	„ Curtains „	.. 761
„ Classrooms „	.. 118	„ Rugs „	.. 512
„ Times Steam Disin-		„ Pairs Boots „	.. 967
„ fector used	..1395	„ Articles of Men's	
„ Beds disinfected	..1388	„ Clothing „	..1365
„ Mattresses „	.. 689	„ Articles of Women's	
„ Blankets „	..2129	„ Clothing „	..2250
„ Sheets „	..2333	„ Articles of Children's	
„ Counterpanes „	..1358	„ Clothing „	..3756
		Miscellaneous	.. 1324

Pathological and Bacteriological Examinations.

During the year, 2,733 specimens from the City were examined at the County Bacteriological Laboratory:—

Swabs for B. Diphtheria	1460	Fluid	} Cerebro- .. 124 } Spinal } Fever .. 4	
„ „ (Virulence)	.. 47	Contact Swabs		
Sputum	263	Milk for Tuberculosis		.. 32
Urine	} Tubercu- } losis .. 162	Milk for Bacterial Content	30	
Pus & Fluids		30	Blood (Wassermann Re-action)	.. .. 317
Blood	} Enteric Fever	For detection of Gonococci	65	
Faeces		9	Miscellaneous	.. .. 146
Urine		3	Total	..2733
Hairs for Ringworm	.. 23		—	

VACCINATION.

The administration of the Vaccination Acts was taken over by the Corporation (under the Local Government Act, 1929), from 1st April, 1930. Mr. W. V. Morris (Chief Clerk in the Public Health Department) is Vaccination Officer for the City.

The following Statistics relate to the years 1931 and 1932 :—

Year 1931.						Year 1932.	
Number of Births.	Successfully Vaccinated.	Vaccination postponed, or certified as insusceptible of Vaccination.	Died Unvaccinated.	Removed to other districts or places unknown, &c.	Number of declarations of "conscientious objection."	Certificates of successful primary Vaccination of Children under 14 received during the year.	Declarations of "conscientious objection" received during the year.
1041	388	19	67	56	511	424	516

Excluding deaths and removals, 42 per cent. of the children were vaccinated.

As the above figures show, nearly 50 per cent. of the parents made statutory declarations of "Conscientious Objection" to Vaccination.

The Public Vaccinators for the City are as under :—

No. 1 District (the whole of Wakefield except the Municipal Wards of Belle Vue, Portobello and Sandal).
Dr. J. B. Lyle,
Grove House,
Kirkgate and
"Broxbourne,"
Barnsley Road.

No. 2 District (the Municipal Wards of Belle Vue, Portobello and Sandal).
Dr. D. Downie,
"Maybush,"
Agbrigg Road,
Belle Vue.

County Poor Law Institution, Park Lodge Lane.
Dr. J. W. Thomson,
"The Grove,"
College Grove,
Road.

TUBERCULOSIS.

Notification.

During 1932, 54 cases of Pulmonary Tuberculosis (32 males and 22 females), and 20 cases of Non-pulmonary Tuberculosis (12 males and 8 females) were notified. In 1931, the corresponding numbers were 56 and 21. Of the 54 Pulmonary cases, 24 died before the end of the year. Of the 20 Non-pulmonary cases, 5 died before the end of the year. The 20 Non-pulmonary cases comprised :—8 of bones and joints, 2 abdominal, 6 Glands, and 4 Cerebral Meninges.

New Cases and Mortality, 1932.

Age Periods.	New Cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0—1	—	—	—	—	—	—	—	—
1—5	—	—	6	—	—	—	3	1
5—10	—	—	5	3	—	—	—	2
10—15	—	—	—	2	—	—	1	—
15—20	2	4	—	2	2	3	—	—
20—25	7	3	—	—	5	3	—	1
25—35	9	11	1	—	3	7	1	—
35—45	5	2	—	—	3	4	—	—
45—55	5	1	—	—	4	2	—	—
55—65	4	1	—	—	2	1	—	—
65 and upwards ..	—	—	—	1	1	1	—	—
Totals ..	32	22	12	8	20	21	5	4

Of the 41 persons who died from Pulmonary Tuberculosis, 10 (24·4 per cent.) had previously received Sanatorium Treatment, and the condition of these on admission to the Sanatorium was as follows :—

Stadium I., Minus T.B.	1*	Stadium II., Plus T.B.	4
Stadium I., Plus T.B.	4	Stadium III., Minus T.B.	—
Stadium II., Minus T.B.	1	Stadium III., Plus T.B.	—

* In 1923.

The following periods intervened between the date of notification and the date of death in the Pulmonary cases :—

Under 1 month	7	12—18 months	1
1—3 months	8	18—24 months	1
3—6 months	8	Over 24 months	8
6—12 months	6	Not notified	2

The above Table shows that 74 per cent. of the notified cases died within a year of notification whilst 4·9 per cent. had not been notified at all.

Pulmonary Tuberculosis.

Cases left on the Register on 31st December, 1932 :—

Year Notified.	Total.	Males.	Females	0-15 years.	15-25 years.	25-45 years.	Over 45 years.
1916 ..	1	—	1	—	—	—	1
1917 ..	1	1	—	—	—	1	—
1918 ..	—	—	—	—	—	—	—
1919 ..	3	2	1	—	—	2	1
1920 ..	1	—	1	—	—	—	1
1921 ..	1	1	—	—	1	—	—
1922 ..	1	1	—	—	—	1	—
1923 ..	—	—	—	—	—	—	—
1924 ..	3	2	1	—	1	2	—
1925 ..	2	1	1	—	1	1	—
1926 ..	3	3	—	1	—	1	1
1927 ..	7	4	3	—	5	1	1
1928 ..	18	10	8	1	10	5	2
1929 ..	11	9	2	2	3	3	3
1930 ..	10	7	3	—	3	3	4
1931 ..	15	9	6	1	2	9	3
1932 ..	24	17	7	—	5	15	4
Totals ..	101	67	34	5	31	44	21

Condition of Cases on 31st December, 1932.

Well and Working ..	31	In Sanatorium	10
Well, not Working ..	18	In County Hospital ..	5
Not Well, Working ..	1	In West Riding Mental	
Not Well, not Working ..	31	Hospital	2
Very Ill, confined to house	2	In City Fever Hospital ..	1

Non-Pulmonary Tuberculosis.

Cases left on the Register on 31st December, 1932 :—

Year Notified.	Total.	Males.	Females	0-15 years.	15-25 years.	25-45 years.	Over 45 years.
1913 ..	1	—	1	—	—	—	1
1914 ..	—	—	—	—	—	—	—
1915 ..	—	—	—	—	—	—	—
1916 ..	—	—	—	—	—	—	—
1917 ..	—	—	—	—	—	—	—
1918 ..	—	—	—	—	—	—	—
1919 ..	—	—	—	—	—	—	—
1920 ..	1	—	1	—	1	—	—
1921 ..	—	—	—	—	—	—	—
1922 ..	1	1	—	1	—	—	—
1923 ..	—	—	—	—	—	—	—
1924 ..	—	—	—	—	—	—	—
1925 ..	3	1	2	2	—	—	1
1926 ..	4	2	2	3	—	1	—
1927 ..	2	1	1	1	1	—	—
1928 ..	1	—	1	1	—	—	—
1929 ..	7	6	1	4	3	—	—
1930 ..	16	7	9	11	—	4	1
1931 ..	11	5	6	9	1	1	—
1932 ..	9	7	2	8	1	—	—
Totals ..	56	30	26	40	7	6	3

Condition of Cases on 31st December, 1932.

Well and Working ..	32	Very Ill, confined to house	1
Well, not Working ..	5	In Kirbymoorside Hospital	7
Not Well, Working ..	3	In Heatherwood Hospital	2
Not Well, not Working ..	6		

TUBERCULOSIS DISPENSARY.

During 1932, 153 persons were referred to the Dispensary for examination, and of these, 47 (31 per cent.) were found to be tuberculous, 40 affected with Pulmonary, and 7 with Non-pulmonary disease, whilst 4 patients remained undiagnosed at the end of the year.

In addition, 115 contacts were examined, and of these, one was found to be suffering from Non-pulmonary disease,

and one remained undiagnosed at the end of the year, the remainder being non-tuberculous.

The following Table shows that of the 40 Pulmonary cases, 12 (30 per cent.) were in the early stage (Stadium I.), 11 (27·5 per cent.) were in the moderately advanced stage (Stadium II.), and 17 (42·5 per cent.) were in the more advanced stage (Stadium III.) :—

	Stadium I.		Stadium II.		Stadium III.	
	T.B. Minus.	T.B. Plus.	T.B. Minus.	T.B. Plus.	T.B. Minus.	T.B. Plus.
Males	2	6	2	7	5	2
Females	2	2	1	1	3	7
Total	4	8	3	8	8	9

The 8 Non-pulmonary cases comprised disease of :—
Bones and Joints 4, Abdominal 2, Peripheral Glands 2.

Of the 153 cases who attended the Dispensary, 99 were sent by general medical practitioners, 29 by School Medical Officers, 7 by Maternity and Child Welfare Medical Officers, 3 by Police Surgeon, 6 by Health Visitors, 4 attended voluntarily, and 5 were transfers from other dispensaries.

Cases of Tuberculosis on the Dispensary Register at the end of 1932.

<i>Pulmonary Cases.</i>			<i>Non-pulmonary Cases.</i>		
Adults	{ Males ..	53	Adults	{ Males ..	3
	{ Females ..	31		{ Females ..	9
Children	{ Males ..	10	Children	{ Males ..	21
	{ Females ..	1		{ Females ..	15
Total ..		95	Total ..		48

PULMONARY TUBERCULOSIS.—SANATORIUM TREATMENT.
Westmorland Sanatorium, Meathop, Grange-over-Sands.

PATIENTS.	Total.			INSURED.			NON-INSURED.		
	Total	M.	F.	Total	M.	F.	Total	M.	F.
Remaining end of 1931 ..	10	5	5	8	4	4	2	1	1
Admitted 1932 ..	16	11	5	13	11	2	3	—	3
Total treated 1932 ..	26	16	10	21	15	6	5	1	4
Discharged during 1932..	16	9	7	12	8	4	4	1	3
Died in Sanatorium ..	—	—	—	—	—	—	—	—	—
Remaining end of 1932..	10	7	3	9	7	2	1	—	1

During 1932, 26 patients received Sanatorium treatment, as compared with 34 in the previous year. Of these, 21 (81 per cent.) were insured persons.

Condition on Discharge.

During the year, 16 patients were discharged from the Sanatorium, and of these, one man was sent in as an observation case and discharged as non-tuberculous. The condition of the remaining 15 was as follows :—

Condition on Admission.		Condition on Discharge.		
		Quiescent.	Improved.	Not Improved.
Stadium I.	T.B. -	3	—	—
	T.B. +	2	4	—
Stadium II.	T.B. -	—	—	—
	T.B. +	2	1	3
Stadium III.	T.B. -	—	—	—
	T.B. +	—	—	—
Totals ..		7	5	3

Taking all classes, the immediate result of treatment in the Sanatorium was that 47 per cent. were improved to the extent of apparent quiescence of the disease, 33 per cent. were improved, but not to the same extent, and 20 per cent. were not improved.

Taking the early cases by themselves, 56 per cent. were improved to the extent of apparent quiescence of the disease, and 44 per cent. were improved but not to the same extent.

The periods of stay in the Sanatorium were as follows:—

Up to 3 months	..	—	9—12 months	..	3
3—6 months	..	6	12—15 months	..	1
6—9 months	..	5	15—18 months	..	—

Sanatorium Arrangements.

The Wakefield Corporation continued to use accommodation at the Westmorland Sanatorium, Meathop, near Grange-over-Sands, on the basis of 10 rented beds, with an option on more beds, if required.

NON-PULMONARY TUBERCULOSIS. Institutional Treatment.

	Kirbymoorside Orthopædic Hospital.				Heatherwood Hospital, Ascot.			St. Gerard's Hospital, Coleshill.		
	Total	Total	M.	F.	Total	M.	F.	Total	M.	F.
Remaining end of 1931 ..	9	5	1	4	3	3	—	1	1	—
Admitted during 1932 ..	4	4	3	1	—	—	—	—	—	—
Discharged 1932	4	2	—	2	1	1	—	1	1	—
Died 1932 ..	—	—	—	—	—	—	—	—	—	—
Remaining end of 1932 ..	9	7	4	3	2	2	—	—	—	—

The 4 children discharged were as follows:—

- (1) Male, aged 11 years.—Tuberculosis of Knee. In Institution 54 weeks. Disease quiescent.
- (2) Male, aged 17 years.—Tuberculosis of Knee. In Institution 56 weeks. Disease quiescent.

- (3) Female, aged 10 years.—Tuberculosis of Hip. In Institution 2 years 8 months. Disease quiescent.
- (4) Female, aged 10 years.—Tuberculosis of Elbow. In Institution 51 weeks. Disease not quiescent. Re-admitted later in the year for further treatment.

Care Work for the Tuberculous.

Extra nourishment was granted by the Corporation to five patients during the year, and clothing was provided for several patients by the Social Service Council.

REMARKS ON TUBERCULOSIS.

The administrative work connected with Tuberculosis was carried out on the usual lines. The circumstances of all cases notified are investigated and continuous supervision is maintained by the Health Visitors so long as the cases remain on the Register. This Register is revised annually, and the names of all cases who have recovered according to the rules laid down by the Ministry of Health, who have died, or who have left the City, are removed. Printed and verbal instructions as to precautions against the spread of infection are given, and every effort is made to secure compliance with these instructions. Sputum flasks and disinfectant fluid are supplied free, and disinfection of bedding, etc., is carried out as required. The services of the Tuberculosis Officer are available for purposes of diagnosis and advice regarding suitable lines of treatment, either at the Tuberculosis Dispensary or for consultation in the home. Radiological examinations are made at the Clayton Hospital. Contacts are encouraged to attend at the Dispensary for examination. Sanatorium treatment at the Westmorland Sanatorium is available for suitable pulmonary cases, and hospital treatment is likewise available for children suffering from non-pulmonary disease at the Yorkshire Children's Orthopaedic Hospital at Kirbymoorside and elsewhere, as well as locally at the Clayton and County Hospitals. The 26 Special Houses provided for the families of ex-sanatorium patients have all been occupied during the year, and the results continue satisfactory. The non-pulmonary group of cases can also have advice and treatment at the Orthopaedic and Ultra-Violet Ray Clinics of the Corporation. The only hospital facilities available for advanced cases are at the County Hospital (Poor Law), but provision will be made for these cases at the new Snapethorpe Hospital. Generally speaking, the arrangements may be regarded as satisfactory. The great weakness of the system is the late stage at which so many cases of pulmonary tuberculosis

come to our knowledge. I have discussed this matter fully in previous reports, and need not dwell on it again. I would, however, urge on medical practitioners the importance of taking full advantage of the facilities of the Dispensary for purposes of early diagnosis. It is, of course, a fact that many patients do not consult a doctor until they are more or less advanced, but there are also cases where earlier diagnosis and more hopeful treatment might have been secured through earlier reference to the Dispensary. The practice of some doctors who send every case where there is the slightest suspicion that the case might be tuberculous in nature, or where there is no clear alternative diagnosis, is one which is to be commended.

During the year a special effort was made to secure examination of a larger proportion of contacts. This is a very important branch of the work, and it is hoped that contacts will continue to come in increasing numbers. During the year the three sessions of the Dispensary were reduced to two. This was occasioned by the pressure of other work, *e.g.*, the Immunisation Clinic, and was rendered possible by the fall in the tuberculosis prevalence during recent years.

VENEREAL DISEASES.

Treatment of Venereal Diseases at the Venereal Diseases Clinic, Clayton Hospital, Wakefield, 1932.

(a) Number of Wakefield persons dealt with for the first time and found to be suffering from:—

	Total.	Males.	Females.
Syphilis	32	22	10
Soft Chancre	—	—	—
Gonorrhoea	52	48	4
Not suffering from Venereal Disease ..	41	27	14
Total ..	125	97	28

(b) Total number of attendances at the Out-Patient Clinic:—

	Total.	Males.	Females.
Syphilis	936	611	325
Soft Chancre	—	—	—
Gonorrhoea	633	418	215
Conditions other than Venereal	144	80	64
Total ..	1713	1109	604

(c) Number of attendances of Wakefield patients for irrigation and treatment (not including attendances at Clinic).

	Total.	Males.	Females.
	2956	2420	536

(d) Aggregate number of In-Patient days of Wakefield patients :—

	Total.	Males.	Females.
Syphilis	—	—	—
Gonorrhoea	43	43	—
Total ..	43	43	—

(e) Number of doses of Arsenobenzol Compounds (N.A.B. and Sulpharsenol given to Wakefield patients :—567.

Dr. A. W. Frew, the Medical Officer of the Clayton Hospital Venereal Diseases Clinic, has kindly sent me the following notes on the year's work at the Clinic :—

“ The total number of new Wakefield patients (125) exceeds that of the previous three years, and there was an increase of cases of syphilis, more than double in males and five times in females, over the year 1930. This is partly accounted for by a few more congenital cases, but without doubt there has been a considerable increase of new infections of syphilis in and around the City. This also accounts for an increase in the doses of arseno-benzol compounds given. Latterly syphilitic patients are attending better. They seem to realise with a greater fulness the possible ravages of the disease and the necessity for an absolute cure, the result, surely, of the continuous educational propaganda. Still there are many defaulters, who require continual reminders to carry on with their treatment. During the previous year, 1931, the Clinic was conducted under difficulties owing to the re-construction of the premises, and patients certainly had to put up with slight inconveniences. Now, however, with the excellent accommodation provided, and the prompt attention given, patients should have little grounds for defaulting.”

**LEEDS GENERAL INFIRMARY.—VENEREAL
DISEASES CLINIC.**

During 1932, 6 patients from Wakefield applied for examination, and 2 were found to be suffering from Syphilis. The total attendances were 49, as compared with 55 in 1931. The aggregate of In-patient days was nil, and the number of doses of Arsenobenzol Compounds given to Wakefield patients was 23.

**Pathological Examinations in connection with Venereal Diseases,
1932.**

	Total.	For Detec- tion of Spiro- chaetes.	For Detec- tion of Gonococci.	Wasserman Re-action.	Other exam- inations.
County Hall Laboratory ..	382	—	65	317	—
Clayton Hospital Clinic	321	—	321	—	—
Leeds Infirmary Clinic	10	1	3	6	—
Totals ..	713	1	389	323	—

**VENEREAL DISEASES CLINICS.—STATISTICAL
SUMMARY, 1918—1932.**

Period.	Total new cases seen at all Clinics.	Percent- age of cases found not to be Venereal.	Total cases found to be suffering from :—						Total attendances at all Clinics.		Total Speci- mens examin- ed
			SYPHILIS.			GONORRHOEA.			Ordinary Clinics.	Irrig't'n Clinics.	
			Total	M.	F.	Total	M.	F.			
1918-1922	663	12·5	427	248	179	152	131	21	8,512		2244
1923-1927	759	24·9	248	157	91	316	271	45	12670	14734	2480
1928-1932	651	32·7	139	93	46	294	239	55	9804	16136	3904

The above Table has been prepared to indicate what changes, if any, have occurred in the attendances of Wakefield patients at the Venereal Diseases Clinics during the 15 years these Clinics have been working. During the first period—1918-1922—all the patients attended the Leeds General Infirmary Clinic, but during the second and third periods the figures are the combined attendances at the Leeds Clinic and the Wakefield Clinic at the Clayton Hospital.

The following conclusions may be drawn from the figures :—

1. The total attendances have not varied very much in the three periods.

2. The number found not to be suffering from venereal disease has increased steadily and substantially through the three periods.

3. The number found to be suffering from syphilis has decreased steadily and substantially. Comparing the third period with the first, the total decrease is 67 per cent., while the decrease amongst males is 62 per cent., and amongst females 74 per cent. (these figures refer to 5-yearly periods, while Dr. Frew's remarks refer to 1932 only).

4. The number found to be suffering from gonorrhoea has increased very considerably in the second period, and has only decreased in the third period to a very small extent. Comparing the third period with the first, the total increase is 93 per cent. or nearly twice the number, and while the increase amongst males is 82 per cent., the increase amongst females is as high as 162 per cent.

The question may now be asked—does the considerable decrease in the number of syphilis cases, and the very considerable increase in the number of gonorrhoea cases found at the clinics, represent real changes in the prevalence of these diseases in the community? In other words—is syphilis declining and gonorrhoea increasing? No definite answer can be made, because we have no direct means of knowing the actual prevalence of these diseases, as we have, for example, with regard to the prevalence of notifiable infectious diseases. Any increase or decrease at the Clinics may, of course, only mean that a larger or smaller proportion of the actual cases are attending. There is, however, a good deal of evidence to support the view that the prevalence of syphilis is really declining, and whilst it can hardly be contended that gonorrhoea has similarly declined, the increase shown by the Clinic figures

probably represents an increased attendance of patients affected with that disease, rather than an actual increase in the prevalence of the disease. Our experience at the Ante-Natal Clinic indicates a decrease of gonorrhoea amongst women attending there, and gonorrhoeal ophthalmia has now become comparatively a rare disease. Of course, it may be argued that the decline in gonorrhoeal ophthalmia is due to the prophylactic measures taken by doctors and midwives at confinements, but I am not convinced that this is the whole explanation.

It is interesting to note that the Army returns show a marked decline in the prevalence of both syphilis and gonorrhoea, and the decline in both diseases is about equal. In the Home Service syphilis has declined from 19.2 per 1,000 in 1913 to 1.6 in 1931, and gonorrhoea from 25.6 in 1913 to 8.9 in 1931. Whilst it would not be justifiable to deduce from the Army returns, a corresponding decline in civilian disease, they do support the view that syphilis has declined, and do not support the view that gonorrhoea has increased in the general community. Apart altogether from the question of prevalence, we must appreciate the great curative work which Venereal Diseases Clinics are doing, and that this curative work is of the highest preventive value, both in preventing the serious sequelae of untreated disease and in preventing fresh infections. Their work is also invaluable from the educational point of view, and strongly re-inforces the general propaganda for prevention.

MATERNITY AND CHILD WELFARE.

By Dr. Jessie Eeles, Medical Officer for Maternity and Child Welfare.

Supervision of Midwives.

17 Midwives gave notice of their intention to practise. Of these, 6 were on the Staff of the County Hospital, 3 of the Maternity Hospital, 2 of a private Maternity Nursing Home, and 6, including 2 municipal midwives, were engaged in district work. The district midwives were regularly inspected during the year, and the Rules of the Central Midwives Board were found to be generally complied with.

Medical Help.

51 notifications of sending for Medical Aid were received from Midwives in respect of home confinements; 46 related to the mother and 5 to the infant.

For Mother.

Ruptured Perineum ..	18	Post Partum Haemorrhage	6
Long Labour	6	Phlebitis	6
Delayed 2nd Stage ..	2	Swelling of one Leg ..	1
No Advance, Foetal Distress	2	Pyrexia	1
Posterior Position, Inertia	1	Cold	1
Adherent Placenta ..	1	Blisters	1

For Infant.

Dangerous Feebleness ..	4	Inflammation of Eye ..	1
-------------------------	---	------------------------	---

Maternity Homes.

The one Private Maternity Home on the Register was visited during the year, and everything was found to be satisfactory.

Ante-Natal Clinic.

During 1932, the Ante-Natal Clinic continued to be held twice weekly. New patients attended on Wednesdays between 10 a.m. and 12 noon, and subsequent visits were paid on Fridays between 2 and 5 p.m.

During the year, 600 expectant mothers attended—509 new cases and 91 patients who had begun to attend in 1931. Of the new cases, 245 were primiparae and 264 were multiparae. The total number of attendances was 2,821. 109 cases were referred to the clinic by midwives, 20 cases by doctors, 10 were sent from Welfare Centres, and 2 by Relieving Officers. The same routine was carried out as in 1931, and patients who failed to keep their appointments were followed up as before.

The age groups of new cases attending the Clinic in 1932, were as follows :—

Age.	Primiparae.	Multiparae.
Under 20 years ..	28	3
20 to 25 years ..	98	46
25 to 30 years ..	78	75
30 to 35 years ..	28	70
35 to 40 years ..	10	53
Over 40 years ..	3	17
Total ..	245	264

5.7 per cent. of the patients attended for the first time before the 4th month of pregnancy.

48.1 per cent. attended for the first time between the beginning of the 4th and the end of the 6th month.

25.0 per cent. attended for the first time during the 7th month.

14.6 per cent. attended for the first time during the 8th month.

6.6 per cent. attended for the first time during the last month.

The following conditions were found and treated:—

Constipation 115	Debility, Nervousness,	
Indigestion, Vomiting,	Depression, Hysteria,	
&c. 102	Headaches, &c. .. 25	
Dental Caries 84	Sleeplessness 41	
Haemorrhoids 21	Epilepsy 1	
Inguinal Hernia 2	Backache, Cramp,	
Umbilical Hernia 1	Muscular Pains .. 51	
Laryngitis, Bronchitis,	Rheumatism 4	
&c. 38	Synovitis of Ankle .. 1	
Symptomless Albuminuria 67	Prepatellar Bursitis .. 2	
Toxic Albuminuria .. 19	Old Whiteleg 3	
Toxic Symptoms without	Pendulous Abdomen .. 2	
Albuminuria 30	Vaginal Discharge .. 13	
Chronic Nephritis 5	Vaginal Polypus 1	
Urinary Infections 7	Threatened Miscarriage 1	
Dysuria 23	Antepartum Haemorrhage	
Skin Diseases 14	(1 Placenta Praevia) 15	
Intense Itching without	Syphilis (1 Congenital,	
Skin Lesions 7	1 Acquired) 2	
Styes, Boils, &c. 2	Deformed Pelvis (1	
Pruritus 11	Congenital Disloca-	
Heart Disease (Organic) 11	tion of Hip, 1 Tuber-	
Heart Disease	cular Hip, 1 Potts	
(Functional) 13	Disease) 3	
Varicose Veins 59	Small Pelvis 10	
Varicose Veins with	Malpresentation	
Phlebitis or Ulcers 4	Corrected 24	
Subcutaneous	Molar Pregnancy 1	
Haemorrhages 2	Not Pregnant 13	
Anaemia 4	X-Ray Examinations	
Epistaxis 4	(1 Hydrocephalus	
Dizziness or Fainting .. 10	1 Malformed Foetus) 2	

86 per cent. of the patients attending the Clinic had some abnormality or discomfort requiring attention. Only 80 out of the 600 patients felt, and were, perfectly well throughout.

The following cases were admitted to the hospital from the Clinic for Ante-Natal treatment :—

Pre-eclamptic Toxaemia	21	Threatened Miscarriage	
Chronic Nephritis ..	2	for investigation—	
Vomiting.. ..	5	Molar Pregnancy ..	1
Pyelitis	5	Ante-Partum Haemorrhage	2
Chloroform Examination		Heart Disease	3
re Induction (4 induced,		Rheumatism	1
1 Caesarean Section)	5	Dental Treatment ..	1
Debility for Rest ..	3	Varicose Veins	1
Vaginal Discharge ..	2	Anaemia	1

Dental Treatment.

Dental Treatment for expectant mothers, first commenced in June, 1930, was continued during 1932 on the same lines, an evening session being held whenever there was a sufficient number of patients waiting for treatment. One case was treated at the Maternity Hospital and extractions done under general anaesthetic. Including this case the work actually done was—extractions 143, fillings 4, other operations 4, and one full upper and lower denture supplied. Almost all the cases who attended had had or were having toothache. Some provision for the giving of short anaesthetics (gas or gas and oxygen) would be desirable as many of these patients seem peculiarly intolerant of the slight pain caused by the prick of the needle in giving a local anaesthetic. In addition one feels chary of injecting into or near a septic field in a normal individual and possibly more so in a case of pregnancy. In all 17 sessions were held in the year and appointments made for 91 patients, and of these 55 were kept and 36 not kept—a 60 per cent. attendance.

THE MATERNITY HOSPITAL.

The number of cases admitted during 1932 was 368, including 82 from outside the City. Out of the total 21 were emergency admissions, 9 from Wakefield and 12 from outlying districts. 351 patients were delivered in hospital, 313 by midwives and 38 by doctors.

In the following cases medical treatment was required for some abnormality :—

(a) Ante-Natal.—95.

Antepartum Haemorrhage (6 Placenta Praevia)	16	Rheumatism	1
Albuminuria	38	Oblique Lie	1
Pyelitis	10	Varicose Veins	1
Hyperemesis	7	Dental Treatment (Multiple Extraction)	1
Heart Disease	3	Vaginitis	1
Epileptic Fits	1	False Labour	6
Anaemia	1	Contracted Pelvis—	
Oedema	1	Chloroform Examina- tion (4 induced) ..	5
X-Ray Examinations (1 hydramnios, 1 hydatid mole)			2

(b) During Labour.—34.

Antepartum Haemorrhage	4	Hydrocephalus (Macerated) ..	1
Breech (1 Hydrocephalus)	5	Transverse (1 Anence- phalus)	2
Foetal Distress	4	Face Presentations ..	2
Maternal Distress	2	Retained Placenta ..	2
Inertia	10	Adherent Placenta ..	1
Impacted Shoulders ..	1		

(c) After Labour.—28.

Epileptic Fits	2	Phlebitis	4
Boil on Breast	2	Pyrexia	3
Pyelitis	7	Secondary Post Partum Haemorrhage ..	1
Retention of Urine ..	1	Varicose Veins	1
Uraemia	1	Milk Stagnation ..	1
Mastitis (3 suppurative)	5		

(d) For the Infant.—27.

Asphyxia	5	Multiple Subcutaneous Haemorrhages ..	1
Cerebral Haemorrhage ..	2	Coryza	2
Fits	2	Styes	1
Craniotabes	1	Frequent Green Motions	1
Discharging Eyes (1 Ophthalmia)	4	Prematurity and Feebleness	3
Melaena Neonatorum ..	2	Vomiting	1
Sore Buttocks	2		

78 patients required to have the perineum sutured.

Instrumental delivery was required in 22 cases (*i.e.*, 6.3 per cent. of the total). The reasons for interference were as follows :—

Primary Uterine Inertia, Foetal Distress—manual dilatation and forceps extraction	1
Uterine Inertia, long second stage	10
Maternal Distress	2
Foetal Distress	3
Antepartum Haemorrhage	1
Face Presentation	2
Occipito Posterior	1
Contracted Pelvis (1 following induction)	2

Caesarean Section was performed 7 times for the following reasons :—

Placenta Praevia	4
Deformed Pelvis (Potts Disease, with contracted outlet)	1
Badly flexed head and uterine inertia	1
Chronic Nephritis (operation at 35th week)	1

The following cases required other forms of operative treatment :—

Bipolar Version	4—(1 placenta praevia, 1	
Induction of Premature Labour	4	transverse lie, 2 Face presentations).
Examined under General Anaesthetic	1	Manual Removal of adherent placenta
Decapsulation of kidney for uraemia	1	Perforation of after-coming hydrocephalic head
Multiple dental extractions under chloroform	1	1

There was one case notified as Puerperal Fever (revised from an original notification of Pyrexia). This patient had a rise of temperature during labour and a small discharge of pus from the uterus. The foetus was hydrocephalic with a Spina Bifida, and the head had to be perforated. She was given antistreptococcal serum immediately, and was transferred to the Clayton Hospital, but she died about 10 days later.

There were other 9 notifications of Puerperal Pyrexia. The following were the causes :—

Pyelitis	4	Phlebitis of Vulva	1
Cystitis	2	Cause doubtful	1
Mastitis	1		

The first 7 cases were treated in the Maternity Hospital. The case of Phlebitis of the Vulva was transferred to the County

Hospital, and the case where no cause was found was sent to the Clayton Hospital. All recovered.

There were no cases of Pemphigus in the Hospital during 1932. One case of Ophthalmia occurred, was treated in the Hospital, and recovered. It was a non-gonococcal case. There were other 3 cases of slight inflammation of the eyes, and one case of multiple styas. All were clear on discharge.

There were 20 still births and 8 infant deaths within 10 days of birth. The causes of deaths were these :—

Atelectasis	..	..	..	..	..	..	1
Right sided diaphragmatic hernia	..	..	..	..	..	..	1
Cerebral Haemorrhage	..	..	..	..	..	..	2
Prematurity	..	..	..	..	..	..	3
Melaena Neonatorum	..	..	..	..	..	..	1

There were 3 maternal deaths. The first was from acute dilatation of the stomach following an emergency Caesarean Section for central Placenta Praevia. The second was from obstetric shock following a version performed because forceps could not obtain a satisfactory grip on a face presentation. The patient was shocked at the time of delivery, then recovered considerably, but relapsed about an hour later. The third was from uraemia. The patient had an old standing mitral stenosis, came in labour with ante-partum haemorrhage, delivered herself normally of a premature infant, but had practically complete suppression of urine thereafter. Decapsulation of the right kidney was performed as a last resort but with no success.

Ante-Natal Supervision and Morbidity.

Of the 351 patients delivered in the Maternity Hospital during 1932, 299 had had regular ante-natal supervision (*i.e.*, the patients had attended for the first time not later than the 36th week of pregnancy, and had returned when instructed to do so). Among the 299 there were 2 deaths (0.66 per cent.)—one died of sepsis and the other of obstetric shock.

The following abnormalities in the confinement or puerperium occurred :—

Forceps deliveries (one following induction)	..	..	..	..	..	14
Inductions followed by normal labour	..	..	..	..	..	3
Caesarean Sections (1 deformed pelvis, 1 Placenta Praevia, 1 Chronic Nephritis)	..	..	..	..	..	3
Ante-partum Haemorrhage	..	..	..	..	..	1
Phlebitis	..	..	..	..	..	4

Pyelitis	2
Cystitis	3
Mastitis	5
Scarlet Fever	1
Epileptic Fit	1
Functional Retention of Urine	1
Version for face presentation (1 died)	2
Perforation of hydrocephalic head—sepsis—died	1
Manual Removal of Placenta	1
Torn Perineum	59

The number of cases with any abnormality however slight, was 85 (25.5 per cent.). Excluding the patients who had perineal lacerations alone, and the inductions followed by normal delivery, the number with abnormalities was 34 (11.4 per cent.).

The average duration of stay of patients in hospital was 16.7 days.

Training of Pupil Midwives.

The ordinary number of pupils is 8. During 1932, 8 new pupils commenced their training, and two of these were trained nurses. 8 pupils passed the examination of the Central Midwives Board during the year. The pupils attend lectures at the Leeds Medical School, and receive tutorial and practical instruction from the Matron and the Sister of the Hospital.

District Cases.

171 confinements, as compared with 136 in 1931, were attended by the two Municipal District Midwives, assisted by the pupil midwives. In this way the latter gain experience of home midwifery.

Post-Natal Clinic.

The Post-Natal Clinic was held weekly throughout the year, the patients being seen on Wednesdays at 10 a.m. along with the new ante-natal cases. The patients attending the Clinic are chiefly those who have been confined in the hospital. They are asked to attend at the end of the sixth week of the puerperium whether the confinement was normal or not. In addition, patients complaining of any form of gynaecological trouble are sent from Welfare Centres to be examined and referred for suitable treatment.

During 1932, the number of patients examined was 218, and the total number of attendances was 275.

Of the 218 cases, 105 (48 per cent.) had no complaints, and no abnormality on examination of the pelvic organs. The abnormal conditions found and treated or referred for treatment were these:—

Constipation	21	Sterility	6
Haemorrhoids	5	Mentally Defective Children	1
Fissure in Ano	2	Irregular Menstruation..	4
Backache	5	Dysmenorrhoea	1
Diarrhoea	1	Vaginal Discharge	8
Lumbago	1	Red Lochia (persistent)	4
Sciatica	1	Brown discharge with	
Coccydynia	2	uterine enlargement ..	2
Debility	7	Cystocele	1
Cough	5	Cystocele and Prolapse	1
Heart Disease	3	Prolapse of Uterus	2
Anæmia	5	Prolapsed Ovary	1
Albuminuria	16	Cervical Lacerations	4
Haematuria	1	Cervical Erosion	1
Cystitis	2	Retroversions	15
Swelling of Left Leg ..	1	Retroflexions	3
Phlebitis	1	Fibroids	2
Epilepsy	1	Enlarged Ovary.. .. .	1
Intertrigo (thighs) ..	2	Early Pregnancy	1
Pruritus ani et Vulvae	2	Miscarriage	3
Mastitis	2	Swelling of Vulva	1
Caesarean Section Cases	3	Bartholinian Cyst	1

Puerperal Fever and Puerperal Pyrexia.

During 1932, 13 cases were notified under the regulations, 11 being cases of Pyrexia, and 2 cases of Puerperal Fever. Of the 11 cases of Pyrexia, 5 were attended at the confinement by midwives, 5 were attended by doctors assisted by midwives, and one case was attended by a doctor and a handywoman. 9 of the cases were notified from the Maternity Hospital and 2 by private doctors. 8 cases were treated at the Maternity Hospital, one at the Clayton Hospital, one at the County Hospital and one at home. All recovered. Inquiries into the causes of the Pyrexia gave the following results:—

Cystitis	3	Pleurisy and Whiteleg ..	1
Pyelitis	2	Phlebitis of Vulva	1
Mastitis (Suppurative) ..	2	Foul Lochia	2

Of the 2 cases of Sepsis, one was delivered by a doctor and one by a midwife. Both were notified from the Maternity Hospital. One recovered and one died. The patient who died had a difficult labour, but sepsis was already established,

before delivery. The other patient had a normal premature labour and the sepsis in her case was very slight.

Ophthalmia Neonatorum.

7 cases of Ophthalmia Neonatorum were notified during 1932, *i.e.*, 0.68 per cent. of the notified live births. 8 cases were notified in 1931, 6 in 1930, 10 in 1929, 16 in 1928, 9 in 1927, and 7 in 1926.

CASES.			Vision Un-impaired.	Vision Impaired.	Total Blindness.	Deaths.
Cases Notified.	Treated.					
	At Home.	In Hospital				
7	5	2	7	—	—	—

In one case only was the condition probably gonococcal. In this case gonococci were present in the mother's vaginal discharge.

HOME VISITING BY HEALTH VISITORS.

The six district Health Visitors, who also act as School and Tuberculosis Nurses carried out the following work during the year :—

Infant Visiting—Primary Visits	..	..	..	934
Re-Visits (under 1 year)	..	..	..	7,208
Re-Visits (1—5 years)	..	..	..	7,147
			Total Visits	.. 15,289
Expectant Mothers—Primary Visits	..	..	..	215
Re-Visits	..	..	..	475
			Total Visits	.. 690
Visits <i>re</i> Still Births	..	..	..	40
Attendances at Child Welfare Centres	..	..	..	302
Attendances at Tuberculosis Dispensary	..	..	..	137
Visits to Tuberculosis Patients	..	..	..	958
Attendances at Medical Inspection of School Children				192
Number of Visits to Schools	..	..	..	583
„ Examinations at Schools <i>re</i> Cleanliness	..	..	..	10,687
„ Examinations at Schools <i>re</i> Treatment	..	..	..	2,588

Number of Homes Visited <i>re</i> Contagious Diseases ..	843
„ Homes Visited <i>re</i> Verminous and neglected Children	76
„ Homes Visited <i>re</i> Treatment	2,356
„ Homes Visited for Other Purposes ..	281
Total number of Homes Visited <i>re</i> School Children	3,556
<hr/>	
Number of Homes Visited <i>re</i> Mental Defectives ..	509
Visits for purposes of Nursing	155
Miscellaneous Visits	255
Total number of Home Visits (all purposes)..	21,451

INFANT LIFE PROTECTION.

The Health Visitors act as Visitors under Part 1 of the Children Act (1908). There were 3 children on the Register at the beginning of the year, 2 new children were added, and one left the City during the year. At the end of the year 4 children remained on the Register. All the children were satisfactorily cared for.

CHILD WELFARE CENTRES.

Numbers on the Registers, 1932.

Centre.	Mothers.	Infants.	Children, 1—5.	Expectant Mothers.
Principal Child Welfare Centre				
Miss Farrar's District ..	286	225	133	35
Miss Staniforth's District ..	324	226	135	14
Miss Gardner's District ..	196	132	99	—
Miss Robertshaw's District ..	262	181	122	20
Belle Vue Centre (Miss Thorp).	186	146	42	6
Snapethorpe Centre (Miss Dearden).	386	343	205	7
<hr/>				
Totals ..	1640	1253	736	82

Attendances.

Centre.	Mothers.	Infants.	Children 1—5.	Expectant Mothers.
Principal Child Welfare Centre				
Miss Farrar's District ..	2883	2074	1038	143
Miss Staniforth's District ..	3107	2094	1146	25
Miss Gardner's District ..	1937	1458	673	—
Miss Robertshaw's District	3260	2148	1426	68
Belle Vue Centre (Miss Thorp).	2830	2169	1006	6
Snapethorpe Centre (Miss Dearden).	3319	2323	1402	21
Totals ..	17336	12266	6691	363

As in 1931, Centres were held at the Principal Child Welfare Centre on four afternoons each week—Mondays, Tuesdays, Wednesdays and Thursdays—at Belle Vue, once a week on Tuesday Afternoons, and at Snapethorpe on Wednesdays. The change from Alverthorpe to Snapethorpe has proved a very popular one. This Centre, from being much the smallest, has now become the one with the largest attendances. During 1932, 1,610 infants and 310 mothers were medically examined at the Centres. Of the 1,610 infants 982 (*i.e.*, 61 per cent.) were found to be normal and satisfactory, while 628 had some defect or ailment requiring supervision or treatment. The total number of medical examinations made was 11,345 (10,314 of children and 1,031 mothers).

All the infants attending the Centres are medically examined at least once a month, and more often, of course, when necessary. The Voluntary Helpers from the Babies Welcome Association have continued to give their most valuable assistance in the running of the Centres.

From the middle of April to the end of September, 1932, 26 debilitated mothers and 27 babies were sent at the Corporation's expense, each for a fortnight's holiday to the Yorkshire Home for Mothers and Babies at Withernsea. This

means that Wakefield kept two beds occupied during the season when the Home was open. All the mothers benefited greatly from the change. The ages of the infants varied from six weeks to one and a half years, and although they could not be expected to show any marked improvement as a result of the holiday the very fact that they were able to be sent along with their mothers, enabled the latter to have a much needed holiday which otherwise would have been out of the question.

INFANT FEEDING.—Infants Born in 1931.

	Infants born 1931.	Percentage.
Wholly breast fed for six months or longer	685	81·5
Wholly breast fed for periods less than six months, but more than one month	84	10·0
Combined breast and artificial feeding for periods of six months or longer	32	3·8
Combined breast and artificial feeding for periods of less than six months, but more than one month	29	3·5
Artificially fed from 1 month or earlier	10	1·2
Totals ..	840	100·0

SUPPLY OF DRIED MILK, 1932.

Sold at Cost Price	3,752 lbs.
Sold at Half Price	863 ,,
Sold at Quarter Price	2,016 ,,
Supplied Free	12,962 ,,
Total ..	19,593 ,,

The amount of Dried Milk supplied in 1932 exceeded that supplied in 1931 by 2,114 lbs.

The cost to the Corporation for Dried Milk, free or sold at less than Cost Price, amounted to £1,065 13s. 1d.

75 Packets of Lactagol were also given out during the year, 33 being sold at cost price, 9 sold at half price, 6 sold at quarter price, and 31 given free.

ORTHOPAEDIC AND ULTRA-VIOLET RAY CLINICS.

These Clinics are held at the Principal Child Welfare Centre. The Orthopaedic Clinic is part of the School Medical Service, but it also provides treatment for Child Welfare and for Tuberculous cases. The Ultra-Violet Ray Clinic belongs to the Mental and Child Welfare Committee, but it also provides treatment for school children and for tuberculous cases.

ORTHOPAEDIC CLINIC.

During 1932, the work of the Orthopaedic Clinic continued on the same lines as before. Dr. Crockatt attended once a month to see cases requiring his advice, and the Clinic was open daily for treatment. New cases are dealt with on Saturday mornings at 10 o'clock.

During the year, 133 patients attended the Clinic. Of these 62 were new cases, and 71 were carried over from 1931. Of these, 77 remained on the register at the end of 1932, 20 ceased attending and 36 were discharged. The total attendances numbered 1,042.

The following Table is an analysis of the Wakefield cases treated in hospitals during 1932 :—

	Cases remaining in Hospital at the end of 1931.	Admitted during 1932.	Discharged during 1932.	In Hospital at the end of 1932.
Education ..	1	7	7	1
Health	7	4	3	8
Mental and Child Welfare ..	1	3	2	2
Total ..	9	14	12	11

There was one Education case on the waiting list at the end of 1932.

The following Table is a summary of the year's work of the Orthopaedic Clinic:—

DEFECT.	New Cases.				Old Cases.				Seen by Orthopaedic Officer.	Total Attendances.	Treatment Recommended.							Discharged.	Ceased Attending.	Remaining on Register.				
	Total.	Education.	Health.	Mental and Child Welfare.	West Riding Cases.	Total.	Education.	Health.			Mental and Child Welfare.	West Riding Cases.	Observation.	Orthopaedic Clinic.	Ultra-Violet Ray Clinic.	No Treatment.	Hospital.				Surgical Appliances.	X-Ray.	Plaster.	Cured.	Improved.	No Change.
Rickets	4	3	—	—	1	10	7	—	3	—	13	9	—	1	—	—	—	—	1	1	1	2	9	
Bone and Joint Tubercle	15	—	15	—	—	10	—	10	—	24	67	12	1	—	2	4	2	2	4*	1	—	1†	19	
Clubfoot	3	1	—	2	—	8	5	—	2	1	118	2	4	—	3	4	—	3	1	1	—	—	9	
Congenital Dislocation of Hip	—	—	—	—	—	3	—	—	3	—	26	—	1	—	—	1	2	—	—	—	—	—	3	
Other Congenital Deformities ..	1	1	—	—	—	2	1	—	1	—	18	—	—	—	2	1	—	—	—	—	2	—	1	
Structural Scoliosis ..	—	—	—	—	—	2	2	—	—	2	27	—	2	—	—	—	1	—	—	—	—	—	2	
Flatfoot	3	2	—	1	—	3	3	—	—	6	66	1	4	—	—	4	—	—	—	1	—	1	4	
Infantile Haemiplegia ..	1	1	—	—	—	4	3	—	1	5	6	4	—	—	—	1	—	—	—	1	1	—	11	
Anterior Poliomyelitis ..	4	3	—	—	1	9	8	—	1	13	44	2	—	—	2	10	—	—	—	1	1	—	3	
Erb's Paralysis ..	1	1	—	—	—	1	—	—	1	2	86	—	1	—	1	—	—	—	—	—	—	—	2	
Postural Defects ..	9	9	—	—	—	3	3	—	—	—	306	—	12	—	—	—	—	—	—	4	—	3	5	
Mouth Breather ..	24	23	—	1	—	—	—	—	—	—	182	—	24	—	—	—	—	—	5	4	—	12	3	
Various	6	3	—	3	—	7	6	—	1	13	63	6	2	—	3	2	1	—	3	1	2	1	6	
Total	71	47	15	7	2	62	38	10	13	1	1042	36	51	4	5	20	27	6	5	14	15	7	20	77

* Healed.
† Died.

ARTIFICIAL SUNLIGHT CLINIC.

The treatment of selected cases by Artificial Sunlight was continued at the Principal Child Welfare Centre as in 1931. The accommodation and equipment were the same as before. New cases recommended for this form of treatment were seen on Saturdays at 10 a.m. Cases were selected from schools, from the school clinic, from the orthopaedic clinic, from child welfare centres, from the tuberculosis dispensary, and a few were sent by their private doctors. Four sessions were held weekly, two for boys and two for girls. The total number of attendances during 1932 was 5,005, and the following Table gives a resume of the cases treated :—

Defects.	Total Attendances.	Number of Cases.							Ceased to attend.		Discharged.	Remaining on Register.
		Total.	New.			Old.			After more than 10 Exposures.	After less than 10 Exposures.		
			Education.	Health.	Maternity and Child Welfare.	Education.	Health.	Maternity and Child Welfare.				
Rickets	1011	40	8	—	23	3	—	6	4	11	6	19
Debility (with various symptoms) ..	1686	65	26	—	14	13	—	12	15	4	21	25
Paratuberculosis	272	10	2	—	1	4	1	2	—	—	6	4
Non-Pulmonary Tuberculosis ..	202	7	—	2	—	—	5	—	1	—	4	2
Cervical Adenitis (Non-Tubercular)	134	6	3	—	1	1	—	1	—	1*	2	3
Bronchitis ..	282	15	7	—	4	2	—	2	2	2	3	8
Ophthalmia and Blepharitis ..	427	20	12	—	2	5	1	—	2	4	5†	9
Skin Conditions (Various).	468	9	1	—	3	1	2	2	1	2	1	5
Alopecia Areata	191	7	5	—	1	1	—	—	3	1‡	1	2
Rheumatism and Chorea	158	6	3	—	—	3	—	—	2	—	1	3
Osteomyelitis and other Chronic Suppurative Conditions ..	94	3	—	—	1	—	1	1	1	—	1	1
Various	80	2	—	—	1	—	—	1	—	1	—	1
Totals ..	5005	191	67	2	51	33	10	27	31	26	51	82

* Left District.

† Cured.

‡ 1 to Clayton Hospital.

Some brief notes follow on the results of treatment in the cases of those children who completed their course of Artificial Sunlight treatment and were discharged during 1932 :—

Rickets.

7 children suffering from rickets completed their course of treatment, and were discharged in 1932. 4 were infants in the active stage, and 3 were older children suffering from deformities of the limbs. Cod liver oil was given as a routine, along with the Artificial Sunlight treatment. As in 1931, the results were very satisfactory. In the younger children, walking was expedited, teething progressed rapidly, and the children from being flabby and phlegmatic became firm and active, and any commencing deformity disappeared. In the older children, the limbs straightened more rapidly than they had previously done, and in the case of Knock-knees, though the deformity did not disappear, the joints became stable and progress of the defect was checked.

Eye Cases.

2 cases of Phlyctenular Keratitis and one of Chronic Blepharitis completed a course of treatment during the year. Correction of any visual defect was done as soon as the eyes were in a fit condition to be tested. All responded very well, and were discharged in from 4 to 8 months with no symptoms.

Chorea and Rheumatism.

One case only of Chorea was treated and was cured.

One case of recurrent "growing pains" accompanied by attacks of sore throat and glandular enlargement was also treated. She had her tonsils removed and some bad teeth extracted during the treatment. The gland disappeared, and for the last 3 to 4 months she had no symptoms. She gained 7 lbs. in weight in 15 months. How much of the improvement was due to the sunlight and how much to the treatment of the throat was difficult to estimate, but 3 months after the treatment was stopped she was seen again. She had complained frequently of pain in her limbs during these three months, and had gained no weight. It may become advisable to give her a further course of the treatment.

Paratuberculosis.

5 children come into this group. They were all thin, languid and slightly anaemic. Some had coughs, some had chains of glands in the neck, and one was suspected of having enlarged hilar glands. All did well, improved in energy and

in appetite, and the average gain of weight was $3\frac{3}{4}$ lbs. over an average of 9 months' treatment.

Non-Pulmonary Tuberculosis.

Only 2 cases come under this heading—one case of tubercular cervical adenitis, and the other an old tubercular ankle with a chronic sinus. The former case had to have surgical treatment as the gland became caseous three months after treatment was started. Treatment was continued after operation and the child was discharged at the end of 18 months, having gained 8 pounds in weight. The neck was in a satisfactory condition. In the second case, the small sinus healed.

One becomes more and more diffident about treating a true active tubercular adenitis with artificial sunlight, except perhaps as an adjuvant to surgical treatment.

Skin Conditions.

One case of psoriasis was discharged during the year, having got steadily worse in spite of this form of treatment. On the other hand we have another case still attending, and she keeps free from lesions only so long as she has the treatment regularly.

2 cases of alopecia areata were cured.

Bronchitis.

3 cases of chronic bronchitis were treated and discharged. All were small children of 2 years of age. In each case the trouble cleared up completely, and all three gained weight substantially.

Non-Tubercular Cervical Adenitis.

One of these cases has already been dealt with under the heading "Rheumatism."

There were 6 others. Two had also a tendency to bronchitis, and one had to have his tonsils removed before the gland would disappear completely. All did well. One of the six, a child of a year and 10 months, had previously had a course of treatment for the same trouble and had relapsed rapidly when the treatment was stopped. He developed convulsions during teething and ceased to attempt to walk. His glands again enlarged. Treatment was resumed and improvement was seen immediately. He gained 5 lbs. 10 ozs. in six months, cut 4 canines without trouble, and was lively and well on discharge.

Chronic Suppurative Conditions.

2 cases come under this heading.

The first was a patient with chronic osteomyelitis of 3 years' duration before this treatment was commenced. He was treated for 19 months. He had multiple sinuses in the neck, arm, legs and chest. All were healed on discharge, fragments of bone having come from each. He gained 15 lbs. 6 ozs. in weight and grew $4\frac{1}{4}$ inches while under treatment.

The second case was a child with an abscess adherent to the jaw, which had broken down and discharged repeatedly. It was treated for three months and healed up, the induration disappeared, and the skin was quite movable over the jaw on discharge.

There is little doubt that Artificial Sunlight is very useful in clearing up chronic inflammatory conditions.

Debility.

There are 15 mixed cases, under this heading. Three of them also suffered from anaemia, and, as usual, failed to take the iron prescribed. All three put on weight remarkably well, but the anaemia was not affected in the slightest. Of the remaining 12, one had to stop on account of albuminuria, 6 were improved, but not to any remarkable extent. The other five, however, one can truthfully say, did benefit quite considerably.

One of these was a child of three who was shaky on his legs, and miserable and thin after a bad attack of whooping cough. In 8 months he gained 6 lbs. 5 ozs., and was a lively, happy child.

2 others belonged to the thin, sallow, languid, but not anaemic type of rapidly growing child. Both did very well. One of them put on 5 lbs. 14 ozs. in 4 months, and other 3 lbs. in the three months following. The other gained 4 lbs. in 8 months, and was generally much better. The fourth case was a boy who had had an illness with cough and pain in the chest, and had been labelled "pleurodynia." He was debilitated and languid, and had no appetite. After two months' treatment he had gained $5\frac{1}{2}$ lbs. and felt perfectly fit again. The last of the five cases was a child who was very nervous and continually talked in his sleep. After nine months he had gained $4\frac{1}{2}$ lbs., and the habit had completely stopped. His general health also was much better.

J. EELES.

MENTAL DEFICIENCY.

At the end of 1932, there were 82 mental defectives (38 males and 44 females) on the Register of the Mental Deficiency Authority, and this list of cases does not include children coming under the jurisdiction of the Education Authority. They are classified as follows:—

	<i>Total.</i>	<i>Males.</i>	<i>Females.</i>	
Under Orders {	In Institutions ..	21	8	13
	Under Guardian-ship	1	1	—
Under Statutory Supervision ..	17	12	5	
Poor Law Cases {	Outdoor	5	1	4
	In Institutions ..	3	2	1
Under Voluntary Supervision ..	33	14	19	
Action not yet determined by Mental Deficiency Committee—				
(a) Notified by Education Authority	1	—	1	
(b) Others	1	—	1	
Total ..	82	38	44	

In addition to the above, there were 90 children (50 boys and 40 girls) between the ages of 7 and 16 years, who had been certified to the Education Authority as feeble-minded. Of these, 74 were attending ordinary schools, and 16 were not attending any school. As there is no Special School for feeble-minded children, the only cases which can be referred by the Education Committee to the Mental Deficiency Committee are those who have been certified uneducable in a Special School, that is, idiots and imbeciles.

St. Catherine's Home for the Feeble-minded.

During 1932, 16 Wakefield patients (5 males and 11 females) were admitted to St. Catherine's Home. The patients were admitted from:—

(a) Other Mental Deficiency Institutions ..		7
(b) Dr. Barnardo's Homes		2
(c) Leeds Orphanage Homes		1
(d) Addresses in the City		6
Total ..		16

The Occupation Centre.

The Occupation Centre, conducted by the Social Service Council on behalf of the Corporation, continues to do excellent work, and I am indebted to Mr. Osbourn, the Secretary of the Council, for the following notes on the Centre:—

“The Occupation Centre for Mental Defectives has steadily continued its work throughout the past year under the able guidance of Mrs. Rawlinson.

“Seven boys and seven girls were in attendance at the beginning of the year. During the year three girls and two boys were transferred to the St. Catherine’s Home at Doncaster, and two boys died. Three new boys were admitted to the Centre.

“In the main the girls have been occupied with the making of garments for their own use, fancy work, cookery, and rug making, while the boys have done weaving, cane-work, physical exercises, and training with letters and numbers for the more backward. With both boys and girls the training has included domestic work and personal hygiene.

“The work requires infinite tact and patience, and any improvement is bound to be slow. Yet the life and influence of the Centre is plainly manifest in the behaviour of most of those who attend. One noisy and boisterous girl is gradually assuming a quieter demeanour, a steadiness of manner and a thoughtfulness for others that is most encouraging; a boy who could swear like the proverbial trooper, and behave as though he were the only person to be considered, is similarly changing his habits and manner.”

SCHOOL MEDICAL SERVICE.

This service is intimately correlated with the general public health service. The medical work is carried out by the Medical Officer of Health, and the two Assistant Medical Officers, and the work of the School Nurses is carried out by the six Health Visitors. In addition, there is a School Dentist, a School Clinic Nurse and an Orthopaedic Clinic Nurse. The work embraces (1) Routine medical inspection of entrants, intermediates and leavers; (2) Supplementary medical inspection in the schools and at the School Clinic, including special examinations *re* Mental Deficiency, etc.; (3) Treatment of Minor Ailments at the School Clinic; (4) Vision Refraction and prescribing of spectacles at the Ophthalmic Clinic; (5)

Dental Inspection and Treatment; (6) Orthopaedic and Ultra-Violet Ray Treatment; (7) Cleanliness Surveys, and the following up of defective children by the School Nurses.

During 1932, the number of medical examinations amounted to 12,323, and 10,197 medical certificates were issued. At the Ophthalmic Clinic, 537 new cases were examined, with 959 attendances, and 483 prescriptions for spectacles were issued. The School Dentist inspected the teeth of 8,289 children, and found that 5,720 of these required dental treatment, although only 2,128 attended the Dental Clinic for treatment.

133 children, including 71 new cases, attended the Orthopaedic Clinic, with 1,042 attendances. 191 children were treated at the Ultra-Violet Ray Clinic, with 5,005 attendances. At the Central Clinic for Minor Ailments, 1,031 children attended, with 17,237 attendances, and at the Snape-thorpe School Clinic 323 children were treated, with 2,413 attendances. The School Nurses made 10,687 examinations of school children with regard to cleanliness and condition of clothing and footgear.

The results of the routine medical inspection of the Elementary School children shewed that 80 per cent. had carious teeth, 23 per cent. defective vision, 16 per cent. defects of throat and nose (mostly enlarged tonsils and adenoids), 9 per cent. diseases of the lungs (mostly bronchitis), 8 per cent. enlarged glands, 4 per cent. external diseases of the eyes, 3 per cent. diseases of the ear, 3 per cent. rickets, 1.5 per cent. defective nutrition, and less than 1 per cent. defective clothing and footgear, defective speech, tuberculosis, and heart disease. 13 per cent. of the children examined were free from any defect. About 16 per cent. of the children examined at routine inspection were referred for treatment other than dental treatment or cleansing, and about 80 per cent. of the children so referred were reported to have obtained treatment.

HEALTH EDUCATION.

As usual, the arrangements for Health Week were made by the Social Service Council, and Mr. Osbourn has kindly supplied the following Report:—

“ The week, October 9th to 15th, was devoted to Health
 “ Week. During the week cinema displays were given in the
 “ Minor Hall, Westgate. The cinema outfit was obtained
 “ from the British Social Hygiene Council, and a number
 “ of their films were shown; in addition, other films dealing

“ with maternity and child welfare, the prevention of
“ diphtheria, and other aspects of public health work were
“ shown throughout the week.

“ With the exception of Monday and Saturday, the
“ attendance was well maintained. Two afternoon displays
“ were given to women only, and these were very well
“ attended.

“ The services of Mr. R. D. Sanders, a lecturer from the
“ British Social Hygiene Council, were secured, and he gave
“ stimulating and helpful addresses at all except one of the
“ meetings. Dr. Jessie Eeles addressed the meeting for
“ women on Wednesday afternoon, and Mr. Sanders visited
“ Rothwell to address a special meeting in connection with
“ Health Week in that district.

“ Members of the Committee helped by presiding over
“ the various meetings, and their services were invaluable.

“ Speakers were provided for the Zion Brotherhood and
“ Sisterhood. Dr. Underwood, of Leeds, addressed the former,
“ and Miss Hilda Staniforth addressed the Sisterhood. Both
“ Meetings were well attended.

“ Work in the schools followed the lines adopted in
“ previous years. The subject chosen for special consideration
“ was “ Food and Nutrition.” Special lessons were given
“ by the teachers, and short addresses were also given by
“ the School Medical Officers. At the end of the week scholars
“ in the senior schools took part in an essay competition,
“ for which book prizes were awarded. As the local Health
“ Week coincided with Empire Health Week, this year
“ arrangements were made to enable the children of twelve
“ years of age and over to join in the Essay Competition
“ organised by the Empire Health Week Committee. Four-
“ teen Wakefield children sent in Essays, and three of these
“ were highly commended and awarded certificates.

“ The work among the young people is of immense
“ value. It can only be undertaken with the wholehearted
“ co-operation of the Director of Education and his staff
“ and the teachers. The Committee are most grateful for
“ the willing help they have all so readily given.”

The distribution of the local edition of “ Better Health ”
(1,000 copies monthly), was continued during the year. A

BLINDNESS.

Number of Blind Persons in Wakefield.

The Secretary-Home-Teacher of the Wakefield Institution for the Blind has kindly supplied the following list of known blind persons :—

(a) Total number of blind persons in the area of the Wakefield County Borough	88
(b) Distribution of the number given in (a) :—	
Children under 5 years of age	None
Children awaiting admission to Special Schools	3
Children in Special Schools	4
Adolescents undergoing training	4
Adults undergoing training	1
Workshop Employees	2
Inmates of Institutions	2
Inmates of Sunny Lawns Home	7
Adolescents and Adults residing in own homes	65
	88

The Public Health Department is not directly associated with the administration of the Blind Persons Act, 1920, except that, during the year, 21 ophthalmic examinations and reports required under the Act were made by Dr. Allardice, the School Ophthalmologist. Representations were, however, made to the Committee that, in future, such examinations should be carried out by a specialist, as required by the regulations. So far as I know, no special action has been taken under Section 66 of the Public Health Amendment Act, 1925, but the prevention of blindness has always received attention from the Corporation, particularly in connection with the prevention and treatment of ophthalmia neonatorum, which in the past has contributed considerably to the number of blind persons. There has, however, been no instance of blindness resulting from this disease in Wakefield for 15 years. The attention of the Education Committee has also been drawn to the great need for special educational facilities for school children suffering from high myopia (or severe short sightedness) which sometimes ends in blindness. These children cannot be safely educated in ordinary classes, they are not bad enough to be admitted to blind schools, but should be educated by special methods.

WITNESSES

Number of Blind Persons in Wisconsin

The Secretary of the Wisconsin State Board of Education has kindly supplied the following list of names of blind persons in Wisconsin:

(a) Total number of blind persons in the State of Wisconsin

(b) Distribution of the number of blind persons in Wisconsin by county

County	Number of Blind Persons
Adams	1
Ashtabula	1
Baraboo	1
Bellevue	1
Berkshire	1
Burlington	1
Calumet	1
Chippewa	1
Columbia	1
Dodge	1
Douglas	1
Franklin	1
Grant	1
Green	1
Greenland	1
Iron	1
Jackson	1
Jefferson	1
Lincoln	1
Manitowish	1
Marathon	1
Marquette	1
Menomonie	1
Monroe	1
Oneida	1
Oshkosh	1
Outagamie	1
Pierce	1
Port Washington	1
Rock	1
Shawano	1
Sheboygan	1
St. Croix	1
Tioga	1
Waushara	1
Winnebago	1
Wisconsin	1

The following is a list of the names of blind persons in Wisconsin, as reported by the various county boards of education. The names are given in alphabetical order, and the county in which they reside is indicated by the number in parentheses. The names of the county boards of education are given in parentheses after the names of the blind persons.

Adams (1) Adams County Board of Education
 Ashtabula (1) Ashtabula County Board of Education
 Baraboo (1) Baraboo County Board of Education
 Bellevue (1) Bellevue County Board of Education
 Berkshire (1) Berkshire County Board of Education
 Burlington (1) Burlington County Board of Education
 Calumet (1) Calumet County Board of Education
 Chippewa (1) Chippewa County Board of Education
 Columbia (1) Columbia County Board of Education
 Dodge (1) Dodge County Board of Education
 Douglas (1) Douglas County Board of Education
 Franklin (1) Franklin County Board of Education
 Grant (1) Grant County Board of Education
 Green (1) Green County Board of Education
 Greenland (1) Greenland County Board of Education
 Iron (1) Iron County Board of Education
 Jackson (1) Jackson County Board of Education
 Jefferson (1) Jefferson County Board of Education
 Lincoln (1) Lincoln County Board of Education
 Manitowish (1) Manitowish County Board of Education
 Marathon (1) Marathon County Board of Education
 Marquette (1) Marquette County Board of Education
 Menomonie (1) Menomonie County Board of Education
 Monroe (1) Monroe County Board of Education
 Oneida (1) Oneida County Board of Education
 Oshkosh (1) Oshkosh County Board of Education
 Outagamie (1) Outagamie County Board of Education
 Pierce (1) Pierce County Board of Education
 Port Washington (1) Port Washington County Board of Education
 Rock (1) Rock County Board of Education
 Shawano (1) Shawano County Board of Education
 Sheboygan (1) Sheboygan County Board of Education
 St. Croix (1) St. Croix County Board of Education
 Tioga (1) Tioga County Board of Education
 Waushara (1) Waushara County Board of Education
 Winnebago (1) Winnebago County Board of Education
 Wisconsin (1) Wisconsin State Board of Education