[Report 1930] / Medical Officer of Health, Wakefield City.

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CITY OF WAKEFIELD.

REPORT

ON THE

PUBLIC HEALTH

AND

SANITARY STATE

OF THE

CITY OF WAKEFIELD

For the Year 1930,

BY

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

MEDICAL OFFICER OF HEALTH.

Printed by Sanderson & Clayton, Ltd., Wakefield.

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INDEX.

PUBLIC HEALTH DEPARTMENT,
TOWN HALL,
WAKEFIELD,

9th June, 1931.

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 1930.

In the preparation of the Report, which follows the lines required by the Ministry of Health for quinquennial reports, I have received valuable assistance from many colleagues, particularly 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 also 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	4,971 acres.
Population (Census 1921)	52,891
Population (Estimated at middle of 1930) ..	56,970
Number of Inhabited Houses (Census 1921) ..	11,252
Rateable Value	£333,350
Sum represented by a Penny Rate	£1,298

The institutional population at the middle of the year was 3,344, of which 2,773 were non-residents and 571 were residents.

The net population, excluding non-residents, is 54,197 and this has been used as the basis for calculating the various rates given in this Report, other than the Infectious Diseases attack rates.

2.—EXTRACTS FROM THE VITAL STATISTICS OF 1930.

(1) Marriages.

493 marriages were celebrated, equal to a marriage rate of 18·2 persons married per 1,000 of the population, as compared with 18·4 in 1929, 15·5 in 1928, and 18·8 the average for the preceding 10 years. There were 3 less marriages in 1930 than in 1929.

(2) Births.

Excluding 96 non-resident births and including 24 resident births which occurred outside the City, the total number of births registered in the City was 1,005 (500 males and 505 females), giving a birth rate of 18·54 per 1,000 of the population, as compared with 18·16 in 1929 and 20·8 the average for the preceding 10 years. The number of births in 1930 was 29 more than in 1929. The birth rate in England and Wales in 1930 was 16·3 and in the large towns 16·6. 32 births (3·1 per cent.) were illegitimate.

Under the Notification of Births Act, 1049 births were notified, 624 from dwelling houses and 425 from Institutions. Of the 646 home confinements, 351 were attended by doctors, and 295 by midwives. The institution births include 352 at the Municipal Maternity Hospital, 41 in the White Rose Hospital, and 32 in a Private Maternity Home. 365 of the institutional confinements were attended by midwives and 60 by doctors. 63 of the registered births (6·2 per cent.) were not notified, as compared with 2·5 per cent. in 1929, and 3 per cent. in 1928. 42 (4 per cent.) of the notified births were stillbirths.

Causes of, and Ages at, Death during the Year 1930.

Causes of Death.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the district.									
	Total All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and under 75 years.	75 years and over.
1	2	3	4	5	6	7	8	9	10	11
All Causes { Certified	719	58	21	22	22	29	82	224	156	105
All Causes { Uncertified	1	—	—	—	—	—	—	—	1	—
Enteric Fever	2		1	1						
Smallpox										
Measles	7	2	3	2						
Scarlet Fever	1			1						
Whooping Cough	5	3	2							
Diphtheria and Croup	4			1	2		1			
Influenza	11			2			2	4		3
Encephalitis Lethargica	4						3	1		
Meningococcal Meningitis	1		1							
Tuberculosis of Respiratory System	32			1		5	17	9		
Other Tuberculous Diseases	18	3	5	3	1		4	2		
Cancer, Malignant Disease	87		1			1	8	37	34	6
Rheumatic Fever	6			1	2		2	1		
Diabetes	7					1	1	4	1	
Cerebral Haemorrhage	61	1						19	23	18
Heart Disease	87				4	5	3	34	27	14
Arterio Sclerosis	21							5	13	3
Bronchitis	49	4	2	1			2	15	12	13
Pneumonia (all forms)	65	9	5	3	2	4	6	25	10	1
Other Respiratory Diseases	3						1	1		1
Ulcer of Stomach and Duodenum	6						1	4	1	
Diarrhoea, etc. (under 2 years)	1	1								
Appendicitis and Typhlitis	*8			1	2	2	2	1		
Cirrhosis of Liver	2						1	1		
Acute or Chronic Nephritis	22					1	4	11	4	2
Puerperal Sepsis	1						1			
Other accidents and diseases of pregnancy and parturition	5					1	4			
Congenital debility and malformation, premature birth	26	26								
Suicide	7					1	1	4	1	
Other deaths from Violence	33	3		3	6	5	4	9	1	2
Other defined diseases	136	6	1	1	3	3	14	37	29	42
Causes ill-defined or unknown	1			1						
Uncertified	1								1	
Totals	720	58	21	22	22	29	82	224	157	105
Sub-Entries included in above figures :—										
Old Age	44								8	36
Broncho Pneumonia	23	7	5	3			2	5	1	
Syphilis	1							1		

The total number of deaths registered in Wakefield during 1930 was 1,038, including 344 non-residents. In addition, 26 resident deaths occurred outside the City. The number of resident deaths is therefore 720 (411 males and 309 females),

giving a death rate of 13·2 per 1,000 of the population, as compared with 15·2 in 1929 and 13·5 the average for the preceding 10 years. In 1930, there were 98 less deaths than in 1929. The 1930 general death rate in England and Wales was 11·4, and in the Great Towns 11·5. One death was uncertified. 269 (37 per cent.) of the resident deaths occurred in public institutions.

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

Age period.	No. of Deaths 1930.	Percentage 1930.	Percentage 1929.
Under 1 year	58	8·0	11·9
1—2 years	21	2·9	2·0
2—5 ,, ...	22	3·1	2·8
5—15 ,, ...	22	3·1	2·7
15—25 ,, ...	29	4·0	3·8
25—45 ,, ...	82	11·4	10·2
45—65 ,, ...	224	31·1	28·1
65—75 ,, ...	157	21·8	19·1
Over 75 years	105	14·6	19·4

The following table gives the chief causes of death :—

Cause of Death.	No. of Deaths, 1930.	Males.	Females.	Percentage of total deaths in 1930.	Percentage of total deaths in 1929.
Cancer	87	46	41	12·1	8·3
Heart Disease	87	44	43	12·1	15·2
Pneumonia	65	35	30	9·0	8·9
Cerebral Haemorrhage	61	32	29	8·5	6·8
Tuberculosis	50	33	17	6·9	7·6
Bronchitis	49	33	16	6·8	8·3
Old Age	44	22	22	6·1	4·9
Violence (excluding Suicide)	33	25	8	4·6	3·5
Congenital Debility, Malformation and Premature Birth ..	26	15	11	3·6	4·9
Nephritis	22	9	13	3·0	2·7

There were 87 deaths from Heart Disease (44 males and 43 females) giving a death rate of 1·61 as compared with 2·30 in 1929, and 1·75 the average for the preceding 10 years. The number of deaths was 37 less than in 1929. 86 per cent. of the deaths were of persons 45 years of age and over, and 16 per cent. of persons over 75 years of age.

There were also 87 deaths from Cancer (46 males and 41 females) giving a death rate of 1·61, as compared with 1·74 in 1929, and 1·30 the average for the preceding 10 years. There were 7 less deaths than in 1929.

There were 65 deaths from Pneumonia (35 males and 30 females) giving a death rate of 1·20 as compared with 1·36 in 1929, and 1·24 the average for the preceding 10 years. There were 8 less deaths than in 1929.

There were 61 deaths from Cerebral Haemorrhage (32 males and 29 females) giving a death rate of 1·12, as compared with 1·04 in 1929, 1·06 in 1928, and 1·1 in 1927. There were 5 more deaths than in 1929.

There were 50 deaths from Tuberculosis (all forms) (32 males and 18 females) giving a death rate of 0·92, as compared with 1·15 in 1929 and 1·26 the average for the preceding 10 years.

There were 32 deaths from Pulmonary Tuberculosis (22 males and 10 females) giving a death rate of 0·59, as compared with 0·83 in 1929 and 0·88 the average for the preceding 10 years. There were 12 less deaths than in 1929.

There were 18 deaths from Non-Pulmonary Tuberculosis (11 males and 7 females) giving a death rate of 0·33, as compared with 0·33 in 1929 and 0·27 the average for the preceding 10 years.

There were 49 deaths from Bronchitis (33 males and 16 females) giving a death rate of 0·90 as compared with 1·26 in 1929 and 1·18 the average for the preceding 10 years.

There was 1 death under 2 years of age from Diarrhoea and Enteritis, giving a death rate of 0·99 per 1,000 births, as compared with 16·5 in 1929 and 12·70 the average for the preceding 10 years. The corresponding rate in England and Wales during 1930 was 6·0.

The number of infantile deaths (*i.e.*, under one year of age) was 58 (30 males and 28 females) giving an infantile mortality of 58 per 1,000 births, as compared with 99 in 1929

and 85 the average for the preceding 10 years. The corresponding rate for England and Wales during 1930 was 60, and for the Great Towns, 64.

In the first quarter of the year, the rate was 59, in the second quarter 52, in the third quarter 48, and in the fourth quarter 65. The legitimate infantile mortality was 56 per 1,000 births, and the illegitimate 94 per 1,000 births. The neo-natal mortality (*i.e.*, the mortality during the first month of life) was 30 per 1,000 births, as compared with 46 in 1929 and 38 the average for the past 10 years.

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

Eastmoor ..	101	Northgate ..	66	Belle Vue ..	32
Kirkgate ..	92	Calder	60	Primrose Hill	30
Sandal	71	South Westgate	45	St. John's ..	15
North Westgate	70	Alverthorpe ..	38		

The principal causes of infantile mortality were :—Congenital Debility and Malformation—(25%), Prematurity—(21%), and Pneumonia—(16%).

47 per cent. of the infantile deaths occurred during the first week of life, 52 per cent. during the first month, and 75 per cent. during the first six months.

There were 6 maternal deaths from diseases or accidents of pregnancy and parturition, giving a mortality of 5·97 per 1,000 births, as compared with 9 in 1929 and 5·84 the average for the preceding 10 years. There was one death from Puerperal Sepsis included in the above. 3 of the maternal deaths occurred in the Clayton Hospital, 1 in the Maternity Hospital, 1 in a Private Nursing Home, and 1 at home.

The 33 deaths from Violence included 11 from vehicular accidents, 2 from colliery accidents, 2 from drowning, 2 from accidental suffocation whilst in bed, 3 from contusions and lacerations of the head (Murder), 2 (aged 21 years and 7 years) from burns and 1 (aged 3 years) from Scalds.

There were also 7 suicidal deaths, comprising 3 from coal-gas poisoning, 1 from drowning, 1 from shooting, 1 from ammonia poisoning, and 1 from multiple injuries caused by a railway engine.

102 inquests were held during the year, 70 on residents and 32 on non-residents.

REMARKS ON THE DEATH RATE.

The mortality rate of 1930 is satisfactory to the extent that it is lower than that of the previous year, and slightly lower than the average for the preceding 10 years. It was, however, higher than the rates in 1928 (11·5, our lowest recorded death rate), 1926, 1925, and 1922. As usual, the Wakefield death rate is higher than the death rates of the whole country and the large towns, and this is an unsatisfactory feature.

Diseases of the Respiratory System.

Taking the systemic groups of diseases, those of the respiratory system account for the largest number of deaths. Even if we exclude Pulmonary Tuberculosis, diseases of the respiratory system, chiefly Bronchitis and Pneumonia, account for nearly one-fifth of the total mortality. As compared with the previous year, and the average for the preceding 10 years, the mortality from Bronchitis and Pneumonia is reduced, but only slightly in the case of Pneumonia.

In previous Reports, I have dealt in detail with the measures which might possibly reduce the incidence of, and the mortality from, these respiratory diseases, but admittedly the scope of practical prevention is limited. The steps taken to reduce Rickets, which is a prolific cause of Bronchitis in childhood; the reduction of air pollution by smoke; the eradication of damp houses; and, generally, a higher standard of hygiene, would all contribute in some degree to this end.

I am also satisfied that the provision of increased hospital accommodation for cases of Pneumonia, coupled with early notification and earlier removal to hospital, would substantially reduce the terrible mortality from this disease. For this reason alone, and of course there are other reasons, the erection of a new hospital at Snapethorpe seems to me fully justified.

Heart Disease.

Of the individual diseases, Heart Disease and Cancer stand at the top of the list, with an equal number of deaths. The death rate from Heart Disease is substantially below that of the previous year, and slightly below the average for the previous 10 years. Although the brunt of the deaths is amongst persons over 45 years of age, a considerable proportion of the cases, namely, those caused by, or associated with, rheumatic infection, originate in early life, and it is highly probable that the early recognition and proper treatment of these cases would do much to reduce the future mortality. There is a real difficulty

in getting proper treatment for these children. Prolonged rest, under healthy conditions and close supervision, is the great desideratum. In many cases, it is quite impossible to secure this in the home, and the Poor Law Hospital is the only institution that can take such children for the long periods of treatment required. Sometimes parents will not agree to their children going into the Hospital or they take them out after an insufficient period of treatment. Possibly, part of the accommodation at Snapethorpe might with advantage be used for these cases, and I think it would be found that parents would have less objection to them going into a Municipal Hospital than into a Poor Law one. It would also be quite convenient to transfer convalescent cases from the hospital wards to the Open Air School, and still keep them under special regimen and medical supervision.

Cancer.

Cancer shows a slightly lessened death rate as compared with 1929, but it is still above the average for the previous 10 years. Like Heart Disease, Cancer kills at the later ages of life, but differs from Heart Disease in generally originating in these later years of life. It is indeed quite probable that the higher average age of the community is itself contributing to the increased mortality from Cancer. There are now more people living in the Cancer period of life than formerly, and naturally one would expect more cases of the disease. Notwithstanding the great amount of research that is being carried on, we are yet ignorant of the cause of Cancer, and it is impossible to suggest any practicable lines of prevention. The only exceptions to this statement are the external Cancers, due to irritation, including the irritation from tarry matters, as occurs in certain trades. But undoubtedly the mortality could be substantially reduced by any measures which would induce people to seek medical advice when the disease is yet in the early stages. Surgeons tell us that many forms of Cancer could be permanently eradicated if patients would only go to them before the disease has advanced too far. We have done a good deal in the way of propaganda for early treatment in Wakefield, and still continue to do this through leaflets, lectures at Child Welfare Centres, etc., but on the whole, the results have been disappointing. Clearly, something more should be done.

In July, 1930, the Ministry of Health issued a Circular and Memorandum to Local Authorities, recommending that Local Authorities should, in connection with the local hospitals, undertake an investigation into Cancer cases seeking treatment at the hospitals, and the Ministry submitted a specimen enquiry

form for the purpose. In referring to the fields of investigation open to Local Authorities, the Ministry made the following remarks :—

" (*a*) In so far as reduction of mortality is concerned, " one signpost stands out clearly. The curability of the " disease, for those organs hitherto investigated by the " Committee, depends to a very important degree upon the " earliness with which it is detected and treated, but under " present conditions a high proportion of patients do not " present themselves for treatment until the opportunity " of permanent relief has passed.

" In many instances no doubt some of the delay which " occurs before appropriate treatment is applied is not " attributable to the patient. Some forms of Cancer give " rise to so few symptoms as to render them very difficult " to recognise during the " curable " stage, and here the " chief prospect of good lies in securing improvement of the " facilities for diagnosis. Some local authorities have already " taken tentative steps in this direction by the organisation " of specialized services.

" In other cases, however, especially in such organs as " the breast, uterus, mouth, skin and rectum, an abnormality " usually gives rise to some obvious sign or symptom readily " noticeable by the patient. In such cases the reasons for " delay, which may be physiological, psychical, economic or " social, offer a wide field for inquiry. More accurate appre- " ciation of the factors influencing patients in this respect " may be expected to bring to light ways in which this fatal " delay can be reduced or eliminated. Investigations " necessary to elucidate the subject, and the action necessary " for its remedy, are matters falling naturally within the " province of local authorities where progress would be " expedited by their co-operation.

" (*b*) The other side of the problem from the standpoint " of local authorities is the relief of suffering for those who, " for various reasons such as delay in obtaining treatment, " recurrence after treatment, and, in some instances, inherent " malignancy of the disease, have reached a stage beyond " the possibility of cure. The home conditions of the patients " in regard to treatment and nursing, the desirability, either " for themselves, or for the sake of their relatives, or both, " of admission to hospital, the sufficiency or otherwise of " hospital accommodation, the means for palliative treatment

" and similar matters, call for investigation and such remedy
" as may be necessary and practicable."

The Ministry then suggested methods of investigation in which " put broadly, the aim would be to ascertain whether,
" and if so, in what ways, the environmental, economic,
" social, or other conditions of cancer patients affect their
" chances of cure or of relief from suffering, and generally to
" survey the local means for controlling the disease. The
" first step would be for the local authority to devise means
" for establishing contact with the patients. In the first
" instance, no doubt the field of inquiry will be limited to
" patients seeking treatment at the hospitals in the area."

The Clayton Hospital is the only hospital in Wakefield dealing with cancer cases at first hand, and accordingly the Corporation has approached the Hospital Board through the Joint Hospitals Consultative Committee, but up to the present no reply has been received. In my judgment it would be a great pity if the matter is left where it is. I entirely agree with the Ministry of Health that local inquiries on the lines they suggest, carried out, as all such inquiries should be carried out, in a tactful and considerate manner, would supply most useful information and very probably would suggest further lines of action. In any case, the mere focussing of attention on the subject would itself have an educative influence and might be the means of bringing more and more cases to the doctor in the early stages. At present, there is, however, a real difficulty in getting such inquiries carried out. The doctors, many of whom would be quite willing to help, feel that it would be a breach of professional confidence to give the information asked on the inquiry form. The solution of this difficulty is to make Cancer, and other forms of malignant disease, compulsorily notifiable, and indeed, this step might be recommended on other grounds as well. I am quite aware that certain objections will be raised to the notification of Cancer, and serious as some of these objections will appear, I am convinced that this is a matter, in which the object sought will fully justify the means.

Tuberculosis.

The mortality from Tuberculosis continues to decline, but the decline is due to the Pulmonary and not to the Non-Pulmonary disease. The 1930 death rate from Pulmonary Tuberculosis is the lowest on record for the City. It is only one-third of what it was thirty years ago, and one-half of what it was 15 years ago. On the other hand, the mortality from

Non-Pulmonary Tuberculosis shows no improvement. The 1930 death rate was the same as the previous year, and is above the average for the previous 10 years. The subject is further discussed in the Tuberculosis Section of the Report.

Infantile Mortality.

Like Phthisis, the infantile mortality is also the lowest on record for the City, and is below the average for the whole country. It is also satisfactory to note that the deaths of children under 2 years of age from Gastro-enteritis have been substantially reduced.

Maternal Mortality.

Although the maternal mortality is not so high as in the previous year, it still remains too high and is above the rate for the whole country. In compliance with the request of the Ministry of Health Committee on Maternal Mortality, all the deaths were carefully investigated and reports sent to the Committee. These inquiries show that it is often extraordinarily difficult to say how an individual death could have been prevented, but at the same time, there can be little doubt that the mortality amongst those expectant mothers who avail themselves of proper and regular antenatal supervision, and have proper conditions for their confinement, is small compared with the general mortality.

New Housing Estate Statistics.

In my last two Reports I gave certain statistics with regard to the Portobello Housing Estate, which is the only completed estate of sufficient size to make the figures significant. In 1930, on this estate, the birth rate was 21·7 (18·5 in the whole City), the death rate 10·1 (13·2 in the whole City), the infantile mortality 53 (58 in the whole City), and the tuberculosis mortality 0·77 (0·92 in the whole City).

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. (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.B., 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 Housing Regulations. Inspector of Canal Boats.

Name.	Qualifications.	Office held.
James T. Briggs ..	Certificates of Royal Sanitary Institute for (1) Inspector of Nuisances and (2) Inspector of Meat and other Foods. Certificate of Royal Sanitary Institute in Sanitary Science.	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.	Ditto.
Harold F. Jowett ..	Certificates of Royal Sanitary Institute for (1) Sanitary Inspectors. (2) Inspector of Meat and other Foods. Certificate of Company of Plumbers.	Ditto.
William Dawson ..	Certificates of Royal Sanitary Institute for (1) Sanitary Inspectors. and (2) Inspector of Meat and other Foods. Certificate of the Company of Plumbers.	Ditto.
Robert Clarkson ..	—	Clerk and Assistant to the Senior Sanitary Inspector.
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 Institute for Health Visitors.	Health Visitor. School Nurse. Tuberculosis Nurse. Superintendent, Alverthorpe Child Welfare Centre.
Winifred Wilson ..	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 (late Market Street, now held at Principal 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 (formerly Homestead Centre, now held at the 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.
Mary T. Kelly ..	—	Clerk and Assistant at Principal Child Welfare Centre.
A. J. Peck	Trained Fever Nurse ..	Matron of City Fever Hospital.
Mary F. Cockin ..	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 office staff consists of William V. Morris (Chief Clerk and Vaccination Officer), Beatrice Lake (Clerk for Maternity and Child Welfare, part-time, School Medical Service), Herbert W. Tate (School Medical Service Clerk), Ronald Shaw, and George O. Allen.

The Corporation also employs two Salaried District Midwives.

Mrs. E. R. Paver, Health Visitor, resigned in January, 1930, and was succeeded by Miss J. Gardner in March, 1930.

Mr. H. Parkinson, District Sanitary Inspector, resigned in July, 1930, and was succeeded by Mr. W. Dawson in August, 1930.

Professional Nursing in the Home.

(*a*) **General.**

This is chiefly provided by the local Nursing Association which employs three 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 1930, 16 midwives gave notice of intention to practice, including 5 at the Maternity Hospital, 3 at the County Hospital, and 2 at a Private Maternity Home.

National Health Insurance.

Since the administration of sanatorium benefit was transferred to the Public Health Authority, there has been very little association between the work of the Public Health Department, and the work of the National Health Insurance Committee. The Insurance Committee, however, has continued to show its interest in public health work by contributing to the expenses of the local Health Week.

Poor Law Medical Out-Relief.

The three District Medical Officers employed by the late Board of Guardians were transferred to the Corporation. They are as under :—

No. of District	Name of Medical Officer	Municipal Wards comprised in District
1	Dr. J. B. Lyle, Grove House, Kirkgate, Wakefield.	St. John's, Northgate, Eastmoor, Primrose Hill, Kirkgate, North Westgate (part), South Westgate (part).
2	Dr. S. Reader, Westgate End House, Wakefield.	Alverthorpe, Calder, North Westgate, South Westgate (Lupset portion).
3	Dr. D. Downie, May Bush, Belle Vue, Wakefield.	Belle Vue, Portobello, and Sandal.

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 Fertilizers is carried out by Mr. F. W. Richardson, F.I.C., of Bradford.

Legislation in Force.

In addition to the general public health legislation, the following local Acts provide powers relating to sanitary matters :—

(1) Wakefield Corporation Act, 1877.
Sections 44, 46, 53, 54, 55 in part, 57, 62, and 64, relating to streets and buildings and prohibiting back-to-back houses, are operative within the City.

(2) Wakefield Corporation Waterworks Act, 1880, empowered the Corporation to construct works to impound and use the waters of Rishworth Moors, on the Eastern side of the Pennine Chain. The powers of the Act have been extended and varied by several subsequent Acts.

(3) Wakefield Corporation Act, 1887.

This Act gives powers with respect to the notification of certain infectious diseases, and for preventing the spread of disease, but these have been superseded by later general legislation.

(4) Wakefield Corporation Act, 1924.

This Act gives powers with regard to waterworks, water supply and other matters, and also with regard to public health and sanitary matters. The public health provisions were fully set out in the annual report of 1924. In order to bring certain provisions of the Wakefield Corporation Act into conformity with the Public Health Act, 1925, the Minister of Health, by order, repealed the following Sections of the Local Act, namely, Sections 101, 103, 105, 109, 111, 112, 113, and 123.

The following Acts have been adopted :—

Infectious Diseases (Prevention) Act, 1890 (except Section 4, which is practically the same as Section 23 of the Wakefield Corporation Act, 1887).

Public Health Acts (Amendment) Act, 1890 (except Part 1).

Public Health Acts (Amendment) Act, 1907 (except Sections 18, 48, 78, 80, 82, 83, 92, and 94).

The following Byelaws relating to the public health are in force :—

(1) Decent conduct of persons using sanitary conveniences, 1896.
(2) Cleansing of footways and pavements and removal of house refuse, 1896.
(3) Nuisances, 1896.
(4) Common Lodging Houses, 1896.
(5) Nuisances in connection with the removal of offensive or noxious matter, 1896.
(6) Tents, Vans, Sheds and Similar Structures, 1906.
(7) Offensive Trades, 1914.
(8) Slaughterhouses, 1925.
(9) New Street and Buildings, 1926.
(10) Houses let in Lodgings, 1926.
(11) Municipal Slaughterhouses, 1926.
(12) Smoke Abatement, 1928.

HOSPITALS.

Fever Hospital in Park Lodge Lane.

This Hospital, used for the isolation of cases of Scarlet Fever, Diphtheria and Enteric Fever, contains 34 beds (30 beds on official floor area). The old part of the Hospital comprises an administrative block and 2 ward blocks, each with 2 wards, all brick buildings. During 1927, a temporary wooden block with 6 cubicle wards was built, as well as a wooden bungalow with three bedrooms and sitting room for the use of the nursing staff. The area of the site was also enlarged from half an acre to one and a half acres, by taking in additional land from the adjoining field belonging to the Corporation. These additions have considerably improved the Hospital, but there still remain many drawbacks described in previous Reports. The building of a new Hospital on a site acquired at Snapethorpe continues under consideration.

Smallpox Hospital, near Carr Gate.

This Hospital belongs to the Wakefield and District Smallpox Hospital Committee and contains 24 beds. It is used at present by the West Riding County Council as a Sanatorium. In the event of an outbreak of Smallpox, arrangements have been made for the first cases to be isolated at other Smallpox Hospitals in the neighbourhood.

Institutions for the Treatment of Tuberculosis.

Provision for the sanatorium treatment of suitable Pulmonary cases is made in connection with the Westmoreland Sanatorium, Meathop, near Grange-over-Sands. The Corporation rents 10 beds in this Institution, and has also arrangements for the admission of additional cases when required. There is no provision for the treatment of advanced cases other than that of the Poor Law. Children affected with Non-Pulmonary Tuberculosis are sent to the Yorkshire Children's Orthopaedic Hospital, Kirbymoorside, and to Heatherwood Hospital, Ascot.

Municipal Maternity Hospital.

The Municipal Maternity Hospital in Blenheim Road accommodates 12 patients, with 4 additional beds in an Isolation Ward. On account of the frequent overcrowding of the Hospital, the Corporation has now purchased Manygates House, Sandal, for the purpose of a larger Maternity Hospital, to take the place of the one in Blenheim Road.

Hospital Treatment of Children.

There is no special Children's Hospital in Wakefield, but the Corporation has an agreement with the Clayton Hospital for the admission of certain cases (*e.g.*, Ophthalmia Neonatorum).

HOSPITAL ACCOMMODATION.

The question of hospital accommodation for Wakefield patients was brought under special consideration through the Local Government Act, 1929. As required by the Act, a Joint Hospital Consultative Committee was established, comprising representatives of the Corporation and the Clayton Hospital, and in April, I submitted to this Committee a Report on the hospital accommodation of the City. Prior to making this Report, I issued a questionnaire on the subject to 18 medical practitioners in the City, and the views of the 10 doctors who replied were very helpful in preparing the Report, which is given below.

OBSERVATIONS OF THE MEDICAL OFFICER OF HEALTH ON THE HOSPITAL QUESTION.

We may best approach this subject by considering (1) the present hospital accommodation of Wakefield ; (2) its sufficiency and (3) methods by which deficiencies may be remedied.

1.—Present Hospital Accommodation.

The in-patient hospital accommodation of Wakefield (excluding that for mental diseases) is as follows :—

Hospital	Number of Beds				Number of Wakefield patients on 26-2-30
	Total	Male	Female	Children	
Clayton Hospital (Voluntary) ..	108*	48	40	20	51
County Hospital (Poor Law) ..	173	80	66	27	88
Fever Hospital (Municipal) ..	34	—	—	34	20
Maternity Hospital (Municipal) ..	12	—	12	—	16
Total ..	327	128	118	81	175

* Not including the extension now being made.

The above figures do not include Wakefield residents who are in Sanatoria and Orthopaedic Hospitals, etc., outside Wakefield. The municipal cases of this kind would number about 25. There are generally a few Wakefield patients in the Leeds General Infirmary and Leeds Hospital for Women and Children. In order to ascertain the actual number of Wakefield persons being treated as in-patients in Wakefield Hospitals on one day, I was able, with the kind assistance of Dr. Thomson at the White Rose Hospital and Mr. Lancaster at the Clayton Hospital, to get the figures on the 26th February of this year which I give summarised above and in more detail below. These figures were obtained at a time of the year when the pressure on hospital beds is usually at its maximum but not, as it happened this year, when there was any great prevalence of epidemic disease.

WAKEFIELD PATIENTS IN THE CLAYTON HOSPITAL.

26th February, 1930.

	Total	Total Adults	Adults		Children 5 to 14		Children 0 to 5		Total Children 0 to 14
			Males	Females	Males	Females	Males	Females	
Surgical Cases ..	48	39	17	22	2	1	3	3	9
Medical Cases ..	3	2	1	1	1	—	—	—	1
Totals ..	51	41	18	23	3	1	3	3	10

Period of Stay of the above Patients.

Under 1 week	14	6—7 weeks	4
1—2 weeks	13	7—8 ,, ...	1
2—3 ,, ...	8	2—3 months	1
3—4 ,, ...	3	3—6 ,, ...	1
4—5 ,, ...	3	6—9 ,, ...	1
5—6 ,, ...	2		

WAKEFIELD PATIENTS IN THE WHITE ROSE HOSPITAL, WAKEFIELD, ON THE 26th February, 1930.

	Totals	Adults		Children 5 to 14		Children 0 to 5 years
		Males	Females	Males	Females	
Ordinary Medical Cases (Hospital)	22	10	5	1	2	4
Pulmonary Tuberculosis	3	—	3	—	—	—
Venereal Disease	2	2	—	—	—	—
Ordinary Surgical Cases (Hospital)	13	3	8	1	—	1
Non-Pulmonary Tuberculosis ..	5	2	1	—	2	—
Chronic and Incurable Medical Cases (Hospital) ..	6	2	3	—	1	—
Chronic and Incurable Surgical Cases (Hospital) ..	8	7	1	—	—	—
Chronic Cases (Not Hospital) ..	2	1	1	—	—	—
Senile Cases (excluding Dementia, not Hospital) ..	15	8	7	—	—	—
Senile Dementia ..	2	2	—	—	—	—
Other Mental Cases exluding Mental Defectives ..	3	2	1	—	—	—
*Mental Defectives	1	—	1	—	—	—
*Epileptics ..	2	1	—	—	1	—
Encephalitis Lethargica ..	2	1	1	—	—	—
*Antenatal Women	1	—	1	—	—	—
Lying-in Women	1	—	1	—	—	—
Totals ..	88	41	34	2	6	5

* There were additional cases of these classes in the Union House.

The accommodation in the Clayton Hospital is almost entirely used for surgical cases. An analysis of the 128 patients in the Hospital on the 26th February showed that there were only 7 purely medical cases amongst them, although there were a few cases that might have been classified as either medical or surgical (*e.g.*, cases of gastric ulcer) according to the method of treatment employed. The Annual Statistical Reports of the Hospital also show that the treatment of surgical cases is the predominant feature of in-patient treatment, and that medical cases bulk very small on the lists. For all practical purposes, the Clayton Hospital may therefore be regarded as a surgical hospital. The Clayton Hospital serves not only the City of Wakefield, but a population outside the City, which may possibly be double that of Wakefield itself, and the total population comparable to that of the old Wakefield Union.

The White Rose Hospital, or Poor Law Infirmary*, unlike the Clayton Hospital, caters almost entirely for medical cases. Out of the 88 Wakefield patients in the Hospital on the 26th February last, only 13 were of a surgical character comparable to those in the Clayton Hospital. There were 22 medical cases of the usual hospital type and the remainder comprised a heterogeneous collection of chronic and incurable cases, cases of senility pure and simple or senility combined with dementia, cases of epilepsy, mental deficiency and insanity (the last being under observation) and antenatal and confinement cases. The area served by the Hospital, namely, that of the old Wakefield Union, has an approximate population of 150,000, of which Wakefield represents about 55,000.

The Fever and Maternity Hospitals are both municipal institutions, but while the Fever Hospital serves the City only, the Maternity Hospital takes in, by agreement, patients from certain districts outside Wakefield. The diseases treated in the Fever Hospital are Scarlet Fever, Diphtheria and Enteric Fever, and very rarely, owing to limited accommodation, are other infectious diseases admitted. At the Maternity Hospital, both normal and abnormal cases are admitted and major operations are performed when necessary. The Municipal Antenatal Clinic is also conducted at the Maternity Hospital.

2.—Sufficiency of Hospital Accommodation.

The replies of the 10 Wakefield doctors to the questionnaire —and I should like to express my appreciation of the great pains which all these doctors took in making these returns so useful and suggestive, do not indicate that there is, on the

* Now known as the County Hospital.

whole, any serious shortage of hospital accommodation in the City. The subject appears, however, to require further consideration. With regard to accommodation for surgical cases, there seems little doubt but that the accommodation is fairly adequate. At the same time, there does not appear to be much margin, probably at times overcrowding, and a hospital which has to deal with accidents and emergencies should always have spare beds available. When beds are pressed for, there is always a tendency to premature discharge, which is not in the best interests of the patients. It is also a question whether certain surgical cases dealt with in the Out-Patient Department, *e.g.*, enlarged tonsils and adenoids, should not remain in the Hospital at least 24 hours after the operation. At any rate, this is the view of the leading authorities on the subject and if the practice was adopted, more in-patient accommodation would be required. With regard to accommodation for medical cases, it is difficult to accept the present accommodation as being adequate. We have seen that on the 26th February, there were less than 30 medical cases from Wakefield in both the Clayton Hospital and the White Rose Hospital, that is, medical cases of the general hospital type, and it seems unlikely that this number comprised all that were really in need of hospital treatment. The same remark would apply to children as there were only 15 children under treatment in both Hospitals on the 26th February and, of these, only 5 were medical cases. Speaking from my own experience, amongst infants and school children, I should say that the number of children in need of hospital treatment is a good deal more than this number. Another factor to be considered is the demand—which will be an increasing demand—for hospital investigation of obscure cases and provision should be made for this very important work, not only in the form of beds, but in the form of investigation facilities and personnel.

It is perhaps not possible to lay down any general rule as to the ratio of general hospital beds to the population, as this must be governed to some extent by local circumstances, *e.g.*, housing and social conditions generally, extent of sickness, local practice as to utilisation of hospitals, etc., but guidance may be obtained from the inquiries which have been made from time to time on the subject. The English Voluntary Hospital Commission Report stated that the beds in voluntary hospitals in England and Wales amounted to 1·3 per 1,000 of the population, which in Wakefield would mean 71 beds and the same Report suggested that the proper ratio should be 1·6 beds per 1,000 of the population which in Wakefield would mean 88

beds. The Hospital Services (Scotland) Committee's Report gave the beds in Scottish Voluntary Hospitals as 1·76 per 1,000 of the population, which in Wakefield would mean 97 beds, and suggested that the ratio should be increased to 2·3 per 1,000, which in Wakefield would mean 126 beds. Of course, these figures relate only to accommodation in voluntary hospitals, and do not include the accommodation in Poor Law and Municipal Hospitals. Having regard to all the circumstances, I am inclined to think that the general hospital accommodation of Wakefield should be 2·3 per 1,000, which means about 130 beds, and that these might be roughly divided into 65 surgical beds and 65 medical beds. These figures are intended to meet all cases of the general hospital type, including those that may be deemed Poor Law cases, but excluding cases of notifiable infectious diseases, tuberculosis, chronic and incurable disease, and obstetric cases. Taking the corresponding present accommodation as 86 (the figure ascertained on the 26th February) the additional accommodation required to come up to this standard would be about 40 beds.

With regard to accommodation for cases of infectious disease, the replies to the questionnaire would not reveal much shortage, but as a matter of fact, overcrowding occurs from time to time, and the diseases admitted are restricted to Scarlet Fever, Diphtheria and Enteric Fever. My own view is that the scope of hospital treatment should be extended to all notifiable infectious diseases where the home circumstances and nursing facilities are unsatisfactory.

The accommodation for obstetric cases at the Maternity Hospital is also inadequate to present demands and overcrowding is frequent.

With regard to cases of tuberculous disease, it may be said that the Corporation has made sufficient provision for early and curable cases of pulmonary tuberculosis at Meathop Sanatorium, Westmorland, and that also the provision for non-pulmonary cases of tuberculosis is also adequate. On the other hand, there is practically no hospital accommodation for advanced and incurable cases of tuberculosis other than that of the Poor Law Hospital, and this cannot be considered quite satisfactory.

With regard to Convalescent Homes—though perhaps these do not come within the terms of reference—the replies to the questionnaire are rather emphatic about the need of further convalescent home provision, particularly for women and children. The bulk of existing convalescent home accommodation appears to be for men.

Methods of improving any Deficiencies in Hospital Accommodation.

The foregoing section has suggested certain deficiencies in the local hospital provision. It now remains to consider how these deficiencies can be met, and in putting before you some observations on this aspect of the subject, I wish to say that these are my own personal opinions, and are not to be taken as the opinions of the Corporation. Clearly the Corporation will have to decide on its own policy in this matter, and for the present it is for you to consider the pros and cons and advise both the Corporation and the Clayton Hospital Board as eventually you may think fit. It might however, be useful if, for purposes of discussion, I put before you a few remarks on the subject, without in any way suggesting that there are not other and possibly better ways of dealing with the problem. In any event, the problem, admittedly difficult and complicated, will not be solved in a day or a year, but may take many years to work itself out to a satisfactory issue.

(1) General Hospital Accommodation.

Such accommodation should provide for the in-patient treatment of surgical and medical cases of an acute and sub-acute character, requiring active treatment and skilled nursing, and also for cases requiring special investigation with a view to diagnosis and treatment. Complicated and difficult obstetric cases, as well as gynaecological cases generally, should be included, and there should be adequate provision for children in separate wards. Normal obstetric cases might also be included in this group. In my opinion, where the population to be served does not exceed 250,000, the best plan is to concentrate the general hospital accommodation in one institution. In a very large town or district it may be preferable to establish, in addition to a general hospital, special hospitals for particular classes of patients, *e.g.*, for children, for gynaecological cases, for obstetric cases, for eyes, ears and throats, etc., because the size of the town or district may justify special hospitals as efficient and economic units. In a town of the size of Wakefield, or even in a larger population such as that served by the Clayton Hospital or the White Rose Hospital, it is not possible to do this, and there is every advantage in combining all the general hospital services in one institution. It therefore seems to me that the ideal plan for Wakefield is to look to the Clayton Hospital for the provision of all the general hospital services required. As far as this particular category of cases is concerned, there is no difference in the cases treated in the Clayton Hospital and the cases treated in the

Poor Law Infirmary. It is often a matter of chance which particular hospital the patient goes into. Of course, if a patient belongs to a family receiving poor law relief, he will naturally go into the Poor Law Infirmary, but there are cases admitted to the Poor Law Infirmary which might just as well have been admitted to the Clayton Hospital and *vice versa*. There is much to be said for the view that all these cases should be treated in the local voluntary hospital, and it so happens that the Corporation is free to consider this point of view. By agreeing to the transfer of the local poor law institutions to the West Riding County Council with an agreement for the treatment of its own cases in these institutions for a period of five years, the Corporation is at liberty to consider alternative methods of providing for the various groups of persons, including the sick, for whom it is responsible. With regard to the sick there are definite legal sanctions for the procedure here suggested. Section 131 of the Public Health Act, 1875 provides as follows :—

"Any local authority may provide for the use of the "inhabitants of their district, hospitals or temporary places "for the reception of the sick and for that purpose may— "themselves build such hospitals of reception, or contract "for the use of any such hospital or part of a hospital or "place of reception; or enter into any agreement with any "person having the management of any hospital, for the "reception of the sick inhabitants of their district, on payment "of such annual sum as may be agreed upon. Two or more "local authorities may combine in providing a common "hospital."

Section 64 of the Public Health Act, 1925, provides as follows :—

"The power of a local authority under Section one "hundred and thirty-one of the Public Health Act, 1875 "(which enables a local authority for the purpose of the "provision of hospital accommodation for their district, "among other things, to enter into agreement with persons "having the management of any hospital), shall include a "power to make reasonable subscriptions or donations to "a voluntary hospital or institution, if the local authority "are satisfied that by so doing they will maintain or extend "or increase the efficiency of hospital accommodation for "the sick inhabitants of their district.

"(2) The expenditure under this Section of a local "authority shall not exceed in any one year, an amount

" equal to that which would be produced by a rate of one " penny in the pound on the property liable to be assessed " for the purpose of the rate out of which such expenditure " is payable."

Section 75 (1) of the Local Government Act, 1929, allows an increase of 33-1/3 per cent.

Section 14 Sub-Section (2) of the Local Government Act, 1929, further provides as follows :—

" Section one hundred and thirty-one of the Public " Health Act, 1875, as so amended, shall in its application to " county councils and county borough councils have effect " as if the power to provide places for the reception of the " sick included power to provide places for the reception of " pregnant women."

Clearly a proposition of this nature is one of serious concern to the Clayton Hospital, because of the increased accommodation which it would necessitate, some additional 40 or even 60 beds, if obstetric cases were included. In my own mind I have no doubt whatever but that it would make for efficiency, that the patients would benefit, and that in the long run it would prove the most economical method of providing for all the sick of the City. From the point of view of a training school for nurses, the arrangement would be of great advantage to the Clayton Hospital.

(2) Accommodation for Notifiable Infectious Diseases, including advanced Cases of Pulmonary Tuberculosis.

Hospital provision for these cases is the direct responsibility of the Corporation and the matter is at present under consideration. The present hospital is inadequate in size and obsolete in type and the building of a new and larger hospital would appear to be necessary. In preparing its plans, the Corporation will no doubt have regard to the advisability of providing accommodation for all cases of notifiable infectious disease which require hospital treatment, and not restricting admission to cases of three diseases as has necessarily been the practice in the past. If this is done, general hospitals will be relieved of a certain number of cases which they have treated in the past, but the relief will not materially affect the accommodation figures referred to above. The present arrangement with the Clayton Hospital for the treatment of Venereal Diseases, including any necessary in-patient treatment, will no doubt be continued.

(3) The treatment of all acute and sub-acute cases of general illness at the Clayton Hospital, or any other general hospital would still leave for consideration the chronic, incurable and senile group of patients who constitute the bulk of the patients in the Poor Law Infirmary. These might continue as inmates of the Infirmary, whether it remains a Poor Law Institution or is transferred to the Public Health Authority, or, what in my opinion would be a better method, they may be provided for in places designated "homes" rather than "hospitals." What I suggest is something analagous to the Scattered Homes for Poor Law children. All that these cases require is general care, cleanliness and comfortable homely surroundings, and these they could obtain much better in homes than in hospitals, where the strict regime necessary for acute cases is unnecessary, and indeed undesirable for these classes. Incidentally the cost in homes would probably be less than that in hospitals. Cases of Senile Dementia, which are so often retained in Poor Law Infirmaries, should be treated in Mental Hospitals.

(4) Maternity cases at present dealt with in the Poor Law Infirmary should be dealt with by the Corporation either in a separate hospital or in the maternity wards of a general hospital.

(5) All mental defectives and epileptics requiring institutional care should be dealt with in special institutions provided for such cases. Some local provision, will, however, have to be made for mental cases under observation.

(6) The provision of adequate convalescent home accommodation is an important matter, but perhaps will have to be postponed till the general hospital arrangements are settled. I might mention that the Corporation has power to provide convalescent home treatment for mothers and their babies, but this power has never been exercised owing to the lack of accommodation. The Yorkshire Federation for Maternity and Child Welfare has, however, purchased a house on the East Coast which it proposes to use as a Convalescent Home for this particular class as soon as funds will allow, but the necessary money is, I understand, coming in very slowly.

Procedure for Admission to Hospitals.

The procedure for admission to the Poor Law Infirmary is strongly criticised by the doctors replying to the questionnaire, but this procedure is laid down definitely in the Poor Law Order, and generally it requires an order of the Public Assistance Committee or Relieving Officer, and in cases of emergency, of the Master of the Workhouse. From the point of view of the patient and the doctor, the procedure is certainly not a satisfactory one.

Out-Patient Treatment.

Although out-patient treatment, whether carried out in connection with hospitals or at dispensaries and municipal clinics has a close relation to the hospital question, it is perhaps not a matter which you can consider in detail at the present time. It is, however, a subject which this Committee might very well investigate, when the more pressing hospital questions are disposed of. I should like, however, to refer to the question in the questionnaire which referred to the provision of an out-patient department for early or doubtful mental diseases, or neuroses, and you will note that 5 doctors were definitely in favour of such a department being established at a local general hospital, and the Clayton Hospital would be the most suitable one. I referred to this matter in my last Annual Report in the following words :—(Vide 1929 Report).

Up to the present, the only outcome of the above Report has been a recommendation to the Clayton Hospital Board for the establishment of a Psychiatric Clinic, and I understand that this is likely to be done in the near future.

Hospital Accommodation for Mental Diseases.

Wakefield persons affected with mental diseases and requiring residential treatment are accommodated for the most part in the Wakefield Mental Hospital, belonging to the West Riding Mental Hospitals Board. The accommodation of this Hospital is 2,400 beds (1,200 for males, and 1,200 for females), and the number of Wakefield residents at present in the Institution is 132 (53 males and 79 females).

Maternity and Nursing Homes.

There was one Maternity Home and one Nursing Home on the Register at the end of the year. One small Nursing Home ceased to be used during 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.

Institutional Provision for Unmarried Mothers, Illegitimate Infants and Homeless Children.

There is no provision for the above other than that provided through the Poor Law.

Institutional Provision for the Care of Mental Defectives.

Wakefield has no local institution for mental defectives, but is a member of the South West Yorkshire Joint Board for Mental Deficiency (along with Dewsbury, Barnsley, Doncaster, Halifax, Huddersfield and Rotherham). This Board has purchased St. Catherine's House and Estate, near Doncaster, and it is hoped that the buildings will be open at an early date. It is, however, unlikely that adequate accommodation for all mental defectives requiring institutional care will be provided for some time. At the present time, Wakefield has 13 feeble-minded persons placed in 9 institutions.

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 now 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.

(*a*) Maternity and Child Welfare Centres.

Situation.	When open.	Doctor. Attending.	Health Visitor in charge.
Principal Child Welfare Centre, 15, Margaret Street.	Monday ..	Dr. Eeles ..	Miss Wilson.
	Tuesday ..	Dr. Eeles ..	Miss Staniforth
	Wednesday	Dr. Allardice	Miss Gardner.
	Thursday ..	Dr. Eeles ..	Miss Robertshaw.
Belle Vue Child Welfare Centre, Primitive Methodist Sunday School Rooms, Doncaster Road.	Tuesday ..	Dr. Allardice	Miss Thorp.

Situation.	When open.	Doctor Attending.	Health Visitor in charge.
Alverthorpe Child Welfare Centre, Wesleyan Sunday School Rooms, Batley Road, Alverthorpe.	Wednesday	Dr. Eeles ..	Miss Dearden.

Each Centre is open from 2 to 5 p.m. on the days stated.

(*b*) Ante-natal Clinic.

This is conducted by Dr. Eeles at the Maternity Hospital every Friday afternoon, from 2 p.m., and every Wednesday morning from 10 a.m.

(*c*) Post-natal Clinic.

This is conducted by Dr. Eeles at the Maternity Hospital every Wednesday morning.

(*d*) School Clinics.

An Inspection and Treatment Clinic for Minor Ailments is provided at the Town Hall Chambers, King Street, and is open daily. The Ophthalmic and Dental Clinics are held in the same building.

(*e*) Tuberculosis Dispensary.

Is situated in Almshouse Lane and is used jointly with the West Riding County Council. It is open on Monday and Thursday afternoons from 2 p.m., and on Thursday evenings from 6-30 p.m.

(*f*) Venereal Diseases Clinic.

The Clinic for Venereal Diseases at the Clayton Hospital is in the charge of Dr. Frew, who holds every week two sessions for men (Wednesday, 6 to 8 p.m., and Friday 10 to 12 a.m.), and two sessions for women and children (Monday 4 to 6 p.m., and Friday 3 to 5 p.m.). Provision is made at the Clinic for daily irrigation and other treatment when required.

(*g*) Orthopaedic Clinic.

An Orthopaedic Clinic, provided by the Education Committee, is carried on at the Principal Child Welfare Centre

in Margaret Street, and is also available for cases sent by the Health and Mental and Child Welfare Committees. Cases requiring special hospital treatment are sent to Kirbymoorside and Heatherwood Orthopaedic Hospitals. Orthopaedic treatment can also be obtained at the Clayton Hospital.

(*h*) Ultra-Violet Ray Clinic.

An Ultra-Violet Ray Clinic is provided by the Mental and Child Welfare Committee at the Principal Child Welfare Centre in Margaret Street and is also available for cases sent by the Education and Health Committees.

Local Government Act, 1929.

The above Act provided for the transfer of the duties of Boards of Guardians to the Councils of Counties and County Boroughs. The Wakefield Corporation has established its own Public Assistance Committee to deal with out-door relief, but agreed to the transfer of the Poor Law Institution, including the Workhouse Infirmary and Scattered Homes, to the West Riding County Council. An agreement has been made between the two authorities for the maintenance and treatment of Wakefield residents in these Institutions for a period of five years. All the Institutions are situated within the City boundary.

The duties of the late Board of Guardians relating to Vaccination and Infant Life Protection were transferred to the Corporation, and are now carried out by the Public Health Department.

Declarations were made by the Corporation that assistance otherwise than by way of Poor Relief be provided under the following Acts :—

Maternity and Child Welfare Act, 1918.
Blind Persons Act, 1920.
Education Act, 1921.

SANITARY CIRCUMSTANCES OF THE AREA.

Water Supply.

The water supply of Wakefield continues highly satisfactory as regards both quality and quantity. It is regularly tested, chemically and bacteriologically, and the reports are invariably satisfactory. Derived from a moorland gathering ground, it is naturally plumbo-solvent, but the alkaline treatment to which it is subjected, removes any danger of lead poisoning. Although, generally speaking, the supply is satisfactory in

quantity, the increasing demands for water, and the dangers of a prolonged drought have necessitated considerable extensions of the Waterworks, which are now in progress. The Waterworks Engineer (C. Clemesha Smith, Esq., M.I.C.E.) has kindly supplied me with the following information as to the present position of the extensions :—

"The first instalment of the Ryburn Scheme consisting "of an intake dam, pipe line, tunnel and filtration plant has "been completed and is now in use. The estimated total "yield of this instalment is 750,000 gallons per diem. The "filtration plant is giving highly satisfactory results.

"The Ryburn Dam, which constitutes the second "instalment of the scheme, will be substantially completed "within the coming twelve months, but it may not be "available for use until eighteen months or more have "elapsed. The dam which is about 120 feet high above the "foundations is now approximately 30 feet from the crest. "This instalment, when completed, will provide a further "half million gallons per day."

Rivers and Streams.

No special action during the year. These are under the general supervision of the West Riding Rivers Board.

Drainage and Sewerage.

The City Surveyor (L. Ives, Esq., M.I.M. & Cy.E.), gives me the following information :—

"So far as Sewerage Disposal is concerned, a good deal "of experimental work has been carried out in connection "with the digestion of sludge, and two units of about 500,000 "gallons each have been constructed on the main Sewerage "Works, as well as a further section of the alterations to the "precipitating tanks, which are being carried out with the "object of producing a better tank effluent."

Closet Accommodation.

See Senior Sanitary Inspector's Report.

Scavenging.

The particulars given in the 1925 Annual Report as regards scavenging, to a large extent still apply. There is, however, only one site for controlled tipping, viz. :—that in Park Lodge Lane, and this will soon be completed.

Under the Wakefield Corporation Act, 1924, 947 dry ashbins have now been provided by the Corporation.

SANITARY INSPECTION OF THE AREA.

By William Roberts, Senior Sanitary Inspector.

	Inspections.	*Re-Inspections.*
Number of Inspections made ..	13,676	1,178
,, ,, Complaints received ..	947	—
,, ,, Complaints confirmed ..	842	—
,, ,, Nuisances found	368	—
,, ,, Informal Notices served ..	855	—
,, ,, Statutory Notices served	191	—
,, ,, Notices outstanding at end of 1930	3	—
,, ,, Summons issued	1	—
,, ,, Premises where work has been carried out by Verbal Notice or without Notice	236	—
,, ,, Letters sent	53	—
,, ,, Matters referred to City Surveyor	143	—
,, ,, Matters referred to Waterworks Engineer ..	22	—

During the year it was necessary to institute legal proceedings against the occupier of a dwelling house for failure to comply with a Notice served on him under the Public Health Act, 1875, to abate a nuisance caused by overcrowding. The Magistrates made an Order to abate the overcrowding within 14 days, and the occupier concerned had 14/- costs to pay.

SUMMARY OF INSPECTION WORK.

	Inspections.	*Re-Inspections.*
Dwelling Houses.		
Ordinary	456	398
Re Infectious Diseases	224	20
Re Housing and Town Planning Acts	420	810
Water Closets	1,050	237
Privies and Tub Closets	43	8
Ashplaces and Ashbins	531	135
Urinals	181	22
Yards and Courts	119	25
Dangerous Structures	11	6

	Inspections.	*Re-Inspections.*
Drains.		
Inspections	481	143
Smoke Tests	38	—
Water Tests	—	—
Chemical Tests	26	—
Sewers, etc.		
Ventilation	5	1
Street Gullies	62	8
Factories and Workshops, etc.		
Factories	3	—
Workshops (excluding Bakehouses)	262	23
Workplaces (including Restaurant Kitchens and Stables)	8	4
Bakehouses (Factory)	22	7
Bakehouses (Non-Factory)	152	6
Outworkers	4	—
Miscellaneous.		
Canal Boats	30	—
Van Dwellings	31	13
Common Lodging Houses	122	14
Houses Let in Lodgings	149	46
Cowsheds	453	—
Dairies, Milkshops and Milkstores	200	—
Ice Cream Premises	80	5
Private Slaughterhouses	2,944	—
Do. (Special Notices)	149	—
Corporation Slaughterhouse	994	—
Borough Market	157	—
Cattle Market	3	—
Butchers' Shops	388	—
Fishmongers' Shops and Stalls	150	—
Cold Storage	—	—
Offensive Trade Premises (including Fish Frying Premises)	425	29
Piggeries	7	1
Smoke Observations	93	—
Wells	—	—
Meetings with Owners and Tradesmen	935	—
Special Visits	2,037	—
Visits under Rats and Mice Destruction Act	96	11

	Inspections.	*Re-Inspections.*
Miscellaneous (including Cesspools, Water Courses, Refuse Tips, etc.)	428	—
Visits to Houses of Entertainment	17	—
Schools	92	16
Streets and Back Roads	18	—

SUMMARY OF SANITARY IMPROVEMENTS CARRIED OUT UNDER PUBLIC HEALTH ACTS.

Dwelling Houses.

Cleansed or Limewashed	66
Overcrowding abated	17
Lighting improved	—
Ventilation improved	28
Roofs repaired	66
Eaves Spouts or Rain Water Fall Pipes repaired	218
External Walls, Chimneys repaired or re-pointed	66
Inside Walls, Ceilings, etc., repaired	57
New Floors laid or repaired	35
Doors repaired	7
Yards re-laid or repaired	28
Water Supply improved	7
New Water Supply laid on	1
Yards cleansed	10
Living Vans removed	—
Fireplaces, etc., repaired	48
Stairways repaired	7
Food Stores improved	1
Washing Accommodation improved	11

Drains.

Opened out for Inspection	8
Repaired	62
Re-constructed	76
Inspection Chambers constructed	29
Drains choked	1,389
Drains cleansed by Corporation Drain Cleanser	1,299
Drains cleansed by Owners	90
Drains or Drain Inlets inside buildings removed	1
Drains Ventilated	15
Disconnected from Sewer	—
Rain Water Fall Pipes disconnected from Drains or Sewers	2
New Drains provided	181

Accumulations Removed.

Manure	29
Other	16
Manure Pits provided	13

Animals, Fowls, etc.

Nuisances abated	22

Ashbins, Ashplaces, etc.

Movable Galvanised Iron Ashbins renewed ..	23
Movable Galvanised Iron Ashbins provided in lieu of Ashpits	39
Dry Ashplaces abolished	29
Dry Ashplaces repaired	75
Tub Closets or Privies with Ashpits repaired ..	—

In addition the following were referred to the City Surveyor :—

Movable Galvanised Iron Ashbins requiring renewal	121
Dry Ashpits requiring repairs	18

Urinals.

Urinals cleansed or improved	11
New Urinals provided	2
Repaired	19

Sinks.

New Sinks provided	54
Sink Waste Pipes trapped, renewed or repaired ..	75
Other Waste Pipes trapped, renewed or repaired ..	—

Piggeries.

Cleansed or improved	1
Swine removed	2

Cesspools.

Repaired or improved	—
Abolished	1

Water Closets.

Cleansed or Limewashed	88
Repaired	143
Additional provided	27
Re-constructed	20

SUMMARY OF SANITARY IMPROVEMENTS CARRIED OUT UNDER HOUSING ACTS.

Dwelling Houses.

Ventilation improved	225
Roofs repaired	127
Eaves Spouts or Rain Water Fall Pipes repaired	147
External Walls, Chimneys, etc., repaired or re-pointed	250
Inside Walls, Ceilings, etc., repaired	245
New Floors laid or repaired	262
Fireplaces, Ovens or Set Pots repaired	159
Washing Accommodation provided	50
Yards re-laid or repaired	54
Doors repaired	51
Food Stores provided or improved	6
Stairways repaired	28

Drains.

Repaired	16
Drains or Drain Inlets inside buildings removed	—
Rain Water Fall Pipes disconnected from Drains or Sewers	9

Sinks.

New Sinks provided	88
Sink Waste Pipes trapped, renewed or repaired	14
Other Waste Pipes trapped, renewed or repaired	—

Water Closets.

Additional provided	—
Repaired	87

Ashplaces.

Movable Galvanised Iron Ashbins renewed	4
Dry Ashpits repaired	36

LITTERING OF STREETS.

Arising out of my remarks in the Annual Report for 1929, the Corporation have decided during the year to cause to be put into operation in the City a Byelaw prohibiting the deposit of refuse, etc., in any highway or open space to which the public have access. The Byelaw came into force on the 2nd December last, and it is hoped that the same will be the means of securing some improvement in the cleanliness and appearance of the public streets and open spaces. It is also desired that the

Byelaw will give publicity to the need of co-operation and assistance on the part of the general public in putting a stop to the thoughtless practice of throwing dangerous and other material on to the footpaths and open spaces.

CLOSET ACCOMMODATION.

The Closet Accommodation in the City is as follows :—

Water Closets (including 368 Trough Closets)	14,119
Privies	64
Tub Closets	18
Number of Privy Closets converted into Water Closets during 1930	31
Number of additional Water Closets provided in connection with above	—
Number of Tub Closets converted into Water Closets during 1930	2
Number of additional Water Closets provided in connection with above	—
Number of Privy Closets in addition to above dispensed with	10
Number of Tub Closets in addition to above dispensed with	4
Total Privy Closets abolished	41
Total Tub Closets abolished	6
Total Trough Closets abolished	6

During 1930, 25 Privy Closets were converted into Water Closets under Section 39 of the Public Health Acts (Amendment) Act, 1907. The cost to the Corporation in carrying out these works was £202 7s. 7d. All the conversions were confined to privy closets.

NUMBER OF PRIVIES AND TUB CLOSETS AT THE END OF 1930.

Ward.	No. of Privy Buildings.	No. of Privy Closets.	No. of Privy Middens.	No. of Dwelling Houses Served.	If used for Workshops &c.	No. of Tub Closets.	No. of Dwelling Houses Served.	If used for Workshops &c.	Total No. of Privies and Tub Closets.
Alverthorpe	1	1	1	1	—	—	—	—	1
North Westgate ..	1	1	1	1	—	—	—	—	1
South Westgate ..	8	10	8	12	—	5	1	1	15
St. John's	—	—	—	—	—	—	—	—	—
Eastmoor	—	—	—	—	—	—	—	—	—
Northgate	—	—	—	—	—	2	2	—	2
Kirkgate	—	—	—	—	—	1	—	1	1
Primrose Hill ..	1	1	1	1	—	8	6	1	9
Calder	3	14	2	2	2	2	2	—	16
Belle Vue	13	22	13	21	1	—	—	—	22
Sandal	12	15	12	20	—	—	—	—	15
Total ..	39	64	38	58	3	18	11	3	82

It will be observed from the foregoing table that the number of privy and pail closets remaining on the 31st December last is—Privy Closets 64 (51 attached to dwellinghouses, and 13 used in connection with workshops) and Pail Closets 18 (10 attached to dwellinghouses and 8 used in connection with workshops).

During the year a careful survey was made of these conveniences, and it was ascertained that in 36 instances (29 Privies and 7 Pails) conversions could be satisfactorily carried out. In the remaining 46 conveniences (35 Privies and 11 Pails) no sewer is at present available, and owing to the properties being situate in isolated parts of the City the cost of providing a suitable sewer would be prohibitive. Added to this it is found that the class of property involved is of such a standard as not to warrant the provision of costly sewerage systems.

It is hoped by the end of 1931 that the remaining 29 Privy Closets and 7 Pail Closets will have been converted into Water Closets, and on completion of this work the whole of the sanitary conveniences in the City, with the exception of the 46 Closets previously referred to, will be on the water carriage system.

Whilst dealing with the question of closet conversions, I should like to draw attention to the need of carrying out conversions in the case of 368 Trough Closets at present attached to certain properties in the City. The type of closet in question is at times very objectionable, and it is found in many instances to be difficult to maintain a satisfactory service of drainage for same.

The cost of converting the type of convenience mentioned into pedestal water closets would not be as excessive as that in respect of privy closets, and in addition to effecting a good sanitary improvement a further advantage would result from a considerable saving in the cost of labour to the Corporation. At present it is necessary for the Cleansing Department to specially employ workmen to cleanse these conveniences daily.

CANAL BOATS.

The number of Boats on the Register is 9, and 30 Boats were inspected during the year. The Boats inspected were occupied by 50 males, 13 females, 7 children over 5 years of age and no children under 5 years of age.

The Boats were all found to be in a clean condition, and in 12 instances it was necessary to draw attention to contraventions of the Canal Boats Acts.

RAT REPRESSION.

It is satisfactory to find that quite a lot of steady persistent work in trapping appears to be carried out by the occupiers of premises infested by Rats.

During the year the District Inspectors have been called upon to deal with a number of infested premises, and in many instances considerable improvements have been carried out so as to render the buildings proof against infestation.

A special effort was made in the City during National Rat Week with the intention of securing unanimity of action by the occupiers of premises most likely to be infested with Rats.

In this way much useful work was accomplished, and it is found that the occupiers of rat infested premises are more observant to their obligations under the Rats and Mice Destruction Act.

It is, however, to be regretted that greater care is not exercised in the disposal of edible material by the occupiers of many premises. If all waste food, etc., was burnt instead of placing it in the ashpits and other parts of the premises, as we invariably find on investigation, I feel certain that rats would not be so frequently attracted to a large number of properties in the City.

COMMON LODGING HOUSES.

Number on Register at end of 1930.	For both Sexes.	For Men only.	Number of Persons registered for.
17	8	9	654

Defects.	Found.	Remedied.
Cleansing	17	17
Water Closets	7	7
Drainage	1	1
Washing Accommodation improved	2	2
Dirty Bedding	1	1
Other Dilapidations	4	4

No change has occurred in the accommodation at the houses, and they have all been kept in a satisfactory manner throughout the year.

HOUSES LET IN LODGINGS.

No. on Register at end of 1930	30
No. taken off during the year	14
No. put on during the year	Nil.
Total accommodation (adults) at end of year ..	530

Defects.	Found.	Remedied.
Cleansing	21	21
Dirty Bedding	1	1
Overcrowding	3	3
Occupied contrary to Byelaws ..	1	1
Ventilation improved	1	1
Water Closets	1	1
Drainage	1	1
Other Dilapidations	13	13

The Inspectors have made regular inspections of the premises during the year, and it was necessary to serve 42 notices under the Byelaws requiring the remedy of certain contraventions at these houses. All the defects referred to were remedied in a satisfactory manner.

It will be observed that a large number of houses have ceased to be used as houses let in lodgings during the year, and it would appear that this type of house is being less used than formerly. At the same time many houses have been found to be occupied as houses let in lodgings, and on account of their unsuitability have been discontinued through the intervention of the Health Department.

ATMOSPHERIC POLLUTION.

Emission of Smoke from Industrial Chimneys.—1930.

TABLE I.

No. of Boilers.	No. of Observations.	Dense Black Smoke.—Minutes in the Half-Hour.											
		Nil	½	1	2	3	4	5	5-10	10-15	15-20	20-25	25-30
1	32	23	1	1	2	1	1	1	1	1	—	—	—
2	18	13	—	1	2	1	—	—	—	1	—	—	—
3	14	11	1	2	—	—	—	—	—	—	—	—	—
4	13	5	—	3	1	—	1	—	1	2	—	—	—
5	6	5	—	—	1	—	—	—	—	—	—	—	—
6	—	—	—	—	—	—	—	—	—	—	—	—	—
7	10	4	—	2	1	—	1	1	1	—	—	—	—
Total	93	61	2	9	7	2	3	2	3	4	—	—	—

TABLE II.

Year.	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
1923	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	—
1924	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	—	-
1925	318	52·2	12·2	10·6	9·6	3·4	3·4	5·0	1·5	0·6	0·9	—	—	—	-
1926	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
1927	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	—	-
1928	532	77·1	6·0	5·2	2·4	2·8	0·9	2·6	1·8	0·3	0·5	—	—	—	-
1929	76	59·21	5·26	13·1	6·6	2·6	2·6	—	—	—	—	—	—	—	
1930	93	65·59	2·15	9·7	4·3	4·3	1·1	6·5	4·3	—	3·2	1·1	—	—	-

NOTE.—The smoke emission from chimneys of metallurgical furnaces are excluded from the above records. For the purposes of comparison the half minute records made in 1927, 1928, 1929, and 1930 have been doubled in Table II.

TABLE III.
MONTHLY RECORD OF SOOT DEPOSITS IN STANDARD GAUGES, 1930.

Month.	Tons of Total Solids per Square Mile.	
	Northgate Station.	Clarence Park Station.
January	24·26	10·36
February	20·62	7·27
March	24·79	11·87
April	21·33	10·86
May	21·76	8·95
June	17·53	9·12
July	27·52	10·66
August	26·39	8·99
September	18·96	9·79
October	19·29	10·39
November	16·72	6·71
December	22·22	7·17
Average per Month	21·78	9·34

During 1930 it was necessary to serve 7 Notices of Offence under the Public Health (Smoke Abatement) Act, 1926, regarding the emission of Black Smoke, and 2 Notices of Offence regarding the emission of Dense Smoke.

Remarks on Smoke Abatement.

The administration of the Smoke Abatement Act, 1926, was carried out very much on the same lines as those indicated in previous reports. An increased number of observations of Factory Chimneys were made by the District Sanitary Inspectors during 1930, and on the whole it is gratifying to find a steady improvement taking place year by year in connection with these Chimneys. Whilst it has to be admitted that still further improvement will have to be effected before it is possible for

us to achieve the desired result in bringing about and maintaining a reasonably clean atmosphere, it is, however, encouraging to find that the majority of those connected with the various industries in the City are always ready to give us their co-operation in assisting our energies in one of the most urgent questions confronting Public Health Authorities.

In dealing with the question of Smoke Abatement, we must not lose sight of the fact that before any appreciable improvement is attained in atmospheric pollution, the domestic chimney will have to be taken in hand. Undoubtedly a large proportion of the Smoke Nuisance existing in the City at the present time is mainly due to the domestic chimney, and a real need exists for a reduction in the domestic smoke output. I fully realise that the domestic smoke nuisance is perplexing and bristling with difficulties, and until the production of heat and light by smokeless fuels is placed upon an economic scale, the problem will, I am afraid, remain unsolved.

The Education Committee again provided facilities for Stokers to attend a course of lectures on Boiler Efficiency and Smoke Abatement at the Technical College during the year. Two courses, first and second year were given by Mr. E. Dickenson, M.I.M.E. A total of 26 students were enrolled, 18 in the first year, and 8 in the second year course. 23 Students sat for the examination, 12 for the first year course, 11 in the second year course. This consisted of a written and oral examination with a practical test in a boiler house. Certificates were given to 10 Students who passed, and these were also endorsed on behalf of the West Riding Regional Smoke Abatemant Committee.

MILK SUPPLY.

Registration of Cowkeepers, etc.

Cowkeepers and Milk Purveyors resident in the City	20
Milk Purveyors resident in the City	154
Milk Purveyors from Districts outside the City ..	27

3 Cowkeepers were added to the Register during 1930.
2 Cowkeepers discontinued business during 1930.
55 Milk Purveyors were added to the Register during 1930.
20 Milk Purveyors discontinued business during 1930.

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

Dairies.

Defects.	Found.	Remedied.
Cleansing	8	8
Vehicle Cleansed	1	1
Name on Churn	1	1
Floor	2	2
Roof	1	1

Cowsheds.

Defects.	Found.	Remedied.
Cleansing	14	14
Dirty Condition of Cows	15	15
Accumulation of Manure	2	2
Manure Receptacle	1	1
Re-construction of Floors	1	1
Dirty Milking Stool..	1	1

Cowsheds and Milk Supply.

A large amount of time has been devoted during the year to the methods of production and distribution of milk. The requirements of the Milk and Dairies Order, 1926, have been strictly enforced, and all our Cowsheds and Dairies now comply with the provisions set out in the Order. It will be observed that three Cowkeepers were added to the register and two were taken off. The number of milch cows remained stationary during the year, and the amount of milk sold in the City is about the same as in 1929.

It is found that the majority of producers and purveyors are always ready to take every precaution in exercising proper care in the handling and distribution of this important article of food, and this is strikingly borne out by the results of the milk samples subjected to the chemical test for cleanliness. During the year 60 samples were submitted for the purpose of ascertaining the amount of sediment contained in milk, and the results of the City Analyst show that in 57 samples the dirt found was under 1 part per 100,000 parts, and in three samples

under 2 parts per 100,000 parts. This reflects great credit on the part of those connected with the production of milk both inside and outside the City boundary. Many of our City Cowsheds are not constructed on modern lines, and the results obtained prove that the production of clean milk entirely depends on the methods adopted, and not on up-to-date buildings. Incidentally, I might mention that the results stated are the most satisfactory ever recorded in Wakefield.

Whilst much steady improvement has been effected during the past few years in the production and distribution of milk, it has to be admitted that many of our Cowsheds and Dairies are not yet quite up to the standard of modern requirements. In this connection I would draw attention to the need for a separate room in addition to the dairy for storage of milk, and the installation of modern cleansing equipment. In order to prevent contamination it is essential that every dairy should have two separate compartments, one for the cleansing of milk vessels and other utensils, and the other to be reserved for the storage of milk. The dairy should be well lighted and ventilated and be provided with an adequate supply of water and sterilizing outfit. Only one dairy in Wakefield is provided with means for carrying out proper sterilization, the old method of scalding is still adhered to, but this at its best cannot approach the efficiency of steam. Steam sterilizing outfits can be provided at comparatively little cost by utilizing a gas boiler or set pot furnace, and it is hoped that this matter will receive the serious consideration of all our milk producers and dairymen in the near future. The need for the adoption of better methods in cleansing utensils, etc. is becoming pressing on account of the growing tendency for milk to be distributed in bottles. I am also confident that much of the loss incurred by the souring of milk would be obviated by the adoption of efficient means of sterilization, and eventually would prove to be a sound economic proposition.

Another matter connected with the distribution of milk I should like to specially draw attention to is the proper covering at all times of vessels used for storage, etc. Some dairymen appear to be under the impression that it is an advantage for milk to be stored in ventilated vessels and unprotected from the atmosphere, but this is quite erroneous. The keeping quality of milk is improved if stored in covered unventilated receptacles. In the same way this equally applies to householders who I regret to say, in many instances, are extremely careless both as regards methods of storage and the exercise of proper cleanliness of receptacles used for milk. I am aware

that a large number of householders are not in possession of suitable food stores, but this should not interfere to any material extent in taking the necessary steps to prevent contamination in the house. It is disappointing to find that whilst Cowkeepers and Dairymen are compelled to exercise all due precautions with regard to milk, the householder in a large number of cases does not co-operate in these efforts to give the consumer a perfectly clean and wholesome milk supply.

The distribution of milk in sealed bottles shews signs of increasing in the City and many shopkeepers are retailing milk in this way, and as a result a considerable increase in the number of retail purveyors has taken place during 1930. The sale of Graded Milk also showed a tendency to increase during the year, the quantity distributed being more than double that of 1929.

Bacteriological Examination of Milk.

During 1930, 27 samples of Milk were taken in the City, and were bacteriologically examined at the County Hall Laboratory. Seven were samples of Milk produced at Cowsheds in Wakefield, and twenty of Milk produced in districts outside the City. The following table gives a summary of the results of the examinations as regards bacterial content :—

Total Bacteria in 1c.c.	Number of Samples.
Under 5,000	—
5,000 and under 10,000	1
10,000 and under 50,000	8
50,000 and under 100,000	5
100,000 and under 500,000	11
500,000 and under 1,000,000	1
1,000,000 and under 2,000,000	—
2,000,000 and under 3,000,000	—
8,160,000	1

One of the samples of Milk was sold as Grade " A " Tuberculin Tested. This sample contained B/coli in 1/100 c.c. and was, therefore, not up to the required standard.

Apart from the Graded Milk, 11 samples (3 produced in the City and 8 produced outside) came up to the bacterial standard of Grade " A " Milk.

28 samples of Milk were examined by animal inoculation for tuberculous infection, and 4 samples or 14·28 per cent. gave positive results as compared with 14·28 in 1929, nil in 1928, 19 per cent. in 1927 and 10·5 per cent. in 1926. The infected Milks were from cowsheds outside the City, and the authorities concerned were notified.

Sediment in Milk.

60 samples of Milk were tested for sediment by the City Analyst, with the following results :—

Parts per 100,000.	Total Samples.	Produced in City.	Produced outside.
0—1	57	18	39
1—2	3	2	1
Total ..	60	20	40

The above figures shew that 95 per cent. of the samples contained less than 1 part of sediment per 100,000, and that 100 per cent. contained less than 2 parts per 100,000.

Quality of Milk.

88 samples of New Milk were examined by the City Analyst for quality, and 12 (13·63 per cent.) were reported as adulterated. This percentage is higher than that for England and Wales in 1929—(7·8 per cent.). The following table gives the average composition of the samples excluding those which fell below the standard :—

Composition of Milk Samples taken during 1930.

Month.	Number of Samples.	Average Fat.	Average Non-fatty solids.
January	8	3·83	9·07
February	7	3·36	9·04
March	5	3·52	9·18
April	6	3·59	8·98
May	7	3·62	9·02
June	6	3·51	9·06

Month.	Number of Samples.	Average Fat.	Average Non-fatty solids.
July	6	4·05	9·10
August	5	3·44	8·88
September	8	3·73	8·88
October	10	3·72	9·11
November	8	3·59	8·98
December	2	3·62	8·92
Whole Year ..	78	3·63	9·02

The Milk (Special Designation) Order, 1923.

Number of Licences in operation during 1930 .. 9

One Licence is to retail Certified Milk, and in the remaining 8 cases the Licence is to retail Grade " A " Milk in the City.

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

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

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) ..	88	—	88	—	12	—	13·63
New Milk (Cleanliness)	60	—	60	—	—	—	—
Grade " A " Milk ..	2	—	2	—	—	—	—
Ammoniated Tincture of Quinine ..	1	1	—	—	—	—	—
Arrowroot	1	1	—	—	—	—	—
Baking Powder ..	1	1	—	—	—	—	—
Boracic Ointment ..	1	1	—	—	—	—	—
Butter	3	3	—	—	—	—	—
Coffee	1	1	—	—	—	—	—
Corn Flour	1	1	—	—	—	—	—
Candied Peel ..	1	1	—	—	—	—	—
Camphorated Oil ..	2	2	—	—	—	—	—
Carried forward ..	162	12	150	—	12	—	13.63

Nature of Article.	Total.	Number of Samples taken for Analysis.		Number found Adulterated.		Percentage Adulterated.	
		Informal.	Formal.	Informal.	Formal.	Informal.	Formal.
Brought forward ..	162	12	150	—	12	—	13·63
Condensed Milk ..	5	5	—	—	—	—	—
Cream	7	7	—	—	—	—	—
Cream Cheese ..	1	1	—	—	—	—	—
Cheshire Cheese ..	1	1	—	—	—	—	—
Cream Sponge Sandwich	2	2	—	2	—	100	—
Cream Horns ..	1	1	—	—	—	—	—
Cream of Tartar ..	1	1	—	—	—	—	—
Custard Powder ..	2	2	—	—	—	—	—
Dried Fruit	2	2	—	—	—	—	—
Dripping (Beef) ..	2	2	—	—	—	—	—
Dried Milk	2	2	—	—	—	—	—
Epsom Salts ..	1	1	—	—	—	—	—
Glauber Salts ..	1	1	—	—	—	—	—
Green Peas	1	1	—	—	—	—	—
Ground Ginger ..	1	1	—	—	—	—	—
Glycerine	1	1	—	—	—	—	—
Jam	2	2	—	—	—	—	—
Liquorice Powder ..	1	1	—	—	—	—	—
Lemonade Powder ..	1	1	—	—	—	—	—
Lime Juice Cordial ..	1	1	—	—	—	—	—
Lemon Cheese ..	1	1	—	—	—	—	—
Margarine	1	1	—	—	—	—	—
Mustard	1	1	—	—	—	—	—
Milk of Sulphur ..	1	1	—	—	—	—	—
Mincemeat	2	2	—	—	—	—	—
Potted Meat ..	1	1	—	—	—	—	—
Potted Salmon ..	1	1	—	—	—	—	—
Pepper (White) ..	1	1	—	—	—	—	—
Paregoric	2	2	—	—	—	—	—
Sweet Spirits of Nitre	1	1	—	—	—	—	—
Self-Raising Flour ..	1	1	—	—	—	—	—
Shredded Suet ..	1	1	—	—	—	—	—
Sponge Cake ..	1	1	—	—	—	—	—
Sausages (Beef) ..	3	3	—	—	—	—	—
Sausages (Pork) ..	2	2	—	—	—	—	—
Sultanas	1	1	—	—	—	—	—
Tea	4	4	—	—	—	—	—
Tea Cake Mixture ..	1	1	—	—	—	—	—
Treacle	1	1	—	—	—	—	—
Total ..	225	75	150	2	12	2·66	8·00

(b) Particulars of Adulterated Samples.

No.	Article.	Defects.	Action taken.
99	New Milk ..	8 per cent. deficiency of Milk Fat ..	"Appeal to Cow" sample No. 101. Vendor warned.
100	New Milk ..	Deficiency of Non-fatty Solids equal to 1·6 parts per cent. added water. 4 per cent. deficiency of Milk Fat.	Reported to Local Authority where milk was produced
123	New Milk ..	4·7 per cent. deficiency of Milk Fat ..	Follow up Sample No. 128 taken and found to be genuine
125	New Milk ..	22 per cent. deficiency of Milk Fat ..	Follow up Sample taken, No. 129.
129	New Milk ..	4 per cent. deficiency of Milk Fat ..	Follow up Sample taken, No. 19, and found to be genuine
133	New Milk ..	4 per cent. deficiency of Milk Fat ..	Follow up Sample taken, No. 32.
141	New Milk ..	4·7 per cent. deficiency of Milk Fat ..	Follow up Sample taken, No. 36, and found to be genuine
142	New Milk ..	1·3 per cent. deficiency of Milk Fat ..	Follow up Sample taken, No. 40, and found to be genuine
148	New Milk ..	·12 per cent. deficiency of Milk Fat ..	Follow up Sample taken, No. 58, and found to be genuine
32	New Milk ..	6 per cent. deficiency of Milk Fat ..	Follow up Sample taken, No. 35, and found to be genuine
39	Fresh Cream Sponge Sandwich	Empirical test showed Fat to be entirely butter-fat or re-constituted cream; no natural fresh cream present.	No action taken pending the decision of a High Court Case.
34	New Milk ..	·14 per cent. deficiency of Milk Fat ..	Follow up Sample taken, No. 119, and found to be genuine
50	Cream Sandwich.	"Cream" made by mixing margarine fat with dried skimmed milk, entirely artificial cream.	No action taken pending the decision of a High Court Case.
56	New Milk ..	Deficiency of Non-fatty Solids equal to ·94 per cent. of added water.	Follow up Sample taken, No. 141, and found to be genuine

ICE CREAM.

The premises used for the manufacture of Ice Cream have continued to receive close supervision by the District Inspectors. In many instances it is found that the conditions under which Ice Cream is made in the City fall short of a reasonable hygienic standard, but in practice we are unable to interfere in these cases owing to our powers of supervision in the matter being limited. The sale of the commodity has increased tremendously during the past few years, and the only means we possess of ascertaining the existence of premises used for making the foodstuff is by careful observation during systematic inspection work.

The need for increased legislation in order to make it possible to deal with all aspects of the trade is very desirable, and until this is accomplished it will be impossible for satisfactory supervision to be exercised over this popular article of food.

Slaughterhouses.

The following table shows particulars of all the private Slaughterhouses in the City at the end of 1930 :—

	In 1920.	In January, 1930.	In December, 1930.
Registered	9	8	8
Licensed	17	15	15
Total ..	26	23	23

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

The following defects were remedied at the Private Slaughterhouses during the year :—

Limewashing	3	Drains re-constructed	1
Receptacles for Offal ..	2	Accumulation removed	1

It has also been necessary to draw attention to the following infringements of the Public Health (Meat) Regulations, 1924 :—

Infringement.	Found.	Remedied.
Sheeting of Stall	3	3
Name on Stall	1	1
Cleansing of Butchers' Shops ..	3	3
Cleansing of Refrigerator	1	1
Gut Scraping in Private Slaughter-houses	1	1

During 1930 it was necessary to institute legal proceedings against a butcher for obstructing a Meat Inspector in the execution of his duty at the Public Abattoir. The case was proved and the defendant was fined £5 and had to pay 10/- costs or in default one month in prison.

Arising out of these proceedings the defendant was further charged with removing diseased meat from the Abattoir contrary to Byelaws Nos. 13 and 15, in connection with the management of the Public Abattoir. The defendant was fined £5 and 10/- costs in this case or one month in prison.

A slaughterman at a private Slaughterhouse in the City was prosecuted for failing to observe the requirements of Byelaw No. 6 as to Slaughterhouses, by not causing a sheep to be effectually stunned with a mechanically-operated instrument. A fine of 10/- was inflicted.

Apart from the above case the humane slaughter of animals continues to be carried out in a most satisfactory way.

Number of Animals Slaughtered in the City during 1930.

	Beasts.	Calves.	Pigs.	Sheep.	Horses.	Total.
Public Slaughter-house	3187	284	2385	5887	—	11743
Private Slaughter-houses	2294	205	3432	2791	—	8722
Total for Year ..	5481	489	5817	8678	—	20465

Condemnations of Unsound Food.

1,792	Meat	Weighing 9,463	Stones
4	Fish	,, 11	,,
1	Fruit..	,, 64	,,
1	Vegetables	,, 80	,,
1	Rabbits	,, 1	,,
		,, 9,619	,,

11 Tinned Goods .. .. 584 Tins.

Where Condemnations made.

1,277 Borough Slaughterhouse.	10 Warehouses.
496 Private Slaughterhouses	10 Borough Markets.
17 Shops	1 Cold Store.

Number of Carcases, etc., Condemned.
Condemnations due to Tuberculosis.

Animals.	Whole Carcases.		Part Carcases.	
	Boro. Slaughter-House.	Private Slaughter-house.	Boro. Slaughter-house.	Private Slaughter-house.
Cows	*141	7	†41	14
Heifers	1	1	1	—
Bullocks ..	2	—	3	—
Calves	—	1	—	—
Pigs	13	11	—	1
Total ..	157	20	45	15

* Including 22 animals slaughtered under the Tuberculosis Order, all from districts outside Wakefield.

† Including 2 animals slaughtered under the Tuberculosis Order, both from districts outside Wakefield.

Condemnations due to Other Defined Diseases.

Animals	Whole Carcases.		Part Carcases.	
	Boro. Slaughter-house.	Private Slaughter-house.	Boro. Slaughter-house.	Private Slaughter-house.
Cows	8	2	2	—
Heifers	1	—	—	—
Bullocks ..	—	—	—	—
Sheep	19	3	1	—
Calves	4	—	—	—
Pigs	10	3	2	—
Total ..	42	8	2	—

Condemnation 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 ..	368	548	148	184	421	406	102	123
Sheep ..	—	—	—	—	8	4	3	1
Calves ..	—	—	—	—	1	1	—	—
Pigs ..	171	136	160	142	59	19	40	10
Totals ..	539	684	308	326	489	430	145	134

	1929.	1930.
Percentage of Condemnations due to Tubercular Disease	62·4	60·49
Percentage of Bovines affected with Tubercular Disease	13·1	12·19
Percentage of Pigs affected with Tubercular Disease	7·9	6·12
Percentage of all animals slaughtered in the City affected with Disease	9·4	8·66
Percentage of all animals slaughtered in Private Slaughterhouses affected with Disease	7·6	5·68
Percentage of all animals slaughtered in the Public Slaughterhouse affected with Disease	10·9	10·87

All the diseased Carcases, etc., with five exceptions, were voluntarily surrendered, and it was not necessary to take any legal action.

Remarks on Food Inspection.

The inspection of meat and other food stuffs has taken up a considerable amount of the District Sanitary Inspectors' time, and this will be fully appreciated by the amount of unsound food it has been necessary to deal with during the year. The number of animals slaughtered in the City during 1930 again showed a decline to the extent of 1,363 Carcases, and this number is evenly distributed between the Public and Private Slaughterhouses. The reduction is mainly accounted for in the greater quantity of imported meat from abroad now being sold in the City.

The Corporation Slaughterhouse is used as a centre for a large outside radius for the slaughter of animals by wholesale, and also in connection with animals dealt with under the Tuberculosis Order from the County Area.

The percentage of animals found to be affected with disease during the year is slightly less than in 1929, and the figure for condemnation due to Tubercular Disease is also less than in the previous year.

It is satisfactory to record that very few complaints have been received as to the sale of unsound and unwholesome food, and this speaks well for the standard and quality of the food sold in the City. Apart from slaughterhouses there are probably some 544 shops and places in the City where food is prepared for sale or exposed for sale, and most of these premises have received regular supervision throughout the year.

The Public Health Meat Regulations, 1924, have been strictly enforced, and it is satisfactory to find a gradual improvement in the standard of cleanliness in the shops of butchers and other food purveyors. It is, however, to be deprecated that many of our butchers still adhere to the practice of keeping their shop windows open, and in consequence the meat is exposed to the risk of contamination from the atmosphere and other sources of pollution. The modern shop with the closed window undoubtedly presents an attractive and spotless appearance with the risk of contamination reduced to a minimum and it is hoped that in the near future all butchers' shops in the City will be provided with this type of window.

The exercise of sufficient care in the handling and transportation of meat and other food stuffs calls for improvement, and it has been necessary to give special attention to this matter at a number of centres of distribution. The careful handling and transportation of food stuffs is, I am afraid, somewhat neglected, and from the public health point of view, is becoming a serious question on account of the innumerable risks of contamination to which the food is subjected. The powers of the local authority is dealing with the methods of preparation, manufacture, storage, distribution and sale of food under hygienic conditions are at the present somewhat limited, and the need for new legislation to deal with same is very desirable.

Rag Flock Acts, 1911 and 1928.

The object of these Acts is to prohibit the sale or use, for the purpose of making any article of upholstery and bedding, of unclean flock manufactured from rags. A standard of purity is fixed by the Acts, and all rag flock must comply with this standard.

During the period under review, samples have been obtained from four shops in the City, and the Analyst's Report on each sample was satisfactory.

OFFENSIVE TRADES.

Offensive Trades on the Register at end of 1930.

Trade.	Number.
Tripe Boiling	5
Tallow Melting	1

Trade.	Number.
Gut Scraping	2
Rag and Bone Dealing	4
Fish Frying	63

Offensive Trades taken off Register during 1930 ..	**3**
Offensive Trades put on Register during 1930 ..	**6**

Defects.	Found.	Remedied.
Cleansing	20	20
Refuse Receptacles	12	12
Cleaning Room provided (Fish Fryer)	1	1
Yards Paved and Improved ..	3	3
New Cooking Pans	2	2
Drains	4	4
Accumulations	5	5
Structural	3	3

All the Offensive Trade premises have been regularly inspected during the year, and it has been found that the several businesses have been conducted in a satisfactory manner.

At several fish frying shops improvements have been effected with a view to complying with the requirements of the Byelaws in force in the City.

I am pleased to be able to state that the bulk of the fish frying shops are now fitted up on modern hygienic lines.

ANNUAL REPORT on the administration of the Factory and Workshop 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.	Number of		
	Inspections.	Written Notices.	Occupiers Prosecuted.
1	2	3	4
Factories (including Factory Laundries) ..	25	4	—
Workshops (including Workshop Laundries) ..	414	8	—
Workplaces (other than Outworkers' premises)	8	—	—
Total	447	12	—

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

Particulars.	Number of Defects.			Number of Offences in respect to which Prosecutions were Instituted.
	Found.	Remedied.	Referred to H.M. Inspector.	
1	2	3	4	5
Nuisances under the Public Health Acts :—				
Want of Cleanliness	28	28	—	—
Want of Ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of Drainage of floors	—	—	—	—
Other Nuisances	11	11	—	—
Sanitary accommodation. insufficient	1	1	—	—
Sanitary accommodation. unsuitable or defective	13	13	—	—
Sanitary accommodation. not separate for sexes	1	1	—	—
Offences under the Factory and Workshop Acts :—				
Illegal occupation of underground bakehouse (S. 101)	—	—	—	—
Other offences :—				
(Excluding offences relating to outwork and offences under the sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops, Transfer of Powers) Order, 1921.	—	—	—	—
Total	54	54	—	—

3.—Outwork in Unwholesome Premises, Section 108.

It has not been necessary to deal with any premises under this Section.

REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at the end of the Year.	Number.
Bakehouses (Factories)	10
Bakehouses (Workshops)	36
Dressmaking	6
Saddlery	3
Boot Repairing	11
Millinery	4
Upholstery	6
Tailoring	8
Joinery	7
Other Workshops	43
Total ..	134

During the year 8 Notices were received from H.M. Inspector of Factories regarding the following :—

Defects.	Found.	Remedied.
Insufficient Closet Accommodation	4	4
Insufficient Ventilation	2	2
Want of Cleanliness	2	2
Insufficient Washing Accommodation	1	1
Insufficient Cloakroom Accommodation	1	1

WILLIAM ROBERTS.

HOUSING.

(a) Statistics.

Number of New Houses erected during 1930.

Size of House according to number of Habitable Rooms.	Total.	Built by Corporation.	Built by Private Enterprise (Non-Subsidy).
3 roomed	—	—	—
4 ,, ...	160	160	—
5 ,, ...	18	9	9
6 ,, ...	25	—	25
7 ,, and over ..	2	—	2
Total ..	205	169	36

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

Alverthorpe	7	Eastmoor (Municipal)	59
North Westgate (Municipal) ..	110	Primrose Hill ..	5
South Westgate ..	7	Calder	7
St. John's	1	Sandal	9

Number of New Houses erected during the Year.

(*a*) Total (including numbers given separately under (*b*)	205
(i) By the Local Authority	169
(ii) By other Local Authorities	—
(iii) By other bodies and persons	36
(*b*) With State Assistance under the Housing Acts	169
(i) By the Local Authority—	
(*a*) For the purpose of Part II. of the Act of 1925..	—
(*b*) For the purpose of Part III. of the Act of 1925..	169
(*c*) For other purposes	—
(ii) By other bodies or persons	—

1.—Inspection of Dwelling Houses during the Year.

(1) Total number of Dwelling Houses inspected for housing defects (under Public Health and Housing Acts) and the number of Inspections made	1020
(2) Number of Dwelling Houses (included under sub-head (1) which were inspected and recorded under the Housing Consolidated Regulations, 1925, and the number of Inspections made	420
(3) Number of Dwelling Houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	12
(4) Number of Dwelling Houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	897

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

Number of defective Dwelling Houses rendered fit in consequence of informal action by the Local Authority or their Officers	851

3.—Action under Statutory Powers during the Year.

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

(1) Number of Dwelling Houses in respect of which notices were served requiring repairs	34
(2) Number of Dwelling Houses which were rendered fit after service of Formal Notices :—	
(*a*) By Owners	27
(*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	—

B.—Proceedings under Public Health Acts :—

(1) Number of Dwelling Houses in respect of which Notices were served requiring defects to be remedied	80

(2) Number of Dwelling Houses in which defects were remedied after service of Formal Notices :—

(*a*) By Owners	80
(*b*) By Local Authority in default of Owners	—

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

(1) Number of representations made with a view to the making of Closing Orders	31
(2) Number of Dwelling Houses in respect of which Closing Orders were made	31
(3) Number of Dwelling Houses in respect of which Closing Orders were determined, the Dwelling Houses having been rendered fit ..	3
(4) Number of Dwelling Houses in respect of which Demolition Orders were made ..	34
(5) Number of Dwelling Houses demolished in pursuance of Demolition Orders	11

4.—Number of Houses owned by the Local Authority 2,499

Number of Houses built by the Local Aurhority during the last two years, and held under :—

(1) Part III. of the Housing Act, 1925 ..	216
(2) Part II. of the Housing Act, 1925 ..	—
(3) Other powers	—

(b) Housing Conditions.

1. General Observations.

The outstanding sanitary problem in Wakefield is the slum problem. Other sanitary problems have been more or less solved. The water supply is satisfactory and is laid on to practically every house. Water carriage for house sewage removal is now almost universal, and improved methods for storage and removal of house refuse are being developed. But Wakefield, as an old town, has more than its share of old, worn out dwellings of an inherently bad type, which call for demolition, and, in addition, considerable areas of densely crowded back to back houses which should be improved.

It is estimated that out of the 14,510 dwellinghouses which, approximately, exist in the City, some 12,300 are occupied by working class families. These houses may be classified into

four groups, which correspond to some extent with the historic development of the town.

1. The first group includes the oldest and poorest type of house, and these are to be found mainly, but not entirely in the centre of the town, and covering the site of ancient Wakefield. Similar houses are to be found in outlying parts, and are the remains of old villages, which have from time to time become incorporated in the extending town. I estimate that all these houses are at least a hundred years old, and quite a number must be much older than that. Many of these houses crowd the congeries of narrow yards behind some of the principal streets, and also line the narrow streets that ramify through the insanitary areas. All these houses were built long before the building regulations came into force, and they contravene most of the building byelaws. They are nearly all devoid of through ventilation and many are built back to back. They lack air space and light. A large proportion are damp, and most of them are dilapidated. The Corporation has done a good deal to mitigate the evils of such dwellings by the introduction of water supply, the conversion of privies into water closets, by paving of yards, by scavenging, and constant sanitary supervision, but no amount of palliation can get rid of the inherent defects which render such houses wholly unfit for human beings to live in. According to modern standards, these houses were probably never really fit for human occupation, and now they are worn out and decayed beyond redemption. The Corporation has already cleared out some of these rookeries by its Westgate, Pincheon Street, and Volunteer Yard Improvement Schemes, and by the closure of many individual houses, but it is estimated that about 1,500 houses of this type remain to be dealt with. To give effect to the Housing Act of 1930, the Corporation has decided on a programme of building 500 houses during the next five years to re-house families from houses which will be closed and demolished under the powers of the Act.

2. The second group includes houses which are a stage above those in the first group, but still cannot be regarded as satisfactory. They are not so old as the first group, but all of them must be over 50 years of age, and built before 1877, the date of the Wakefield Improvement Act, which established building regulations, and prohibited the erection of rows of back to back houses. A large proportion of these houses are back to back, built on narrow streets, or around courts behind the streets. Generally speaking they are in a fair structural condition, but they are far too closely packed together, and

lack air space, light and ventilation, as well as many necessary domestic conveniences. Deep cellar kitchens is an objectionable feature of many houses in this group. It is estimated that there are about 2,500 houses of this kind. A large proportion of these houses would lend themselves to improvement rather than to clearance schemes. A great improvement would be achieved through the demolition of certain houses to open up the dense areas and enhance the air space and light, and the conversion of the remaining back to back houses into through houses. Something no doubt could be done under the new Housing Act, but the powers given in connection with Improvement Areas appear to be inadequate to accomplish all that is really required.

3. The third group may be described as the byelaw houses, all of which have been built during the last fifty years or so under the building regulations, which first came into force under the Wakefield Improvement Act of 1877, and which have been revised and extended from time to time. It is estimated that there are about 6,719 of these houses. Generally speaking these houses may be regarded as satisfactory, although all of them do not possess the amenities and domestic conveniences, *e.g.*, baths, which are to be found in so many of the houses built within recent years, and which are now coming to be regarded as necessities.

4. The fourth group includes the houses built on Garden City lines, 10 or 12 to the acre, within the last 10 years or so. The great feature of these houses is the generous allowance of air space around them, and, removed as they are from the congested centre of the town, the general salubrity of their situation. These houses have, almost wholly, been built by the Corporation, and the number of municipal dwellings completed at the end of 1930, including 80 built for sale, amounted to 2,579 (Elm Tree Street Estate 66, Rufford Street Estate 46, Portobello Estate 542, Lupset Estate 1,644, Batley Road Estate 146, Thornes Road Estate (occupier-owners) 80, and Eastmoor Estate 55). The further number of municipal houses authorised (1st January, 1931) is 535 (290 on the Lupset Estate and 245 on the Eastmoor Estate).

2. Sufficiency of Supply of Houses.

Judged by the long list of applicants for municipal houses (the waiting list contains 1,700 names), there is still a considerable demand for houses. No doubt many of the applicants are persons who already possess houses, but who are, for one reason or another, desirous of improving their housing accom-

modation. At the same time one seldom sees a working class house empty, and there appears to be plenty of demand both for municipal and private houses. The demand is now being met almost wholly by the Corporation, which built 169 houses during 1930, and is continuing to build on the Lupset and Eastmoor Estates. There now appears to be a distinct movement upwards in the scale of housing accommodation. Families in fairly good houses are more and more moving into houses with more conveniences, and these are being replaced by families whose accommodation is a step lower down.

Up to the present, there has been no difficulty in securing suitable sites for new houses.

3. Overcrowding.

We do not meet now with so many gross cases of overcrowding as we used to, but they still occur. For example during 1930, statutory notices to abate overcrowding were served in seven instances. Four of these were 2-roomed houses of the familiar local type, one down and one up, and the occupants were 9, 10, 10 and 11 respectively. In a 3-roomed house there were 10 occupants, and in two 5-roomed houses 13 in one and 20 people in the other. Taking the Registrar General's standard of two persons per room as marking the limit above which overcrowding is assumed to exist, there were 14 per cent. of the houses overcrowded at the time of the 1921 Census. It is difficult to estimate, but I should imagine that the 1931 Census figures, when they are published, will shew a smaller amount of overcrowding.

Our available data vary a good deal. For example, in connection with enquiries into Scarlet Fever, we find the overcrowded houses to be only 5 per cent. But Scarlet Fever has a predilection for the better class of house, where overcrowding is likely to be low. Housing surveys made last year gave 9 per cent. overcrowding in one lot of 419 houses of a mixed character, 16 per cent. in another lot of 414 houses of a distinctly poorer character, while out of 92 houses situated in an insanitary area 33 per cent. were overcrowded. The last group contained a considerable number of sub-let houses, and this probably accounts for the high percentage of overcrowding. As to the cause of overcrowding the principal one is inability to pay rent. Many of the worst cases we come across are those where two or more families are living together, and we are told that separately they cannot afford to pay the rent of the necessary houses. Incidentally, many are considered undesirable tenants, and not acceptable to house agents.

4. **Fitness of Houses.**

The general standard of housing has already been described. The following list of defects found in 420 houses inspected in 1930 under the Housing Regulations, will give some indication of their condition. Generally speaking the houses inspected were of a poor character, but were not situated in insanitary areas.

Dilapidated	33	With Water Closet defects	188
Damp	246	With Tub Closets or Privies	—
With defective Lighting	16	With Ashbin or Ashplace defects ..	173
With defective Ventilation	289	With Yard surface defects	125
Dirty	11	With nuisance from keeping of Animals or Poultry	2
Overcrowded	22	With other Nuisances or defects	377
With Drain and Sink defects	233		
No Washing accommodation ..	16		
Unsatisfactory Food Store	72		

Practically all houses in the City have water laid on, and very few are without water closets.

No special difficulties have been found in action under the Public Health Acts or under Section 3 of the Housing Act, 1925.

5. **Unhealthy Areas.**

There are localities in the City which may be properly described as unhealthy areas. They consist of old dwelling-houses, and the death rate amongst the inhabitants is much above that of the City generally. Some of these have already been represented by me as unhealthy areas, such as the Northgate, Bishopgate and Kirkgate areas. A number of the houses in the last area have recently been closed under the 1925 Housing Act, and it is proposed to start slum clearance action under the 1930 Housing Act in the Northgate area, which is about 13 acres in extent and contains over 400 houses. Districts like the congested parts of Primrose Hill would lend themselves to Improvement rather than General Clearance schemes.

6. **Byelaws relating to Houses, Houses let in lodgings, and to tents, vans and sheds.**

These byelaws are modern and generally adequate. As regards the last two mentioned byelaws it would, however,

be advantageous if a person was required to apply for the approval of the Corporation before sub-letting a house or using a caravan, &c., as a permanent place of abode. Fortunately we have not much trouble with vans, but we have a lot of sub-letting, which in some cases may go on for a considerable time without being discovered, and the requirements of the byelaws put into force.

PREVALENCE OF, AND CONTROL OVER INFECTIOUS DISEASES.

Notification of Infectious Diseases, 1930.

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.	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.	No. of Cases Removed to Hospital.
Smallpox	1										1															
Cholera																										
Plague																										
Diphtheria, including Membraneous Croup	58		1	2	3	3	30	9	3	6	1			4			1			2			1			
Erysipelas	28	1				1		1	1	4	7	10	3	1					1							
Scarlet Fever	151	3	6	5	8	21	67	17	14	7	3			1					1							13
Typhus Fever																										
Enteric Fever	13		1	1			1	1	3	2	2	1	1	2		1	1									
Relapsing Fever																										
Continued Fever																										
Puerperal Fever	5									4	1			1									1			
Puerperal Pyrexia	13								1	10	2															
Cerebro-Spinal Meningitis																										
Poliomyelitis	1								1																	
Ophthalmia Neonatorum	6	6																								
Primary Pneumonia	68	2	2	1	1	5	3	1	8	10	9	22	4	63	9	5	2	1		1	1	1	5	3	24	11	
Influenzal Pneumonia	3								1	1		1		2									1		1		
Dysentery	10								1	2	1	3	3														
Pulmonary Tuberculosis	54						1	1	4	23	6	19		32				1				2	9	11	9		
Non-Pulmonary Tuberculosis	29		1	1	2	2	9	4		6	1	3		18	3	5	1	2			1		2	2	2		
Measles	73	16	16	10	10	21								7	2	3	1	1									
Whooping Cough	50	7	7	13	13	10								5	3	2											
Acute Polio-Encephalitis														1									1				
Acute Encephalitis Lethargica	2										1	1		4										3	1		
Trench Fever																											
Food Poisoning, Pemphigus Neonatorum	1	1																									
Totals	566	36	34	33	37	63	111	34	37	75	35	60	11	141	17	16	6	5	2	3	2	3	19	20	37	11	2

Smallpox.

1 case of Smallpox was notified in 1930, as compared with 4 in the previous year. The particulars of the case are as follows :—

Male, aged 40 years, Colliery worker.

Onset—7th February, notified 12th February and removed to Dewsbury Smallpox Hospital on the 13th February. Stated he was vaccinated in infancy, but had no definite vaccinal scars. The man lived in a common lodging house and was employed at a Normanton Colliery. The usual precautions were taken, including vaccination of known contacts, and no further cases occurred

Diphtheria.

58 cases of Diphtheria were notified (22 males and 36 females) giving an attack rate of 1·02 as compared with 0·7 in 1929, and 0·92 the average for the preceding 10 years. There were 20 more cases than in 1929. The cases were spread over the City, although the largest numbers were in North Westgate (18) and Sandal Wards (12), the smallest number—nil, being in South Westgate Ward. 22 cases occurred in the first quarter of the year, 3 in the second, 9 in the third, and 24 in the fourth. 56 cases (97 per cent.) were removed to the Fever Hospital. There were 4 deaths from Diphtheria, giving a case mortality of 7 per cent., and a death rate of 0·07 per 1,000 of the population, as compared with 0·055 in 1929 and 0·04 the average for the preceding 10 years. The corresponding rate in England and Wales in 1930 was 0·09 and in the Great Towns, 0·10.

Scarlet Fever.

151 cases of Scarlet Fever were notified (73 males and 78 females) giving an attack rate of 2·6 per 1,000 as compared with 5·0 in 1929 and 3·03 the average for the preceding 10 years. There were 120 less cases than in 1929. The largest number of cases occurred in North Westgate Ward (61 cases) the remainder being distributed over the whole City, ranging from 18 cases in Sandal Ward, down to 2 cases in Eastmoor Ward. 53 cases occurred in the first quarter of the year, 30 in the second, 15 in the third, and 53 in the fourth. There was one death, giving a case mortality of 0·7 per cent., and a death rate of 0·02 per 1,000 of the population, as compared with 0·019 in 1929 and 0·014 the average for the preceding 10 years.

The corresponding death rate in England and Wales and also in the Great Towns during 1930 was 0·02. 133 (88 per cent.)

of the cases were removed to the Fever Hospital. There were 7 Return Cases (5·3 per cent.) related to 7 hospital patients (5·4 per cent. of discharges) discharged from the Hospital. There were also 8 Secondary Cases.

Scarlet Fever and Home Conditions.

Of the 126 ordinary dwellings invaded, 64 had less than 1 person per room, 56 between 1 and 2 persons per room, and 6 more than 2 persons per room. 4·8 per cent. of the houses were overcrowded according to the standard of the Registrar General, as compared with 4·2 in 1929.

Home Contacts.	Under 14 years—150 (Susceptibles—141).	
	Over 14 years—352 (Susceptibles—329).	

Amongst the 141 susceptible contacts under 14 years of age, there occurred 7 return cases, and 8 secondary cases.

No secondary or return cases occurred amongst the 329 susceptible contacts over 14 years of age.

Houses with Secondary Cases.	Under 1 person per room	.. —
	1—2 persons per room	.. 5 cases.
	Over 2 persons per room	.. 3 cases.
Houses with Return Cases.	Under 1 person per room	.. 1 case.
	1—2 persons per room	.. 5 cases.
	Over 2 persons per room	.. 1 case.

As in previous years, these figures do not indicate any relationship between overcrowding and the domiciliary spread of Scarlet Fever.

Enteric Fever.

There were 13 cases of Enteric Fever notified, giving an attack rate of 0·23 per 1,000 of the population, as compared with ·024 in 1929 and 0·16 the average for the preceding 10 years. 1 case was admitted to the County Hospital from outside the City, while suffering from the disease. 3 cases occurred in the Mental Hospital, and probably had been infected by a carrier case. The others were sporadic cases, and no source of infection could be ascertained. Of the two fatal cases, one, a child 18 months old, had died before the notification was received, and the other, a child aged 2½ years, died on the day following the notification. The following are particulars of the 13 cases :—

No.	Sex.	Age.	Home Address.	Where Isolated.	Bacteriological Report.	Date.
1	M.	16	George's Square, Warrengate.	Fever Hospital	B. Typhosus.	January.
2	F.	5	John Street, Belle Vue.	Do.	B. Para B. B. Para A.	January.
3	F.	16	Clifford View, Portobello.	At home ..	B. Typhosus.	January.
4	M.	2½	Milton Crescent, Lupset.	Do.	B. Typhosus. B. Para B. B. Para A.	February.
5	M.	52	Townley Road, Lupset.	Do.	B. Typhosus. B. Para B.	March.
6	M.	38	Park View, Flanshaw.	Fever Hospital	B. Typhosus. B. Para B.	June.
7	M.	1½	Leeds Road ..	At home ..	—	June.
8	F.	10	Westgate End ..	Fever Hospital	B. Para B.	July.
9	F.	16	County Hospital (Admitted from Crofton).	Do.	B. Typhosus. B. Para B. B. Para A.	July.
10	M.	26	Sandal	At home ..	B. Para B.	September.
11	F.	37	West Riding Mental Hospital	West Riding Mental Hospital.	B. Typhosus.	October.
12	F.	27	Do.	Do.	Do. ..	November.
13	F.	69	Do.	Do.	Do. ..	December.

Pneumonia.

71 cases of Pneumonia were notified (68 Primary and 3 Influenzal), 18 in the first quarter of the year, 15 in the second, 8 in the third, and 30 in the fourth quarter.

Of the notified cases, 18 died. There were 47 deaths from Pneumonia where the illness had not been notified.

Dysentery.

There were 10 cases of Dysentery notified, all patients in the West Riding Mental Hospital. There were no deaths.

Measles.

73 cases of Measles (all children under 5 years and all first cases in the household), were notified, as compared with 350 in 1929, and 61 in 1928. 31 were notified in the first quarter of the year, 27 in the second, 10 in the third, and 5 in the fourth quarter. In addition, 14 cases under 5 years were notified through the schools. 59 cases over 5 years were also notified through the schools.

There were 7 deaths from Measles, giving a death rate of 0·13 per 1,000 as compared with 0·24 in 1929, and 0·14 the average for the preceding 10 years. In all the cases, the immediate cause of death was Pneumonia. 2 of the deaths were in the first year of life, 3 were in their second, 1 in the third, and 1 was 3 years old.

Whooping Cough.

50 cases of Whooping Cough were notified (all children under 5 years of age and first cases in the household), as compared with 20 in 1929. 85 cases were reported from the schools. There were 5 deaths from Whooping Cough (3 under 1 year of age, and 2 aged 1 year each), giving a death rate of 0·09 per 1,000 as compared with 0·11 in 1929, and 0·09 the average for the preceding 10 years. The immediate causes of death were :— Pneumonia (2 cases), Bronchitis (2 cases), and Convulsions (1 case).

Pemphigus Neonatorum.

Owing to the prevalence of this disease during the past few years, the Corporation decided to make it a notifiable disease, and compulsory notification came into force on the 10th June, 1930. Only 1 case was notified after that date.

Other Notifiable Diseases.

2 cases of Encephalitis Lethargica were notified, both males aged 52 and 36 years respectively, and one of these died shortly after notification. The other recovered but with a certain amount of mental deterioration. There were 3 other deaths from that disease (2 men aged 56 and 36 and a woman aged 37 years) without previous notification.

There was one case of Acute Anterior Poliomyelitis notified, but no cases of Cerebro-Spinal Fever.

INFECTIOUS DISEASES HOSPITAL.

Disease.	No. of Cases remaining 1st Jan., 1930.	No. of Cases admitted 1930.	Total Cases treated 1930.	No. of Cases Discharged 1930.	No. of Deaths 1930.	Mortality percentage 1930.	No. of Cases remaining 31st Dec., 1930.
Scarlet Fever	17	133	150	130	1	0·7	19
Diphtheria ..	5	56	61	49	3	4·9	9
Enteric Fever	1	5	6	6	—	—	—
Measles ..	—	4	4	4	—	—	—
Erysipelas ..	—	3	3	2	1	33·3	—
Observation ..	—	3	3	1	1	33·3	1
Totals ..	23	204	227	192	6	2·7	29

During 1930, the number of admissions to the Hospital was 92 less than in the previous year, due to the decreased prevalence of Scarlet Fever. The maximum number of patients in the Hospital was 36 (February), the minimum 5 (June), and the average 18.

Scarlet Fever.

The maximum number of cases in the Hospital was 25 (February), the minimum 3 (June), and the average 12. The maximum period of stay was 109 days, the minimum 15 days, and the average 34 days. 5 cases were admitted on the first day of the disease, 43 on the second, 42 on the third, 21 on the 4th, 6 on the 5th, 1 on the 7th and 4 after the 7th day of the disease. In 5 cases the diagnosis was revised.

Complications occurred as follows :—

	On Admission.	After Admission.
Rhinitis	11 (8·86%)	7 (5·64%)
Otorrhoea	2 (1·6%)	8 (6·45%)
Cervical Adenitis	8 (6·45%)	14 (11·29%)
Tonsilitis	1 (0·8%)	2 (1·6%)
Rheumatism	—	8 (6·45%)
Acute Nephritis	—	2 (1·6%)
Bronchitis	2 (1·6%)	—
Pneumonia	—	1 (0·8%)
Toxic Haemorrhage	—	1 (0·8%)
Diphtheria	1 (0·8%)	—
Pyelitis	—	1 (0·8%)
Varicella	1 (0·8%)	3 (2·4%)

Judged by the complications, the type of Scarlet Fever was rather more severe than in the previous year. There was, however, only one fatal case. This was a case of the severe septic type, which developed toxic haemorrhage from the mucous membranes and skin, and ended with signs of Cerebral Haemorrhage. Three cases of cross infection occurred, all Chickenpox, contracted from a child admitted with Scarlet Fever whilst incubating Chickenpox.

Diphtheria.

The maximum number of cases was 10, the minimum nil, and the average 5. The maximum period of stay was 76 days, the minimum 16 days, and the average 33 days.

Complications occurred as follows :—

	On Admission.	After Admission.
Rhinitis	17 (14·6%)	1 (2·08%)
Otorrhoea	1 (2·08%)	—
Cervical Adenitis	5 (10·4%)	1 (2·08%)
Albuminuria	3 (6·20%)	5 (10·4%)
Paralysis	—	3 (6·2%)
Heart Complications	2 (4·2%)	1 (2·08%)
Serum Rashes	—	3 (6·2%)

2 cases were admitted on the 1st day of disease, 14 on the 2nd, 14 on the 3rd, 8 on the 4th, 7 on the 5th, 1 on the 6th, 3 on the 7th, and 7 after the 7th day of the disease. Of the 3 fatal cases, 1 was admitted on the 4th day, 1 on the 5th day, and 1 on the 6th day of the disease. 460,000 units of antitoxin were administered to 46 patients (82%), the maximum dose being 24,000 units, the minimum 4,000 units, and the average 10,000 units. 2 cases of cross infection occurred, both of Scarlet Fever.

Enteric Fever.

The maximum number of cases was 3. The maximum period of stay was 60 days, the minimum 23 days, and the average 40 days. All the cases were mild, and without complications.

Other Diseases.

These included 5 cases of Measles, 3 of Erysipelas, 1 of Pneumonia, 1 of Laryngitis and 1 of severe Ketosis. 1 case of Erysipelas died from Septic Meningitis, and the case of Pneumonia died 12 hours after admission.

Remarks on Infectious Diseases.

There is little out of the ordinary to report for 1930. We were fortunate to escape with one case of Smallpox, having regard to a considerable prevalence of the disease in localities near to the City. The epidemic of Scarlet Fever, which prevailed in the previous year, abated considerably during 1930, when the notifications dropped to about half. The mortality also remained low, and for many years past, the deaths have not exceeded 1 per annum. The damage done by Scarlet Fever is not, however, wholly to be measured by the death rate, for the aftermath of discharging ears, damaged kidneys and hearts, etc., are by no means negligible, and we had during 1930 an increased proportion of these complications. There was no unusual prevalence of Diphtheria and the attack rate of about 1 per 1,000 has remained fairly constant during the past 10 years, and so has the death rate. It is now 17 years since we experienced a really serious epidemic of Diphtheria and I should not be surprised if we have to meet another in the near future. The control of Diphtheria outbreaks is difficult and unsatisfactory, but in the light of modern knowledge and experience, its prevention could be achieved with comparative ease. The causal relationship of Diphtheria to defective drainage has now lost the importance that it was once supposed to hold, although in my opinion, it would be unwise to ignore the association altogether. The spread of the infection is, however, mainly from case to case, and not infrequently from cases showing no clinical

signs of the disease, and known as carriers. Carriers, even in non-epidemic times, are always numerous, though only a proportion of them harbour the specific micro-organisms in a virulent form, and capable of communicating the disease. It is possible to isolate cases of the disease, and prevent further spread from them, but to control carriers is a hopeless proposition, as I have learned from experience. In my judgment, we ought to turn our minds from administrative measures, which at best can only achieve a small amount of success, and consider what can be done to radically prevent the disease. With the accumulated evidence of the past 10 years, I think one is now justified in saying that it is just as easy to prevent Diphtheria by immunisation as it is to prevent Smallpox by vaccination, and, as Sir George Newman says in his last Annual Report to the Ministry of Health, "every parent should be given the opportunity of having his child protected." A considerable number of local authorities have now made arrangements for immunising children, whose parents desire it to be done, and I strongly recommend that such facilities be provided in Wakefield. The toxoid-antitoxin used in this country on thousands of cases, has proved thoroughly safe and satisfactory, and I am confident that, as parents became familiarised with the procedure and appreciated its advantages, the demands for immunisation would become very great. From the Corporation's point of view, it would be an economical proposition, for the cost of immunising all the children in the Wakefield schools would not be more than the cost of maintaining the number of Diphtheria cases we usually have in the Hospital during non-epidemic periods, and considerably less than that of hospital maintenance during an epidemic period. It is well, however, to remember that immunisation is not a ready method of checking an epidemic, as protection is only slowly acquired, and in some cases may take as long as six months. Sir George Newman, in his Report, gives the following illustrations of the attitude of the public to the matter :—

"After careful and prolonged consideration, the Urban "District Council of Heston and Isleworth decided to open a "public clinic for immunisation, as Diphtheria had been un- "usually prevalent during the year. It was not expected that "the response would be great, as local opinion appeared to be "against inoculations of any kind, at least in so far as could be "judged by the large number of children exempted from "vaccination. A meeting of parents was held in one of the "schools ; over 300 attended. The film ' The Risk of Diphtheria "Banished ' was shown, and the procedure explained. Within

" the next few weeks, 1,400 applications for treatment were " handed in to the Council, and it became necessary to open " five clinics a week instead of one. Meanwhile the ratepayers " of two other Wards petitioned the Council for meetings in " their areas, and requested that more clinics should be opened.

" In Bristol, within a few weeks of the offer of the Town " Council to provide immunisation, the number of children " attending the Clinics rose to over 1,000 a week—a response " that was quite unexpected."

The tendency for certain infectious diseases, particularly Scarlet Fever, to unduly affect new housing estates was referred to in my last Report. The same phenomenon is to be noted in 1930, when 47 cases of Scarlet Fever (31 per cent.) and 14 cases of Diphtheria (24 per cent.) occurred on the Lupset Estate. On the Portobello Estate, too, the Diphtheria attack rate was over the average for the City, but the Scarlet Fever attack rate was less than the average.

As we had the biennial epidemic of Measles, in 1929, the disease was not so prevalent in 1930, but still we had a considerable number of cases, and the death rate was not negligible. Whooping Cough on the other hand, was more prevalent than in the previous year, though the death rate was lower. The prevention of Measles and Whooping Cough is a very baffling problem, and the most we can do is to see that the patients get the best attention possible. The Health Visitors spend a good part of their time visiting and advising, and undoubtedly these diseases are taken more seriously than used to be the case. Hospital provision for many cases of Measles in poor homes would undoubtedly be beneficial.

Disinfection.

During 1930, the Hospital Porter carried out the following disinfecting work :—

No. of Houses disinfected	293	No. of Pillows disinfected	745
,, Rooms ,,	624	,, Bolsters ,,	439
,, Schools ,,	5	,, Curtains ,,	436
,, Classrooms ,,	11	,, Carpets ,,	326
,, times Steam Disinfector used ..	568	,, Rugs ,,	305
,, Beds disinfected	488	,, Pairs Boots ,,	335
,, Mattresses ,,	354	,, Men's Clothing ,,	778
,, Blankets ,,	829	,, Women's ,, ,,	1229
,, Sheets ,,	939	,, Children's Clothing ,,	1748
,, Counterpanes ,,	541	Miscellaneous	841

Pathological and Bacteriological Examinations.

During the year, 1,318 specimens from the City were examined at the County Bacteriological Laboratory :—

Hair (for Ringworm) ..		87	Urine	Organisms	113
Throat Swabs (Diphtheria)		295	Blood		1
Sputum	Tuberculoeis	249	Sputum		1
Pus		10	Pleural Fluid		1
Urine		3	Pus		5
Faeces		1	Cerebrospinal Fluid		8
Fluid		1			
Urine	Enteric Fever	20	Milk		29
Faeces		34	Faeces (Dysentery) ..		1
Blood		46	Film for B. Anthracis ..		1
			Miscellaneous		109

Blood (for Wasserman Re-action) ..	283
For detection of Spirochaetes ..	2
For detection of Gonococci	18
Total ..	1318

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 1929 and 1930 :—

Year 1929.						Year 1930.	
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.
1067	366	18	79	156	448	419	482

Excluding deaths and removals, 44 per cent. of the children were vaccinated.

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 1930, 54 cases of Pulmonary Tuberculosis (33 males and 21 females) and 29 cases of Non-pulmonary Tuberculosis (17 males and 12 females) were notified. In 1929, the corresponding numbers were 59 and 24. Of the 54 Pulmonary cases, 20 died before the end of the year. Of the 29 Non-pulmonary cases, 6 died before the end of the year.

The 29 Non-pulmonary cases comprised :—9 of Bones and Joints, 7 of Glands, 6 Abdominal, 4 of Skin, 2 of Cerebral Meninges and 1 of other organs.

New Cases and Mortality during 1930.

Age Periods.	New Cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0—1	—	—	—	—	—	—	3	—
1—5	—	—	5	1	1	—	3	5
5—10	—	1	4	5	—	—	—	—
10—15	1	—	2	2	—	—	1	—
15—20	2	2	—	—	—	2	—	—
20—25	3	1	2	2	2	1	—	—
25—35	8	11	—	2	4	2	1	1
35—45	5	1	1	—	10	1	1	1
45—55	7	2	2	—	3	1	1	—
55—65	7	3	1	—	2	3	1	—
65 and upwards ..	—	—	—	—	—	—	—	—
Totals ..	33	21	17	12	22	10	11	7

Of the 32 persons who died from Pulmonary Tuberculosis, 9 (28 per cent.) had previously received sanatorium treatment

and the condition of these on admission to the Sanatorium was as follows :—

Stadium I. and Minus T.B.	1	Stadium II. and Plus T.B.	4
Stadium I. and Plus T.B.	2	Stadium III. and Minus T.B.	—
Stadium II. and Minus T.B.	1	Stadium III. and Plus T.B.	1

It will be noted that only one of the 32 cases was in the really early stage on admission to the Sanatorium (that is, in Stadium I., without tubercle bacilli in the sputum) and this particular patient lived six years afterwards.

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

Under 1 month	5	12—18 months	1
1—3 months	7	18—24 months	1
3—6 months	5	Over 24 months	3
6—12 months	7	Not notified	4

Pulmonary Tuberculosis.

Cases left on the Register on the 31st December, 1930 :—

Year Notified.	Total.	Males.	Females	0-15 years.	15-25 years.	25-45 years.	Over 45 years.
1916 ..	1	—	1	—	—	1	—
1917 ..	5	1	4	1	2	1	1
1918 ..	—	—	—	—	—	—	—
1919 ..	3	2	1	—	—	3	—
1920 ..	6	3	3	—	1	5	—
1921 ..	1	1	—	1	—	—	—
1922 ..	1	1	—	—	1	—	—
1923 ..	1	1	—	—	1	—	—
1924 ..	5	3	2	1	1	3	—
1925 ..	7	4	3	1	2	3	1
1926 ..	15	7	8	5	2	4	4
1927 ..	15	9	6	4	6	3	2
1928 ..	25	12	13	6	8	9	2
1929 ..	16	11	5	2	5	6	3
1930 ..	29	19	10	1	6	12	10
Totals ..	130	74	56	22	35	50	23

Condition of Cases on 31st December, 1930.

Well and Working ..	54	Very ill, confined to house	6
Well, not Working ..	14	In Sanatorium	13
Not well, but Working	9	In County Hospital ..	6
Not well, not Working	16	In West Riding Mental Hospital	2
		Total ..	130

Non-Pulmonary Tuberculosis.

Cases left on the Register on 31st December, 1930 :—

Year Notified.	Total.	Males.	Females	0-15 years.	15-25 years.	25-45 years.	Over 45 years.
1913 ..	1	—	1	—	—	1	—
1914 ..	—	—	—	—	—	—	—
1915 ..	—	—	—	—	—	—	—
1916 ..	1	—	1	—	1	—	—
1917 ..	—	—	—	—	—	—	—
1918 ..	1	—	1	1	—	—	—
1919 ..	1	1	—	1	—	—	—
1920 ..	1	—	1	1	—	—	—
1921 ..	—	—	—	—	—	—	—
1922 ..	1	1	—	1	—	—	—
1923 ..	—	—	—	—	—	—	—
1924 ..	1	1	—	—	1	—	—
1925 ..	6	2	4	5	—	1	—
1926 ..	7	3	4	4	1	2	—
1927 ..	3	1	2	2	1	—	—
1928 ..	5	1	4	3	—	2	—
1929 ..	13	10	3	7	5	1	—
1930 ..	21	10	11	14	3	3	1
Totals ..	62	30	32	39	12	10	1

Condition of Cases, 31st December, 1930.

Well and Working ..	36	Very ill, confined to house	3
Well, not working ..	8	In Kirbymoorside Orthopaedic Hospital	4
Not well, Working ..	4	In Clayton Hospital ..	2
Not well, not Working	5		
		Total ..	62

TUBERCULOSIS DISPENSARY.

During 1930, 134 persons were referred to the Dispensary for examination, and of these, 43 (33 per cent.) were found to be tuberculous, 32 affected with Pulmonary, and 11 with Non-Pulmonary Disease.

In addition, 48 contacts were examined, of whom, 1 was found to be suffering from Pulmonary Tuberculosis, 1 from Non-Pulmonary, and 1 doubtful case remained undiagnosed at the end of the year.

Of the 33 definite Pulmonary cases, 10 (30 per cent.) were in the early stage (Stadium I.), 14 (43 per cent.) were in the moderately advanced stage (Stadium II.), and 9 (27 per cent.) were in the more advanced stage (Stadium III.).

Pulmonary Tuberculosis.

	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	3	—	8	1	6
Females	2	3	1	5	1	1
Total ..	4	6	1	13	2	7

The 12 Non-Pulmonary cases comprised disease of :—

Bones and Joints, 6; Abdomen, 2; Skin, 2; Cervical Glands, 2.

Most of the cases were sent by general medical practitioners, 12 were referred by school medical officers, 4 by maternity and child welfare medical officers, 3 by health visitors, 8 attended voluntarily, and 7 were transfers from other dispensaries.

Cases of Tuberculosis on the Dispensary Register at the end of 1930.

Pulmonary Cases.			*Non-Pulmonary Cases.*		
Adults	Males	55	Adults	Males	3
	Females	41		Females	9
Children	Males	13	Children	Males	14
	Females	6		Females	14

14 patients were X-Rayed at the Clayton Hospital, and 168 specimens of Sputum were sent to the Laboratory. Dental treatment was provided for two persons, in addition to the Dental Treatment given at the Sanatorium. The total attendances at the Dispensary were 1,586. The Tuberculosis Officer had 39 consultations with medical practitioners either at home or at the hospitals. In addition, the Tuberculosis Officer made 81 home visits, and the Tuberculosis Nurses made 890 home visits in connection with the investigation and supervision of dispensary patients. With regard to insured persons, 18 Forms (G.P. 36) were received, out of 39 Forms sent to panel practitioners.

The number of attendances of Non-Pulmonary cases at the Orthopaedic Clinic during the year was 112, and the number of attendances for Ultra-Violet Ray treatment was 277.

PULMONARY TUBERCULOSIS.—SANATORIUM TREATMENT.

Meathop Sanatorium, Grange-over-Sands.

Patients.	Total.			Insured.			Non-Insured.		
	Total	M.	F.	Total	M.	F.	Total	M.	F.
Remaining end of 1929 ..	15	8	7	10	7	3	5	1	4
Admitted 1930 ..	21	15	6	16	15	1	5	—	5
Total treated 1930 ..	36	23	13	26	22	4	10	1	9
Discharged during 1930..	21	10	11	13	9	4	8	1	7
Died in Sanatorium ..	1	1	—	1	1	—	—	—	—
Remaining end of 1930..	14	12	2	12	12	—	2	—	2

During 1930, 36 persons received sanatorium treatment, as compared with 51 in the previous year. Of these, 26 (72 per cent.) were insured persons.

Condition on Discharge.

Condition on Admission.		Condition on Discharge.		
		Quiescent.	Improved.	Not Improved.
Stadium I.	T.B. –	—	—	—
	T.B. +	6	2	—
Stadium II.	T.B. –	—	—	—
	T.B. +	1	4	7
Stadium III.	T.B. –	—	—	—
	T.B. +	—	—	—
	Totals ..	7	6	7

In addition to the above, 1 patient died in the Sanatorium, and 1 patient was transferred to the West Riding County Council on account of change of domicile, but actually remained in the Sanatorium. Taking all classes, the immediate results of treatment in the Sanatorium were that 35 per cent. were improved to the extent of apparent quiescence of the disease, 30 per cent. were definitely improved, but not to the same extent, and 35 per cent. were not improved. Taking the early cases by themselves, 75 per cent. were improved to the extent of apparent quiescence of the disease, and 25 per cent. were improved, but not to the same extent.

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

Up to 3 months	..	5	9—12 months	..	4
3—6 months ..	..	8	12—15 months	..	—
6—9 months ..	..	3	15—18 months	..	1

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. We have every reason to be satisfied with the arrangements, which have proved both economical and efficient.

NON-PULMONARY TUBERCULOSIS.

Institutional Treatment.

	Total	Heatherwood Hospital.			Kirbymoorside Hospital.		
		T.	M	F.	T.	M.	F.
No. of Children remaining at end of 1929	7	5	3	2	2	—	2
No. of Children admitted during 1930 ..	4	—	—	—	4	1	3
No. of Children discharged during 1930 ..	6	5	3	2	1	—	1
No. of Children died during 1930 ..	1	—	—	—	1	—	1
No. of Children remaining at end of 1930	4	—	—	—	4	1	3

The above are all children under 14 years of age. Of the 6 patients discharged, 1 was transferred to the West Riding County Council because the parents had left Wakefield, but the patient actually remained in the Hospital. The other 5 comprised 3 cases of spinal disease, 1 case of Hip disease, and 1 case of disease of the foot. They had been under treatment for periods varying from 1 year 9 months to 2 years 9 months, the average period being about 2 years 3 months. In all, the disease had become quiescent, leaving a varying amount of crippling, except in the case of the patient suffering from disease of the foot, who recovered without any crippling. The death was that of a child, admitted with a tuberculous knee, and who developed Tuberculous Meningitis.

Care Work for the Tuberculous.

The Social Service Council has continued its most useful care work for the Tuberculous, and this has included the provision of clothing for needy persons going to the Sanatorium.

REMARKS ON TUBERCULOSIS.

During the present century the mortality from Tuberculosis in Wakefield has declined to nearly half of what it was at the end of the last century. The decline has occurred both in Pulmonary and Non-Pulmonary Disease, but while the decline in Pulmonary Disease has been fairly progressive during the past thirty years, the Non-Pulmonary Tuberculosis has remained stationary during the past fifteen years.

Death Rates per 1,000 of the Population, from 1901 to 1930.

Period.	Pulmonary.	Non-Pulmonary.
5 years, 1901—1905	1·29	0·51
,, 1906—1910	1·25	0·47
,, 1911—1915	1·10	0·46
,, 1916—1920	1·33	0·29
,, 1921—1925	0·90	0·28
,, 1926—1930	0·73	0·30
Average ..	1·10	0·38

I think we may conclude that the administrative measures taken against Pulmonary Tuberculosis are on the right lines, though capable of being improved in detail. These measures comprise compulsory notification, supervision and advice, sanatorium, dispensary and domiciliary treatment, according to the needs of each case, extra nourishment when required, dental treatment, special house accommodation and disinfection. The whole system rests on notification, and unfortunately notification is often unduly delayed. During 1930 more than a third of the fatal cases had only been notified within three months of their death, and four were not notified at all. The reasons for delay are various. Sometimes the patient has not sought medical advice or the disease has not been diagnosed until it has been well advanced, or the doctor has been under the impression that the case has already been notified. The Tuberculosis Regulations (July, 1930) deals, *inter alia*, with the last point, and I give below a circular letter sent to Wakefield medical practitioners in December last, with regard to these Regulations and other matters connected with Tuberculosis.

"I am instructed by the Ministry of Health to draw your "attention to the new Regulations which come into force on "the 1st January, 1931, and which supersede the Regulations "previously in force. In so far as medical practitioners are

" concerned, the new Regulations do not materially alter the " previous requirements. Paragraph 5 of the Regulations " requires the notification by every practitioner within 48 " hours of first becoming aware that a patient is suffering from " Tuberculosis, whether pulmonary or non-pulmonary. He " must make and sign a notification of the case on the usual " form, supplied by this Department, and transmit this to the " Medical Officer of Health within which the place of residence " of the person is situate at the date of notification. In the " case of a patient admitted from outside the City to an " institution within the City, or merely staying temporarily in " Wakefield, whilst retaining his permanent residence outside " the City, the notification should be sent to the Medical Officer " of Health of the district where his usual residence is situate. " If the practitioner does not know the name and address of the " Medical Officer of Health concerned, the notification may be " sent to me, in order that I may forward it to the proper " quarter. The medical practitioner is not required to notify " if he has reasonable grounds for believing that the case has " already been notified to the Medical Officer of Health of the " district in which the patient is living. I would, however, " strongly urge the doctor to notify, unless he knows as a fact " that the case has already been notified. It is better to " duplicate notifications (for which the usual fee will be paid) " than allow a case to escape notification altogether. You " should also note that notification is required, even if the " patient has been previously notified whilst residing in the " district of another sanitary authority.

" The requirement as to notification does not impose any " duty or obligation upon medical practitioners acting as :—

" (*a*) medical officer of one of His Majesty's prisons or " of a Borstal institution, a certified reformatory " school, a certified industrial school, a state or " certified inebriate reformatory, or a criminal " lunatic asylum.

" (*b*) medical examiner of candidates for some office or " appointment.

" (*c*) medical examiner on behalf of an insurance " company of a person proposing to insure his life " at the risk of that company ;

" (*d*) medical examiner of the passengers and crew of an " emigrant ship ; or

" (*e*) certifying or appointed surgeon under the Factory " and Workshop Acts, 1901 to 1920.

"TUBERCULOSIS DISPENSARY.

"The Minister of Health, in his circular, draws attention "to the fact that throughout the country there are still a "considerable number of cases of Tuberculosis not notified, "and a still larger number not notified until the later stages "of the disease, and he requests medical officers of health to "remind medical practitioners of the facilities for diagnosis "provided at the Tuberculosis Dispensary, and to urge them "to make full use of such facilities. So far as Wakefield is "concerned, such a reminder is hardly necessary as the "Dispensary is well known to all the doctors, who largely avail "themselves of its services.

"It is also hardly necessary for me to urge the extreme "importance of early diagnosis, and to say that we will always "be glad to examine and advise on any case where there is any "doubt as to the diagnosis, and where Tuberculosis is one of "the possibilities. I should like, however, to refer to one point "in this connection. Medical practitioners frequently send "sputum specimens to the Bacteriological Laboratory and "receive negative reports. Doubtless many of these cases are "non-tuberculous, but all of them are not, and I would "respectfully suggest that in some of these cases, at any rate, "an examination of the patient at the Tuberculosis Dispensary "might be advantageous. I mention this point specially because "in making enquiries regarding certain advanced cases, it has "appeared that diagnosis in the earlier stage of the disease "had not been made because the sputum was then reported to "be negative. Even if tubercle bacilli are present in the sputum, "one or even several examinations may fail to reveal their "presence, and in the really early stage, when diagnosis would "be of the greatest possible advantage, both to the patient "and to the community, tubercle bacilli will be absent from "the sputum. Whilst a positive sputum clinches the diagnosis, "a negative sputum should not be regarded as necessarily "excluding the possibility of tuberculosis.

"I should also like to urge the importance of the medical "examination of contacts of cases of Tuberculosis, especially "of those who are in an infective condition. Doctors would "render a real service by examining contacts whenever possible, "or referring them to the Dispensary. Although only a small "proportion of all the contacts do attend the Dispensary for "examination, yet it is usual to find one or two cases of active "tuberculous disease during the course of a year. It has also "happened more than once in my experience that an examina-

" tion of the contacts of a notified case has revealed the presence " of an infective case, who may have been responsible for the " case actually notified, but who himself had never been notified.

" The Wakefield Tuberculosis Dispensary in Almshouse " Lane is open on Monday and Thursday afternoons, from two " to four o'clock, and on Thursday evenings from 6-30 to 7-30 " o'clock.

" REPORTS ON INSURED TUBERCULOUS PATIENTS.

" I desire also to take this opportunity of reminding medical " practitioners as to their obligations under the Medical Benefit " Regulations made under the National Health Insurance Act, " to furnish reports on insured persons to the Tuberculosis " Officer. These include reports on the case when first recognised " by the panel practitioner, at periodical intervals afterwards, " if continuing under domiciliary treatment, and when any " serious changes in the patient's condition arises. The " periodical report (on Form G.P. 36) should be made at intervals " not exceeding three months, and it is the practice in Wakefield " to send these Forms to medical practitioners every quarter. " Many doctors return the forms promptly, but other doctors " only return the forms occasionally, or ignore them altogether. " The Minister of Health has drawn attention to the paucity " of these returns in Wakefield, and has asked that the matter " should have attention. I should therefore be glad if all doctors " concerned would kindly return the forms sent them, duly " filled up, at their earliest convenience. It may happen some- " times that the doctor is not attending a person in respect of " whom a form is sent, and a notification to this effect would " be appreciated."

SANATORIUM TREATMENT.

Sanatorium treatment continues to be our main line of treatment, and provided patients are not too advanced to respond no other form of treatment gives such good results. The following table gives the condition of 420 patients who received sanatorium treatment for periods of two months or more during the years 1912—1929. 567 patients had been treated, but 147 of these had left the City or otherwise had been lost sight of.

Condition of Patients treated in Sanatoria for periods of Two Months and more, during the years 1912—1929, as reported at the end of 1930.

	No. Treated.	No. reported on.	Well.		Poorly.		Very Ill.		Dead.		Lost sight of.
			Number.	Percentage.	Number.	Percentage.	Number.	Percentage.	Number.	Percentage.	
STADIUM I.											
T.B. –	274	181	126	70	17	9	—	—	38	21	9
T.B.+	44	32	9	28	4	12	—	—	19	59	1
Total ..	318	213	135	63	21	10	—	—	57	27	10
STADIUM II.											
T.B. –	73	55	23	42	3	5	—	—	29	53	1
T.B.+	114	96	17	18	6	6	—	—	73	76	1
Total ..	187	151	40	26	9	6	—	—	102	68	3
STADIUM III.											
T.B. –	16	15	1	7	—	—	—	—	14	93	
T.B.+	46	41	1	2	1	2	—	—	39	95	
Total ..	62	56	2	4	1	2	—	—	53	94	
Total—All Stages ..	567	420	177	42	31	7	—	—	212	50	14

It is very clear from the above table that the results run pretty well parallel with the stage of the disease, and that the presence of the tubercle bacilli in the sputum increases the gravity of the prognosis.

Possibly better results might have been expected from Stadium I. cases than actually occurred, and better results would no doubt have occurred if more of these patients had been able to live under satisfactory conditions after discharge from the sanatorium. The special houses for ex-sanatorium patients which the Corporation have built on its new housing estates are now helping to meet the difficulty. Six of these houses were built at Portobello in 1926, and described in my report for that year, and in 1930, 20 more were built at Lupset. The results have exceeded expectations, and I think one can now definitely say that houses like these are essential to the after-care of sanatorium patients.

We still need hospital accommodation for advanced cases of phthisis, and such accommodation will be available when the new hospital at Snapethorpe is built.

With regard to non-pulmonary tuberculosis it will be remarked that the decline in the mortality has been arrested for some years, and has shown no sign of improvement during 1930. The reason for this seems fairly obvious. The chief infecting agency in this class of tuberculosis is cows' milk, and a considerable amount of the milk produced is tuberculous. In 1930, 14 per cent. of the Wakefield samples tested contained tuberculous infection. Whilst many practical difficulties stand in the way of producing tubercle free milk, consumers have a ready safeguard in boiling it. It is indeed a question whether all milk, produced from cows other than those who have passed the tuberculin test, should not be compulsorily pasteurised before being sold or consumed. The Ministry of Health has recently issued a Memorandum on Bovine Tuberculosis in Man, from which I extract the following Summary :—

" (1) The death rates for non-pulmonary forms of tuber-
" culosis in England and Wales, while still high, are decreasing,
" the rate for 1929 being less than half that for 1911. Loss
" of life and invalidity from this disease are, however, still
" matters for grave concern.

" (2) It is not possible at present to say what proportion
" of the cases of tuberculosis in human subjects are of bovine
" origin, but it seems probable that more than 1,000 children
" under 15 years die annually in England and Wales from
" infection of this origin.

" (3) It is practically certain that the great majority
" of human infections with the bovine tubercle bacillus are
" conveyed by means of cow's milk, and that infection usually
" occurs during the early years of life, when milk forms a
" large part of the diet and when susceptibility to infection
" is greatest.

" (4) The proportion of milch cows in this country
" infected with tuberculosis is not accurately known, but
" there is reason to believe that it is not less than 40 per cent.
" Cows are much more often affected than other bovines, and
" those suffering from tuberculous mastitis are responsible
" for most of the infection in human beings. The proportion
" of cows so affected has been variously estimated at 0·3 per
" cent. to 6 per cent. These estimates, however, apply to
" cases of " open " tuberculosis, and there are in addition

" many cows showing no clinical signs of tuberculosis, but " excreting the bacilli in their milk and faeces. The propor- " tion of cows actually yielding tuberculous milk is probably " between 1 per cent. and 2 per cent. Whether the incidence " of tuberculosis in bovines is increasing or decreasing is not " known.

" (5) Complete eradication by means of universal " tuberculin testing and the slaughter of all re-acting animals " is not practicable in this country, not only on account of " the expense and the dislocation of the milk supply which " would be involved in any attempt at such a measure, but " also because it is doubtful whether complete and permanent " eradication could be effected by this means. A less drastic " procedure, but one also involving the slaughter of infected " animals, is represented by the Ministry of Agriculture and " Fisheries' Tuberculosis Order of 1925. This Order aims " at the destruction of cattle in an advanced and more " infectious stage of the disease, and cannot be expected, " without the introduction of adjuvant measures, seriously " to affect the incidence of the disease in cattle or man.

" (6) The method of building up tuberculosis-free herds " has been discussed, and the financial and other difficulties " in the way of its success have been pointed out, but it is " to be hoped that a more extensive trial will be given to it " in this country.

" (7) Calmette and Guerin claim to be able to prevent " tuberculosis in young calves and babies by protecting them " with their vaccine, known as B.C.G. This claim has not " yet been established for babies, but there is evidence that " a certain degree of immunity may be produced in young " calves.

" (8) The next method of control considered is one which " has only been tried to a small extent in England and Wales, " but has given such encouraging results in Scotland that " its area of operation is being rapidly extended. This method " is the routine clinical examination of cattle, which, to be " fully effective, should involve the thorough and systematic " examination by competent veterinary surgeons of all the " milk herds at stated intervals, say twice a year,* and the " exclusion of those found diseased. There is reason to believe " that such a procedure, when employed in combination with

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* This is done three times a year in Wakefield.

" other methods of prevention, is productive of beneficial " results.

" (9) The testing of milk by the microscopic and biological " methods can be of great value, especially when applied to " samples from herds of moderate size (a complete list of the " contributing cows being made at the time of sampling) " and combined with competent clinical examination of the " cattle.

" (10) All measures aimed at the reduction of bovine " tuberculosis must lose a great part of their effect so long " as milch cows are kept under conditions which favour the " spread of tuberculous infection. The education of the " cowkeeper in the prevention of bovine infection should " therefore occupy a prominent place in any scheme for the " eradication of bovine tuberculosis.

" (11) Reference has been made to the limited success " so far achieved by the scheme for grading milk established " by the Milk and Dairies (Amendment) Act, 1922, and the " Milk (Special Designations) Order, 1923, made under that " Act. The campaign in favour of clean raw milk, must, " however, be regarded as of great potential value, and the " official grading of milk would constitute an important " element in any comprehensive scheme for the improvement " of the milk supply.

" (12) The Manchester Clauses and the provisions of the " Milk and Dairies (Consolidation) Act, 1915, which superseded " them, appear to have had but little effect upon the incidence " of bovine tuberculosis or the sale of tuberculous milk, " though the educational value of these measures has " probably been far from negligible. The factors limiting " their utility have been pointed out, and a consideration of " these demonstrates the paramount importance of those " measures which are applicable to the source of the infection " or its near neighbourhood.

" (13) This conclusion does not justify the neglect of " safeguards for the milk consumer which can be applied to " the milk after production and before delivery. The problems " and procedures of pasteurisation have been reviewed, and " it has been shown that, subject to careful operation and " scientific control, this process ensures a milk which not " only is safe for consumption, but also retains its food value " practically unimpaired by the heat to which it is subjected."

VENEREAL DISEASES.

TREATMENT OF VENEREAL DISEASES AT THE VENEREAL DISEASES CLINIC, CLAYTON HOSPITAL, WAKEFIELD, 1930.

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

	Total.	Males.	Females.
Syphilis	11	9	2
Soft Chancre	2	2	—
Gonorrhoea	62	51	11
Not suffering from Venereal Disease ..	38	29	9
Total ..	113	91	22

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

	Total.	Males.	Females.
Syphilis	825	414	411
Soft Chancre	12	12	—
Gonorrhoea	728	521	207
Conditions other than Venereal	142	95	47
Total ..	1707	1042	665

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

Total.	Males.	Females.
2833	2153	680

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

	Total.	Males.	Females.
Syphilis	15	—	15
Gonorrhoea	—	—	—
Total ..	15	—	15

(*e*) Number of doses of Arsenobenzol Compounds (N.A.B. and Sulpharsenol) given to Wakefield patients :—334.

LEEDS GENERAL INFIRMARY.—VENEREAL DISEASES CLINIC.

During 1930, 10 patients from Wakefield applied for examination, and 5 were found to be suffering from Venereal Disease (Syphilis 2, and Gonorrhœa 3). The total attendances were 96, as compared with 153 in 1929. The aggregate of In-patient days was nil, and the number of doses of Arsenobenzol Compounds given to Wakefield patients was 27.

Pathological Examinations in connection with Venereal Diseases, 1930.

	Total.	For Detection of Spirochætes.	For Detection of Gonococci.	Wasserman Re-action.	Other examinations.
County Hall Laboratory ..	303	2	18	283	—
Clayton Hospital Clinic	379	2	377	—	—
Leeds Infirmary Clinic	30	—	9	17	4
Totals ..	712	4	404	300	4

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

"The number of new patients (113) is curiously near "the total of last year (115), and also is the smallest total "since the establishment of the Clinic. The analyses of the "diseases, however, shows a considerable difference, Syphilis "accounting for only 11 as against 25 of last year, with a "slight increase in Gonorrhoea. This proportion is always "fluctuating within limits and does not in any way indicate "the incidence of new infections. The attendances have "on the whole been good, but the intermediate treatment "has been more taken advantage of by women than by men. "Those females attending have shown a marked appreciation "of their treatment and a desire to follow instructions more "religiously than has previously been the case.

" The work of the Clinic has been carried on satisfactorily, " notwithstanding the fact that re-construction of the premises " has been taking place. Every facility has been afforded " by the Hospital Authority for the convenience of patients " and no one, so far as has been ascertained, has been " incommoded."

Propaganda Work.

Propaganda work against Venereal Diseases is carried out on behalf of the Corporation by the Wakefield Social Service Council, which is the local branch of the British Social Hygiene Council. During Health Week of 1930, films were shown and lectures given each evening in the Minor Hall, and on two afternoons, to large and appreciative audiences, and meetings were also held in connection with various organisations.

MATERNITY AND CHILD WELFARE.

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

Supervision of Midwives.

The district midwives were regularly inspected during the year, and the Rules of the Central Midwives Board were found to be generally complied with.

16 midwives gave notice of intention to practice, including 5 at the Maternity Hospital, 3 at the County Hospital, and 2 at a Private Maternity Home. There are 5 midwives in ordinary district practice, including 2 Municipal Midwives. All hold the Certificate of the Central Midwives Board.

Medical Help.

80 notifications of sending for Medical Help were received from midwives in respect of home confinements; 59 related to mothers and 21 to infants.

For Mother.

Torn Perineum	28	Foetal distress ..	1
Long first stage ..	9	Threatened abortion	1
Long second stage ..	7	Exhaustion after birth of Triplets	1
Arm presentation ..	2	Pyrexia	1
Post Partum Hæmorrhage	2	Pain in right side ..	1
Persistent Occipito Posterior	1	Convulsions	1
Extended Breech ..	1	Mastitis	1
Prolapsed Cord	1	Medical aid sought by relatives	1

For Infant.

Inflammation of Eyes ..	11	Spina bifida and Talipes	1
Feebleness	2	Haemorrhage from Bowel	1
Prematurity	2	White Asphyxia ..	1
Tongue Tie	1	Rash	1
Otorrhoea	1		

The midwife in whose practice Pemphigus Neonatorum caused anxiety from 1927—1929 ceased to practise at the end of 1929 on account of ill health. She took no cases at all in 1930, though she sent in notification of intention to practice.

Maternity Homes.

The one Private Maternity Home on the register was visited during the year, and everything found satisfactory. 32 confinements took place at this Home during the year.

Ante-Natal Clinic.

During 1930 the Ante-Natal Clinic had to be held twice weekly owing to the increase in the number of attendances. New patients were seen on Wednesdays from 10 a.m. to 12 noon, and subsequent visits were paid on Fridays from 2 to 5 p.m.

During the year 536 expectant mothers attended—463 new cases, and 73 who had begun to attend in 1929. Of the new cases 198 were primiparae and 265 were multiparae. The total attendances were 2,420. 100 cases were referred to the Clinic by midwives and 12 by doctors. The same routine was carried out as in 1929. In order to ensure regularity of attendance, a system of following up was introduced at the beginning of the year. Patients who failed to re-attend on the date appointed were either written to or visited by the District Midwife or by a Health Visitor, and reminded of the importance of ante-natal care. In this way, gaps in the supervision of each case were as far as possible avoided.

The age-groups of new cases attending the Clinic in 1930 were as follows :—

Age.	Primiparae.	Multiparae.
Under 20 years ..	14	2
20 to 25 years ..	86	45
25 to 30 years ..	76	102
30 to 35 years ..	17	59
35 to 40 years ..	4	42
Over 40 years ..	1	15
Total ..	198	265

5·3 per cent. of the patients attended for the first time before the 4th month of pregnancy.
53·6 per cent. attended for the first time between the beginning of the 4th and the end of the 6th month.
22·1 per cent. attended for the first time during the 7th month.
15·7 per cent. attended for the first time during the 8th month.
3·3 per cent. attended for the first time during the last month.

These figures show a distinct improvement upon the corresponding figures for 1929—58·9 per cent. starting to attend the clinic before the end of the 6th month, as compared with 45 per cent. in 1929.

The following abnormal conditions were found and treated or referred for treatment :—

Constipation	100	Anaemia	3
Indigestion, Vomiting, Heartburn, etc.	118	Varicose Veins	51
Haematemesis	2	Fainting Attacks	9
Dental Caries	65	Nervousness	7
Haemorrhoids	16	Sleeplessness	31
Fissure in Ano	1	Debility	2
Fistula in Ano	1	Epilepsy	1
Jaundice	1	Bell's Paralysis	1
Rectocele	1	Otorrhoea	1
Tonsillitis	1	Detachment of Retina	1
Laryngitis, Bronchitis, etc.	30	Dacrocystitis	1
Pulmonary Tuberculosis	1	Backache, Cramp, etc.	74
Frontal Sinus Catarrh	1	Rheumatism	1
Albuminuria (Symptomless)	43	Skin Diseases	6
Albuminuria (Severe Toxic)	15	Goitre (Simple)	1
Dysuria	17	Cervical Adenitis	1
Oedema without Albuminuria	27	Lipoma in Axilla	1
Pyelitis	2	Prepatella Bursitis	1
Chronic Nephritis	8	Cellulitis (Leg)	1
Heart Disease	7	Tenosynovitis (Wrist)	1
Scalded Foot	1	Pelvic Tumours	3*
Congenital Dislocation of Hip	1	Retroverted Gravid Uterus	1
Ventral Hernia	1	Flat Pelvis	10
Umbilical Hernia	1	Justominor Pelvis	4
Pendulous Abdomen	4	Face Presentation	1
Vaginal Discharge	16	Breech converted to Vertex	15
Pruritis	8	Transverse converted to Vertex	2
Threatened Miscarriage	13	Referred to V.D. Dept. of Clayton Hospital	3
Missed Abortion	3		
Not Pregnant	14		

* Of the three cases who were discovered to have pelvic tumours complicating pregnancy, one had an ovarian dermoid removed at 4½ months at Clayton Hospital, and then went on to full time, and had a healthy living baby after a normal labour; one had a hysterectomy at 2½ months at Clayton Hospital because of multiple fibroids; and the third had an ovarian dermoid removed at 8 months at the Maternity Hospital and a Caesarian Section at the same time. All did well. It is interesting to note that the two patients with large dermoid tumours felt perfectly well and had no suspicion that anything was wrong. The patient with the fibroids, on the other hand, sought advice at the Clinic because of intense abdominal discomfort.

80·5 per cent. of the patients attending the Clinic had some abnormality or discomfort requiring attention.

The following cases were admitted to the Hospital from the Clinic for ante-natal treatment:

Albuminuria	14	External Version (Breech presentation)	9
Induction of Premature labour for contracted pelvis	9	Heart Disease	4
General Debility, for rest	3	Vomiting	1
Pelvic Tumours complicating pregnancy	3	Vaginal Discharge ..	1
Pyelitis	2	Pulmonary Tuberculosis	1
Threatened Miscarriage ..	2	Abdominal Pain—observation	1
		Haematemesis—observation	1

For the last nine months the Corporation has undertaken to provide Dental treatment for Expectant Mothers who are in need of it. Cases are recommended from the Ante-Natal Clinic, and the treatment is carried out by the School Dentist at the School Dental Clinic with evening sessions. During 1930, there were 14 sessions, 24 mothers attended, the total attendances being 40. Full advantage has not been taken of this opportunity. The stumbling block is a mass of old-fashioned prejudices and superstitions which will only be removed gradually by patience and perseverance. The very cases which are most in need of treatment are the ones who refuse to consider the matter. In some of these cases, where removal of all the teeth is the only remedy, the impossibility of being able to provide artificial dentures afterwards is part of the difficulty.

THE MATERNITY HOSPITAL.

The number of cases admitted during 1930 was 366, including 56 from outside the City. Out of the total, 24 were emergency cases, 15 from Wakefield and 9 from outlying districts. 352 patients were delivered in the Hospital, 316 by midwives and 36 by doctors.

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

(*a*) Ante-Natal.—70.

Antepartum Haemorrhage	9	Epilepsy	2
Albuminuria	13	Cystitis	2
Breech presentation (for Version)	9	Pre-eclampsia	2
Contracted Pelvis (Induction)	9	Haematemesis	1
Heart Disease	5	Bronchitis	1
Pelvic Tumours	3	Pleurisy (Pulmonary Tubercle)	1
Pyelitis	3	Catarrhal Jaundice	1
Hyperemesis	3	Anaemia	1
General Debility	3	Abdominal Pain	1
		Detachment of Retina	1

(*b*) During Labour.—42.

Foetal Distress	7	Hemiplegia	1
Prolonged Labour	11	Aortic Heart Disease	1
Contracted Pelvis	2	Accidental Haemorrhage	3
Maternal Distress	1	Failed Forceps cases	3
Eclampsia	1	Adherent Placenta	5
Forceps Deliveries.		Placenta Praevia	1
Malpresentations	5	Rigid Cervix (Face presentation)	1
Shoulder	1		
Transverse	1		
Extended Breech	1		
Extended Breech with Prolapsed Cord	1		
Persistent Occipito Posterior	1		

(*c*) After Labour.—21.

Phlegmasia Alba Dolens	4	Cystitis	1
Phlebitis	4	Mastitis with Abscess formation	1
Pyelitis	11		

The Perineum required suturing in 82 cases.

(*d*) **For the Infant.—30.**

Sticky Eyes	9	Pemphigus	2
Prematurity	6	Inflammation of Breasts	1
Non-Viability	1	Abscesses	1
Cerebral Haemorrhage ..	2	Congenital Intestinal	
Persistent Vomiting ..	3	Obstruction	1
White Asphyxia	1	Bronchitis	1
Spina Bifida	1	Fits	1

Instrumental Delivery was required in 22 cases (*i.e.*, $6\frac{1}{4}$ per cent. of the total).

The reasons for interference were as follows :—

Prolonged Second Stage	9	Contracted Pelvis	
Foetal Distress	7	(Induction performed)	2
Failed Forceps cases ..	2	Maternal Distress ..	1
		Eclampsia	1

Caesarean Section was performed 4 times for the following reasons :—

Ovarian Dermoid	1
Lateral Placenta Praevia	1
Rigid Cervix (Face presenting)	1
Detachment of Retina (Hysterotomy at 4 months) ..	1

The following cases required other forms of operative treatment :—

External Version (5 successful)	9
Induction of premature labour for contracted pelvis (all successful)	8
Internal Version	5
Manual removal of Placenta	5

There were no cases of Puerperal Fever, but 7 cases of Puerperal Pyrexia, with the following causes :—

Pyelitis (1 removed to		Stitch Abscess ..	1
Clayton Hospital) ..	3	Mastitis	1
Septic Vaginal Lacerations	2		

All 7 cases recovered.

One case of Ophthamia Neonatorum occurred during the year. It was treated in the Maternity Hospital, and responded to treatment without damage to the eye. There were in addition 9 cases of slight inflammation of the eyes not amounting to Ophthalmia.

Two cases of Pemphigus Neonatorum were notified during 1930. Both recovered completely, and in neither case was the general progress retarded by the disease.

There were 11 stillbirths and 12 infant deaths within 10 days of birth. The causes of death were these :—

Toxic Absorption from injuries received during attempts at delivery outside	1
Prematurity (1 non-viable)	6
Asphyxia Neonatorum	1
Cerebral Haemorrhage	2
Aspiration Pneumonia	1
Prematurity, difficult labour (Version for Placenta Praevia)	1

There was 1 maternal death, from Pulmonary Embolism. This was an emergency case, sent in after the doctor had tried to apply forceps. Labour proceeded normally and delivery was spontaneous but the patient died suddenly on 5th day from Embolism.

Ante-Natal Supervision and Morbidity.

Of the 352 patients delivered in the Maternity Hospital during 1930, 305 had had regular ante-natal supervision, *i.e.*, the patients attended for the first time not later than the 36th week of pregnancy and returned when instructed to do so.

Among the 305, there were no deaths, and the following abnormalities in confinement or puerperium occurred :—

Forceps deliveries (2 following induction) ..	19 (6·2%)	Cystitis	6
Inductions followed by normal labour	3	Pyelitis	1
Caesarean Sections (1 lateral Placenta Praevia, 1 Ovarian Dermoid, 1 Rigid Cervix with Face presenting)	3	Bartholinian Abscess ..	1
Adherent Placenta ..	4	Persistent Albuminuria	4
Miscarriage	1	Phlebitis	3
Torn Perineum (Slight) ..	67	Post Partum Hæmorrhage	1
Torn Perineum (Bad) ..	2	Whiteleg	3
		Eclampsia (urine clear till onset of labour)	1
		Hemiplegia	1
		Stitch abscess in Caesarean Section Scar	1
		Mastitis	2

The actual number of cases with any abnormality, however slight, was 103 (34 per cent.). Excluding slight perineal lacerations, and the inductions followed by normal labour, the number with abnormalities was 41 (13 per cent.).

The average duration of stay of patients in hospital was 14·2 days.

Training of Pupil Midwives.

The ordinary number of pupils is 8. During 1930, 9 new pupils commenced their training. These included 3 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 Sister of the Hospital.

District Cases.

124 confinements were attended by the Municipal District Midwives, assisted by the pupil midwives. In this way the latter gain experience of home midwifery. In July, 1930, a second District Midwife was appointed, as the demands on the one Midwife were becoming too heavy.

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, whether the confinement has been normal or not. In addition, however, patients complaining of any form of gynaecological trouble are sent from Welfare Centres to be examined and referred for suitable treatment. During 1930, the number of patients examined was 252, the total attendances were 309.

Of the 252 cases, 171 (67 per cent.) had no abnormality of the pelvic organs. The abnormal conditions found and treated or referred for treatment were these :—

Constipation	35	Phlegmasia	4
Indigestion	2	Sterility	1
Fissure in Ano	5	Menstrual Irregularities	7
Haemorrhoids	8	Dysmenorrhoea	1
Threadworms	1	Red Lochia	4
Backache	9	Subinvolution	3
Albuminuria	13	Vaginal Discharge	9
Heart Disease	3	Vaginitis	1
Varicose Veins	2	Cervical Laceration	2
Anaemia	5	Old Pelvic Inflammation	1
Debility, Fainting, Head-aches, etc.	4	Pus Tube	1
Neurasthenia	2	Vulvar Abscess	1
Bronchitis	1	Painful granulations in Perineal Scar	2
Pulmonary Tuberculosis	1	Prolapsed Uteri	5
Detachment of Retina	1	Retroversion	18

Caesarean Section cases	4	Rectocele and Cystocele	5
Ventral Hernia	2	Small Ovarian Tumour	1
Cracked Nipples	1	Small Uterine Fibroid	1
Mastitis	4	Advice *re* Baby ..	9

Puerperal Fever and Puerperal Pyrexia.

During 1930, 18 cases were notified under the regulations, 13 being cases of Pyrexia and 5 cases of Puerperal Fever. Of the 13 cases of Pyrexia, 5 had been attended at the confinement by a doctor called in by a midwife, 7 by doctors, and 1 was unattended. 7 of the cases were notified from the Maternity Hospital, 2 from the County Hospital, and 1 from the Clayton Hospital. 3 cases were treated in the Clayton Hospital, and 3 in the County Hospital. There were no deaths.

Inquiries as to the causes gave the following results :—

Pyelitis	3	Septic Perineal Lacerations	2
Cystitis	1	Puerperal Mania ..	1
Mastitis	2	Unknown	3
Stitch Abscess	1		

Of the 5 cases of Puerperal Fever, 3 were delivered by doctors, 1 was delivered by a handywoman before the doctor arrived, and 1 was a case of abortion in a patient suffering from Gonorrhoea. There were two deaths, one of these being the last-mentioned case. One case was treated at home, 3 in Clayton Hospital, and 1 in first the County Hospital and then the Clayton Hospital.

Ophthalmia Neonatorum.

6 cases of Ophthalmia Neonatorum were notified during 1930, *i.e.*, 0·59 per cent. of the notified live births. 10 cases were notified in 1929, 16 in 1928, 9 in 1927, 7 in 1926, 3 in 1925, and 6 in 1924.

Cases			Vision Unimpaired.	Vision Impaired.	Total Blindness.	Deaths.
Cases Notified.	Treated.					
	At Home.	In Hospital				
6	5	1	6	—	—	—

1 case occurred in the Maternity Hospital, and was treated there.

HOME VISITING BY HEALTH VISITORS.

Infant Visiting—Primary Visits	955
Re-Visits (under 1 year)	11,692
Re-Visits (1—5 years)	6,163
Total Visits	18,810
Expectant Mothers—Primary Visits	174
Re-Visits	215
Total	389
Visits *re* Still Births	39
Visits *re* Midwives	—
Attendances at Child Welfare Centres	309
Attendances at Tuberculosis Dispensary	146
Visits to Tuberculous Patients	1,147
Attendances at Medical Inspection of School Children ..	245
Number of Visits to Schools	455
Number of Examinations at Schools *re* Cleanliness ..	8,952
Number of Examinations at Schools *re* Treatment ..	1,101
Number of Homes visited *re* Contagious Diseases ..	1,002
Number of Homes visited *re* Verminous and Neglected Children	109
Number of Homes visited *re* Treatment	1,679
Number of Homes visited for other purposes	439
Total number of Homes visited *re* School Children ..	3,229
Homes visited *re* Mental Defectives	312
Visits for purposes of Nursing	97
Miscellaneous Visits	428
Total number of Home Visits (all purposes)	24,451

The number of Home Visits to infants and mothers exceeded those of 1929 by 1,715, and the other Home Visits by 2,074.

INFANT LIFE PROTECTION.

Under the Local Government Act the duty of administering Part 1 of the Children Act (1908) was transferred from the Poor Law Authority to the Corporation. This part of the Act deals with the registration and supervision of infants under the age of 7 years who are nursed and maintained for reward apart from their parents or who have no parents. The Health Visitors, who have all been appointed Infant Protection Visitors under the Act, carry out the necessary supervision. At the end of the year there were 2 infants under supervision, and the reports were satisfactory in all cases.

CHILD WELFARE CENTRES.

Numbers on Registers, 1930.

Centre.	Mothers.	Infants.	Children. 1—5.	Expectant Mothers
Principal Child Welfare Centre.				
Miss Wilson's District ..	186	134	105	33
Miss Staniforth's District ..	185	162	110	21
Miss Gardner's District ..	109	105	74	2
Miss Robertshaw's District	205	193	80	28
Belle Vue	210	185	115	18
Alverthorpe	145	117	75	11
Totals ..	1040	896	559	113

Attendances.

Centre.	Mothers.	Infants.	Children 1—5.	Expectant Mothers.
Principal Child Welfare Centre.				
Miss Wilson's District ..	2283	1822	1737	81
Miss Staniforth's District ..	2148	1824	1122	76
Miss Gardner's District ..	2087	1698	849	66
Miss Robertshaw's District	2156	1614	987	64
Belle Vue	2632	1918	1392	96
Alverthorpe	910	833	345	48
Totals ..	12216	9709	6432	431

The new principal Child Welfare Centre at The Cliffe, Margaret Street, was started early in 1930, and was formerly opened by Dame Janet Campbell, of the Ministry of Health, on 1st August.

Four of the old Centres have been transferred there—from Market Street, Eastmoor, the Homestead and Thornes Lane—and these are held on Monday, Tuesday, Wednesday and Thursday afternoons, respectively.

The Belle Vue and the Alverthorpe Centres continue to be held in their old premises.

The change of premises has caused a definite increase in the number and regularity of attendances in spite of the extra distance from which most of the mothers have to come. The accommodation is very satisfactory and includes a large assembly hall, a registration room where particulars of new cases are obtained, an undressing and weighing room, a consulting room, and a dispensary and dried milk store. In addition, the Artificial Sunlight treatment rooms are in the same building and also the Orthopaedic Clinic, a room for the treatment of minor ailments, and a committee room where the Voluntary Helpers can hold their meetings. This room is also used as a Toddlers' playroom on Centre afternoons, but during the summer the Toddlers play out of doors in the large garden where the sandpit is a great source of attraction.

The extension of the work has made increasing demands on the Voluntary Helpers, and they have ungrudgingly risen to the occasion. They are now responsible for enrolling new patients, and keeping the register of attendances, which is no light task. In addition they provide tea for the mothers and look after the toddlers. As the Centres are now held at 2 p.m. instead of 2-30 p.m., the extra time which they spend on the work is a most valuable contribution towards the smooth working of the scheme.

During 1930, 1,440 new infants and 367 mothers were examined medically at the Centres. Of the 1,440 infants, 734 (*i.e.*, 51 per cent.) were found to be normal and satisfactory, while 706 had some defect or ailment requiring supervision or treatment. The total number of medical examinations made was 9,773 (8,822 of children and 951 of mothers).

Compared with 1929, the attendances of mothers at the Centres have increased by 612, and the attendances of children by 1,912, whilst the medical examinations have increased by 3,286, or fully 50 per cent.

All the infants attending the Centres are medically examined at least once a month, so far as the attendances permit.

INFANT FEEDING.—Infants born in 1929.

	Infants born 1929.	Percentage.
Wholly breast fed for six months or longer	729	83·50
Wholly breast fed for periods less than six months, but more than one month	48	5·44
Combined breast and artificial feeding for periods of six months or longer	62	7·32
Combined breast and artificial feeding for periods of less than six months, but more than one month ..	24	2·72
Artificially fed from 1 month or earlier	19	1·02
Total	882	100·00

The percentage of babies wholly breast fed for six months is practically the same as last year.

SUPPLY OF DRIED MILK, 1930.

Sold at Cost Price	5,314 lbs.
Sold at Half Price	467 ,,
Sold at Quarter Price	1,578 ,,
Supplied Free..	9,855 ,,
	17,214 ,,

The amount of Dried Milk supplied in 1930, exceeded that supplied in 1929 by 4,197 lbs.

The cost to the Corporation for Dried Milk free or sold at less than Cost Price, amounted to £844 10s. 8d.

108 packets of Lactagol were also given out during the year, 28 being sold at cost price, and 80 given free.

ORTHOPAEDIC CLINIC.

A scheme for the more satisfactory care and supervision of children with crippling defects was first put into operation in December, 1929, by the Education Committee. The Orthopaedic Officer, Dr. Crockatt, attends once a month to see new

cases, and such old ones as still require his supervision and advice. The Clinic is held at the Principal Child Welfare Centre in Margaret Street, and is open daily for the treatment of cases by massage, remedial exercises and Artificial Sunlight where necessary. X-Ray examinations are made by arrangement with the Clayton Hospital. All cases of crippling whether Maternity and Child Welfare, Health or Education cases are dealt with at the same Clinic.

During 1930, 154 cases attended. Of these 83 remained on the register at the end of the year; 35 ceased attending; 3 died; 33 were discharged. The total attendances numbered 1,245.

The number of orthopaedic cases actually treated by massage and remedial exercises was 61, by Artificial Sunlight 16. In 18 cases surgical appliances were supplied or repaired; 6 X-Ray examinations were made and plaster was applied in 2 cases (1 tubercular elbow, 1 knock knee).

18 children were recommended for hospital treatment. 5 of these were admitted to institutions, 2 had out-patient treatment at the Leeds General Infirmary, 7 are still on the waiting list for institutional treatment. In the other 4 cases treatment was declined by the parents.

Education Hospital Cases.

At the end of 1929, 2 education cases were in institutions—1 Clubfoot, and 1 case of Still's Disease. During 1930, 7 children were put on the waiting list for hospital treatment. Of these, 2 were admitted during the year. Both were Clubfoot cases.

2 cases were discharged during 1930—both cases of Clubfoot. Both were much improved though one will require further operative treatment later.

2 cases remained in hospital at the end of the year, 1 case of Clubfoot, and 1 of Still's Disease.

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

Defects.	New Cases.				Seen by Orthopaedic Officer.	Total attendances.	Discharged.			Ceased attending.	Remaining on Register.	Observation.	Orthopaedic Clinic.	Treatment Recommended.					
	Total.	Education.	Health.	Maternity and Child Welfare.			Cured.	Improved.	No Change.					Ultra Violet Ray Clinic.	No treatment.	Hospital.	Surgical Appliances.	X-Ray.	Plaster.
Postural Defects	26	26	—	—	5	411	3	6	—	10	7	1	25	—	—	—	—	—	—
Mouth Breathing	15	15	—	—	—	209	8	—	—	2	5	—	15	—	—	—	—	—	—
Rickets	33	14	—	*19	33	69	1	1	1	14 (1 died).	16	2	1	25	1	2	4	—	2
Clubfoot	11	7	—	4	10	63	1	—	—	1	9	1	3	—	—	7	—	—	—
Tuberculosis (bone and joint)	22	1	21	—	22	94	—	1	2	2 (1 died).	17	11	2	—	2	4	4	3	1
Anterior Poliomyelitis ..	8	6	—	2	8	77	—	—	1	1	6	2	1	1	—	2	3	1	—
Osteomyelitis	5	3	—	2	5	15	—	—	1	—	4	2	1	2	1	—	—	—	—
Infantile Hemiplegia ..	7	6	—	1	7	14	—	1	1	2	3	4	1	—	1	—	1	—	—
Flatfoot	9	5	—	4	8	190	—	2	—	2	5	1	9	—	—	—	1	—	—
Little's Disease	3	2	—	1	3	4	—	—	1	1	1	2	—	—	1	—	—	—	—
Erbs Paralysis and other birth injuries	4	3	—	1	4	75	—	—	1	—	3	—	2	—	—	1	2	—	—
Structural Scoliosis ..	1	1	—	—	1	2	—	—	—	—	1	—	1	—	—	—	—	—	—
Haemophilic Joint	1	1	—	—	1	6	—	—	—	—	1	—	—	—	—	—	1	—	—
Coxa Vara	1	1	—	—	1	1	—	—	—	1	—	—	—	—	—	1	—	—	—
Septic Arthritis	1	1	—	—	1	2	—	—	—	—	1	—	—	—	—	—	1	—	—
Hammer Toes	1	1	—	—	1	1	—	—	—	—	1	—	—	—	—	1	—	—	—
Old Fracture	1	1	—	—	1	2	—	—	—	—	1	—	—	—	—	—	1	—	—
Congenital Abnormalities ..	2	2	—	—	2	2	—	—	1	—	1	1	—	—	1	—	1	—	—
Lumbar Klyphosis (doubtful origin)	2	—	—	2	2	7	—	—	—	2 (1 died).	—	1	—	—	—	—	1	2	—
Amputation Stump.. ..	1	1	—	—	1	1	—	—	—	—	1	—	—	—	—	—	1	—	—
Totals ..	154	97	21	36	116	1245	13	11	9	38	83	28	61	28	7	18	21	6	3

ARTIFICIAL SUNLIGHT CLINIC.

A Clinic for the treatment of suitable cases by means of Artificial Sunlight was opened in the Principal Child Welfare Centre in February, 1930. The accommodation consists of a dressing room with cubicles, and the treatment room. Both are electrically heated in addition to having open fireplaces. The lamp used is a Mercury Vapour one—a double suspended Jesionek, the height of which can be readily adjusted. It is suspended above a large couch which can accommodate 6 small children or 4 older ones. In addition to the Mercury Vapour Lamp there is a 1,000 Watt Radiant Heat Lamp.

The routine method of treatment used in all but exceptional cases, is to start with a 2-minute exposure at 3 feet (1 minute each to back and front), and increase by one minute each visit until the child is having 15 minutes (7½ minutes each to back and front). Some of the smaller children and those showing any signs of intolerance do not get more than 10 minutes altogether. The children attend twice weekly, the boys on Wednesdays and Saturdays and the girls on Mondays and Thursdays. The cases are selected from Child Welfare Centres, and from Schools, some are sent from the Orthopaedic Clinic, Tuberculosis Dispensary, and a few are recommended by private practitioners. Supplementary treatment, usually in the form of Cod Liver Oil, is given in suitable cases. The following Table gives a resume of the cases treated :—

Defects.	No. of Cases.				No. who ceased attending.		Treatment stopped on account of Unfavourable symptoms.	Discharged.	Remaining on
	Total.	Education.	Health.	Maternity and Child Welfare.	After less than 10 exposures.	After more than 10 exposures.			
Rickets	67	10	—	57	15	8	—	19	2
Malnutrition	30	15	—	15	6	—	—	10	1
Anaemia	7	7	—	—	—	—	—	3	
Bronchitis	15	8	—	7	3	1 (Died).	—	4	
Non-Pulmonary Tuberculosis ..	6	—	6	—	—	1 (left district).	—	—	
Eczema	4	—	—	4	2	—	—	—	
Psoriasis	4	4	—	—	—	—	—	—	
Nervousness ..	10	4	—	6	—	1	2	3	
Chorea	2	2	—	—	—	—	—	—	
Osteomyelitis ..	2	—	1	1	—	—	—	—	
Chilblains	1	1	—	—	—	—	—	—	
Debility following Pneumonia and Empyema ..	4	1	—	3	—	—	—	3	
Cervical Adenitis ..	6	4	—	2	1	—	—	1	
Strumous Blepharitis and Ophthalmia ..	13	11	—	2	—	—	—	3	1
Totals ..	171	67	7	97	27	11	2	46	8

So far as results are concerned it is only fair to judge from those cases where the course of treatment was actually completed, and in the case of some defects the numbers treated are as yet too small to be of any value.

The impressions one receives as one's experience of the work increases, are, however, quite definite.

There is no doubt about the value of this form of treatment in rickets, especially in the active stage in infants. Children who are making little progress on Cod Liver Oil alone, show

marked improvement when Artificial Sunlight is combined with it. Teething proceeds rapidly, and with relatively little trouble, the ligaments become firmer and the bones straighter, and the child soon attempts to walk. It is significant that although a large number of rickety children ceased to attend before their course was completed, a majority of these were children of indifferent mothers, who were quite satisfied as soon as their children began to walk, and therefore did not trouble to continue the treatment. The nervous symptoms, Spasmus Nutans and Facial Irritability, are among the first to disappear under Sunlight treatment.

In older children there is likewise benefit. Bowlegs improve and growth increases. Knock knees do not seem to alter much under this form of treatment alone.

Nervous, irritable children who sleep badly and have poor appetites, soon show improvement in all these symptoms. Two cases of this type, however, had to have the treatment discontinued because in one case each exposure was followed by an attack of diarrhoea, and in the other case the child did not seem to get over his initial fear of the treatment and became almost hysterical each time he attended.

Artificial Sunlight combined with local treatment is of value in cases of Phlyctenular Keratitis and Strumous Blepharitis. Some cases react much more quickly than others. One case which did not improve much had undoubtedly a specific element accounting for this.

Some cases of Eczema in babies, which fail to improve under local treatment with ointments, do well on Artificial Sunlight alone. So also do cases of Psoriasis provided the treatment is intensive. Those treated at The Cliffe had daily general exposures of 15 minutes at 3 feet, along with 10 minutes at 2 feet on specially affected parts every second day. The impression one received of the action of the Ultra Violet Rays in these skin conditions is that they act purely as a local irritant assisting desquamation.

The value of Artificial Sunlight in cases of Chronic Bronchitis is doubtful. The child's general condition does certainly improve but acute exacerbations during the treatment are frequent and relapses occur after the treatment ceases. Incidentally Artificial Sunlight does not appear to be of much value as a preventive of the common cold, as colds were of frequent occurrence among the children attending the Sunlight Clinic.

With regard to cases of Anaemia, Sunlight treatment alone has little or no effect. Three cases of definite profound anaemia were treated, and after 49, 52 and 25 doses the Haemoglobin content of the blood had risen 5, 8 and 5 per cent. respectively. Iron was prescribed as an additional treatment, but was not taken with any regularity in any of the cases.

Some cases of non-pulmonary tuberculosis, especially Cervical Glands, do certainly improve with Sunlight. One case of abdominal tuberculosis was not improving on Ultra Violet Ray Therapy, but left the district too early in the course of treatment for any conclusion to be drawn from his case.

Cases of Malnutrition and Debility vary, as one would expect, in their reaction to this form of treatment, and on the whole the results in this type of case are distinctly disappointing. Parents are too apt to think that Artificial Sunlight alone is sufficient treatment, and to neglect important considerations like diet, sleep, fresh air, and supplementary treatment such as Iron.

Very few cases showed any unfavourable symptoms. The two nervous cases already mentioned were the only ones where treatment had to be stopped on this account. A few other children were reported to have suffered from headaches or languor or lack of appetite after the earliest doses, but by careful regulation of dosage they were all able to continue the treatment. The complexion of the child does not seem to matter much, though care had to be taken to prevent very fair children from having their faces scorched.

The following Table gives the results of treatment in the case of children who completed the course :—

Condition Treated.	Number of Cases.	Frequency of Treatment.	Average number of Exposures.	Supplementary Treatment.	Parents Report on Progress.						Medical Officers' Observations on Progress.					
					General.			Special Symptoms.			General.			Special Symptoms.		
					Improved.	No Change.	Worse.	Improved.	No Change.	Worse.	Improved.	No Change.	Worse.	Improved.	No Change.	Worse.
Rickets	19	Twice weekly	31	Cod Liver Oil ..	16	2	0	15	3	0	17	2	0	17	2	0
					Parents report not available in 1 case.											
Malnutrition and Debility (associated with various symptoms). ..	9	,,	37	Cod Liver Oil ..	6	2	0	5	1	0	§7	2	0	§6	1	0
				Parrish's Food	Parents report not available in 1 case.									No special symptoms in 2 cases.		
				Virol	No special symptoms in 2 cases.											
Failure to thrive (infancy) ..	1	,,	23	Cod Liver Oil ..	1	—	—	1	—	—	1	—	—	1	—	—
Anaemia	3	,,	42	Parrish's Food (irregularly).	1	1	—	—	—	—	3	—	—	—	3	—
					No parents report in 1 case.											
Bronchitis	4	,,	36	Cod Liver Oil ..	4	—	—	1	3	—	4	—	—	*2	†2	—
Cervical Adenitis	1	,,	42	Nil	1	—	—	1	—	—	1	—	—	1	—	—
Debility following Pneumonia ..	3	,,	43	Nil	2	—	—	—	—	—	3	—	—	—	—	—
					No parents report in 1 case.											
Strumous Ophthalmia	3	,,	36	Local treatment	1	1	—	1	1	—	2	1	0	2	1	0
					Parents did not attend in 1 case.											
Nervous, Nervousness and Irritability	2	,,	25	Nil	1	1	—	2	—	—	—	2	—	2	—	—
Congenital Nystagmus and Head Shaking	1	,,	16	—	—	1	—	—	1	—	—	1	—	—	1	

* One relapsed when treatment was discontinued.
† One caught Whooping Cough and died.
§ Improvement only slight.

REMARKS ON THE NEO-NATAL MORTALITY.

To collect statistics and draw conclusions from the certified causes of death in the case of young infants and to attempt to reason out therefrom some means of reducing infant mortality, is not a profitable occupation. Statistics based on clinical diagnosis alone, especially in infants, are liable to serious error. One need go no further than the postmortem room of any large children's hospital for proof of this statement. But even if one could rely on the certified cause of death as being pathologically true and accurate, that would not be enough. There are other root causes, in their turn leading up to the cause of death, that one would need to know. For instance, the family history on both sides for several generations is in some cases extremely important, but is seldom accurately obtainable. The habits of the parents, particularly with reference to alcohol, have an important bearing on a child's health. So also has the general health of the parents, the health of the mother during pregnancy, the circumstances of the child's birth, the method of feeding subsequent to birth, and the general care and home surroundings.

It is almost as important from a preventive point of view to know all these circumstances as to know the actual cause of death. Especially is this the case where Neo-natal Mortality is concerned. Up to the end of the first month, the child depends entirely on its parents for making and keeping it healthy. By the end of the first year, the child, by its own actions, has assumed a little responsibility in the matter, and by the time adult life is reached, parental influences, though still operating, are almost swamped by the conduct of the individual. It is during the Neo-natal Period, that parental influences past and present are most at work, and it is significant that the Neo-natal Mortality remains between 30 and 40 per 1,000.

To achieve a further fall in the infantile mortality rate, an attempt must be made to improve the figures of the Neo-natal Period.

On examining the certified causes of death in infants under one month in Wakefield in 1930, it will be seen that the root causes of these deaths can be divided into three different groups.

(1) **Causes arising during Labour,** *e.g.*, "Birth Injuries." These causes may be divided into two groups :—

(*a*) Injuries.—Usually Cerebral Haemorrhage or Asphyxia, (*b*) Infections entering by the umbilical cord, the skin, or by aspiration or swallowing.

Group (*a*) could certainly be lessened by better antenatal supervision, by induction of premature labour when necessary, and by correcting malpresentations, though even then a certain number of cases would be beyond control. Cerebral Haemorrhage following spontaneous delivery with no disproportion between foetal head and pelvis is much more common than is usually thought—a number of the cases certified as having died on the third or fourth day from "Convulsions and Meningitis" may more probably be due to this cause. Asphyxia from a cord which is tightly round the neck is beyond human control, but the more modern methods of treating asphyxiated infants may help to lessen the mortality from this cause.

On the whole, a considerable improvement can still be expected in Group 1 (*a*).

Deaths in Group 1 (*b*) usually result in cases where the patient has been a long time in labour with the membranes ruptured, whether this is due to uterine inertia, or to pelvic disproportion. Treatment beforehand of any discharges is the obvious preventive course and strict asepsis during labour.

(2) Deaths due to Hereditary Causes.

These are due either to (*a*) inherent defects in the germ plasm of the father or the mother, *e.g.*, deaths from "Hydrocephalus," "Myelocele," "Congenital Heart Disease," "Congenital Intestinal Obstruction," or to (*b*) defects in the germ plasm resulting from chronic poisoning. The commonest poisons which damage the actual reproductive cells of the parents, and so lead to deaths from such causes as "Inanition," "Congenital Debility," etc., are Alcohol and Lead.

To tackle this latter group, one would need to begin before conception had even occurred.

(3) Deaths from Causes in the Mother operating during Pregnancy.

It is in this group that one finds most deaths certified (necessarily vaguely) as being due to "Prematurity," "Asthenia," "Debility with Maternal Toxaemia," etc.

The group may be again sub-divided into :—

(*a*) *Cases where insufficient nourishment is supplied by the mother to the foetus.* These cases are rarely due to actual starvation of the mother, but if the mother's diet is deficient in certain necessities, *e.g.*, Vitamins and Calcium, it may conceivably, and probably does, have a prejudical effect on the health of the child. These cases can be dealt with in the obvious way.

When the insufficient nourishment of the child is combined with faulty elimination of its waste products, and is due to poor development of the placenta, nothing can be done. These cases should probably fall under the heading 2 (*a*).

(*b*) *Cases where the foetus during development is poisoned by toxic substances passed on to it from the mother.* These toxic substances may be :—

(i) *Metabolic, as in toxaemias of Pregnancy, Chronic Kidney Disease and Diabetes.* In the case of toxaemias of Pregnancy, it has not yet been determined whether the foetus or the mother is the source of the toxins, so that it is doubtful whether they can correctly be included here, but in any case, the toxaemia can be diagnosed early and kept under control. Children of Chronic Nephritis subjects are usually small, puny, and difficult to rear. They frequently succumb to the strain of labour. Little can be done in these cases for the child, as the treatment directed towards safeguarding the mother (strict diet, etc.) is likely to make the child's chances even smaller.

(ii) *Toxins of Disease.* The commonest disease which affects the foetus in utero and its subsequent health, is, of course, Syphilis, and such maternal diseases can be treated.

(*c*) *Cases where the child is born prematurely, thus jeopardising its chance of survival.* The immediate cause of the onset of natural labour is unknown and, until this is discovered, there is little likelihood of the number of premature labours being markedly diminished. Maternal Heart Disease and Tuberculosis have been cited as causes of prematurity, but in one's experience there is no greater incidence of premature labour among these than among ordinary healthy patients. Toxaemias of Pregnancy, Syphilis, accidents (in a few cases), illness with high temperatures (*e.g.*, Influenza), Pyelitis, and drugs taken by the patients themselves, do account for a small percentage of premature births, but the reason for the vast

majority is undiscovered. A 50 per cent. improvement in the neo-natal mortality would at once take place if the cause of prematurity could be found and steps taken to prevent its occurrence.

If all neo-natal deaths were grouped under these three main headings, there would be very few remaining. This demonstrates the fact that the key to the reduction of neo-natal mortality is better Antenatal Care, still better midwifery, and, in some cases, the prevention of conception.

JESSIE EELES.

MENTAL DEFICIENCY.

At the end of 1930, there were 65 mental defectives (32 males and 33 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 :—

Under Orders	In Institutions ..	13 (6 males and 7 females).
	On licence from Institution ..	1 (Male).
Under Statutory Supervision		17 (12 males and 5 females).
Poor Law Cases (outdoor) ..		7 (1 male and 6 females).
Under Voluntary Supervision		27 (12 males and 15 females).

In addition to the above there were 79 children (38 boys and 41 girls) between the ages of 7 and 16 years who had been certified to the Education Authority as feebleminded. Of these, 66 were attending the ordinary elementary schools, and 13 were not attending any school. Wakefield does not possess a Special School for Mental Defectives, and no children have been sent to special residential schools for some years last, owing to the lack of available accommodation.

The position with regard to mental deficiency continues very unsatisfactory. The absence of special school accommodation not only prevents the feeble children being trained on lines suitable to their mental condition, but it prevents the full functioning of the Mental Deficiency Authority, which should automatically take over from the Education Authority all feeble-minded children who are in need of care and supervision when these children are about to be withdrawn from special schools at the age of 16 years. As none of these children are in special schools, all legal control lapses when they leave the ordinary schools at the age of 14 years. As a matter of fact, most of the new cases now dealt with under the Mental

DeficiencyAct are idiots and imbeciles, and persons who have committed some offence and are found by the Justices to be feeble minded. The Mental Deficiency Authority itself has found much difficulty in finding accommodation for the few cases with which it has to deal. It is, however, hoped that this difficulty will in time be overcome when the South West Yorkshire Board for Mental Deficiency, of which Wakefield is a member, has got its new institution at Doncaster fully established.

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

"The Occupation Centre for mental defectives continues "to make steady progress. 16 young people—10 girls and 6 "boys—are now attending and there is ample evidence that "the training they are receiving is having a beneficial "influence. Attempts are made through various forms of "handwork to develop any latent faculties; personal "hygiene and simple domestic acquirements are also part "of the work of the Centre. Difficulties are still experienced "in getting a few of the young people to attend regularly. "These are mainly due to the apathy and ignorance of the "parents.

"During the past year Miss Coates resigned her post as "Supervisor. The Council appointed Mrs. Rawlinson to the "post. She has had previous experience in the work and "has already shown her ability to adapt the training to "individual needs, and has manifested her sympathetic "understanding of the young people who attend the Centre."

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 Treatment; (7) Cleanliness Surveys and the following up of defective children by the School Nurses.

During 1930, 6,434 children were medically examined, and the number of medical examinations amounted to 13,141. 8,459 medical certificates were issued during the year. At the Ophthalmic Clinic, conducted by Dr. Allardice, new cases numbered 592, the re-examinations 458, and the total attendances 1,050. 528 prescriptions for glasses were issued. The School Dentist inspected 6,822 children, of whom 4,833 required treatment, and 1,811 were actually treated at the School Dental Clinic. 154 children were treated at the Orthopaedic Clinic, with a total attendance of 1,245. 171 children (including 67 Education Committee cases) were treated at the Ultra Violet Ray Clinic. 992 children were treated at the General Clinic, with 17,680 attendances. The School Nurses examined 7,793 children with regard to cleanliness, the total examinations being 10,053, and they also made 709 visits to schools, and 3,541 visits to homes *re* treatment, cleansing, infectious diseases, etc.

The results of the routine examinations of the elementary school children shew that 82 per cent. had carious teeth, 22 per cent. had defective vision, 16 per cent. diseases of the throat and nose, 16 per cent. of the girls had dirty heads, 11 per cent. enlarged glands, 10 per cent. lung diseases (mostly bronchitis), 5 per cent. were undernourished, 4 per cent. had rickets or other deformities, 4 per cent. had external eye disease, 4 per cent. were dull and backward, 3 per cent. had ear disease, 2 per cent. had defective hearing, about ½ per cent. had organic heart disease, about ½ per cent. had speech defects, and about 1/10th per cent. had tuberculosis. 15 per cent. of the children were free from any defect. Rather less than a quarter of all children examined at routine inspection were referred for treatment for some defect or other, excluding uncleanliness and dental disease.

Notwithstanding the continued industrial depression and large amount of unemployment in the City, the physique and general well being of the children shewed no signs of deterioration. The weights of the children were up to the average, and the percentages of children with sub-nutrition and with defective clothing were well below the average.

80 per cent. of the children referred for treatment obtained it, and this is about the average. As usual the worst response to advice for treatment was in connection with enlarged tonsils and adenoids.

HEALTH WEEK.

During Health Week, held in October, we concentrated mainly on the school children. The subject chosen was " Food and Drink," and by means of special lessons given by the Teachers, short lectures by the Medical Officers and appropriate literature, the importance of the subject was duly impressed upon the children. The usual Essay Competition followed and prizes (provided through the Social Service Council) were given the two best in each school and the three best in all the schools. Valuable as these annual intensive health campaigns are, one cannot say that they are a sufficient substitute for the systematic education in hygiene which should form part of the normal school curriculum.

SCHOOL SANITATION.

During 1930, Dr. Frank Allardice, the Deputy Medical Officer of Health, made a very painstaking and complete sanitary survey of the Wakefield Schools, and prepared a full report (too long for inclusion here) for the information of the Education Committee. This Report has been specially prepared at this time in order that the information might be available for the Committee during the process of school re-organisation, when, possibly alterations and improvements of school buildings might come up for consideration. Twenty years have passed since I first prepared a comprehensive and detailed Report on the sanitary state of the Wakefield Schools, and one cannot help noting that many of the criticisms appearing in the 1910 Report are repeated in the Report of 1930. This is not to say that no improvements have been carried out during that time, and it only indicates that, judged by modern standards, some of the old schools are so badly planned and situated, and have so many inherent defects, that it is almost impossible to bring them up to a satisfactory level, without re-building them altogether. When one compares some of the old schools with a new school like Manygates, the hopelessness of making them anything like satisfactory is only too apparent. On grounds of hygiene one would welcome the scrapping of some of these schools, which, like many of our old dwelling-houses, have long outlived their day and generation, and possibly, the changes brought about by the drift of the population from the centre of the City to the suburbs, and changes arising out of the re-organisation of schools, may bring about the abolition of some of the least desirable schools. Nevertheless, some schools, which are not entirely satisfactory, will no doubt remain, and I can only recommend that these schools be made as hygienic and

satisfactory as it is possible to make them. Structurally, the buildings should be sound and watertight. The playground should be paved, level and properly drained. The water closets, urinals and lavatory basins should be sanitary and adequate for the number of pupils, and there should be proper provision for the teachers, having regard to the sexes. In some cases the shortage of conveniences noted in the Report is due partly or wholly to the present overcrowding of some of the schools, and no doubt the overcrowding will be abated in the near future, when the new school at Snapethorpe is opened. I completely agree with Dr. Allardice in his criticisms of the perpetuation of sanitary blocks, situated, as sometimes they are, at considerable distances from the classrooms. The practice of placing sanitary blocks at some distance from the school buildings was commenced when privies were the rule, and when there was a good reason for it, but there is no reason at all for it now, when sanitary waterclosets are used. In the case of infant schools particularly, the practice has many serious disadvantages. All classrooms should be adequately lighted, ventilated and heated. These conditions are probably more important than anything else in school hygiene, and the Report indicates that there are a great number of Wakefield Schools which have classrooms, etc., unsatisfactory in these respects. With regard to natural lighting and ventilation there has often been, in the past, regretable hesitancy about doing the thing in a really sufficient way. In consequence of reports, the lighting and ventilation of classrooms have, from time to time been improved, but even then, they have often remained quite inadequate. The need for better heating is, in some schools, an urgent matter, and I do not think that Dr. Allardice has spoken a bit too strong on this subject. Improvements in cloakroom accommodation would often be advantageous, but one is bound to admit that anything involving extension is often out of the question. I have often represented that the overlapping of children's garments on cloakroom pegs was objectionable, but it continues to be done. Heating of cloakrooms is also important, but, except in the newer schools it is generally absent. School furniture has been much improved during recent years, but there still remain a few of the old-fashioned desks which should be cleared out as soon as possible. It should hardly be necessary to say anything about the importance of cleanliness at this time of day, but the Report shews, and I know from my own observations, that there are still schools where the standard could be improved on. With regard to school painting, I have noticed that some schools are allowed to get very dirty before anything

is done, and, on enquiry, I have been told that the schools are painted by time-table, and not by need. I would suggest that some schools, because of their situation, etc., require cleaning and painting more frequently than other schools do.

As Dr. Allardice has very cogently pointed out, there should be nothing in the hygienic conditions of the schools which conflicts with the standards of hygiene taught in the schools, child welfare centres and elsewhere. Rather, we should expect the schools to be models, illustrating, and demonstrating what we mean by hygiene and sanitation.

BLINDNESS.

Number of Blind Persons in Wakefield.

The Secretary of the Wakefield Institution and Workshops 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	95
(*b*) Distribution of the number given in (*a*), *e.g.*,	
Children below 5	1
Children awaiting admission to, or unsuitable for admission to, Special Schools	2
Children in Special Schools	9
Adolescents undergoing training	1
Inmates of Institutions	2
Inmates of Society's Home	10
Adolescents and adults residing in their own homes	70
	95

Included in the above figures there are 9 persons who are employed in the Workshops.

The Public Health Department is not directly associated with the administration of the Blind Persons Act, 1920, except that the ophthalmic examinations and reports required under the Act are made by Dr. Allardice, the School Ophthalmologist. Eight persons were so examined and certified during 1930. 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. 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. It has been suggested that a special class for high myopes might be arranged in the proposed open-air school.