

**[Report 1931] / Medical Officer of Health, Halifax County Borough.**

**Contributors**

Halifax (England). County Borough Council. nb2008024085

**Publication/Creation**

1931

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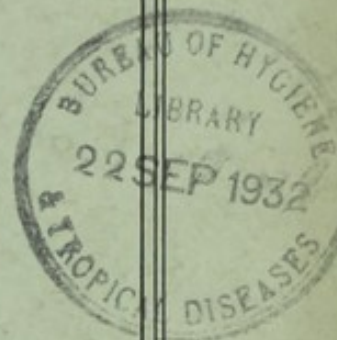
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COUNTY BOROUGH OF HALIFAX  
HEALTH DEPARTMENT.

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# Annual Report

ON THE HEALTH  
OF THE BOROUGH

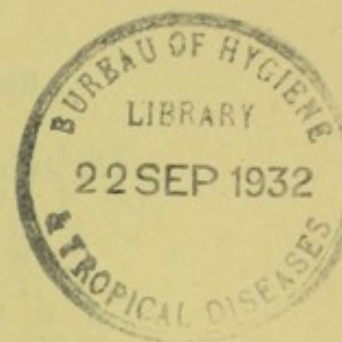
For the Year 1931.

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**GEORGE C. F. ROE,**  
*L.R.C.P. & S., L.M., D.P.H., D.P.M.,*  
*Medical Officer of Health.*

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COUNTY BOROUGH OF HALIFAX  
HEALTH DEPARTMENT.

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# Annual Report

ON THE HEALTH  
OF THE BOROUGH

For the Year 1931.

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*L.R.C.P. & S., L.M., D.P.H., D.P.M.,*  
*Medical Officer of Health.*

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# Health Committee

(as on Dec. 31st, 1931).

**Mayor** - ALDERMAN RUFUS STIRK, O.B.E., J.P.

COUNCILLOR H. THORP, *Chairman*.

ALDERMAN W. M. BRANSON, J.P., *Vice-Chairman*.

Ald. T. HEY, J.P.	Coun. M. WILLIAMSON, J.P.
" A. W. LONGBOTTOM, J.P.	" L. CHAMBERS.
" A. WALTERS, J.P.	" F. SHARP.
" J. H. WADDINGTON, J.P.	" T. H. FARRAR.
Coun. P. BARRETT.	" T. W. HANSON.
" A. MUFF.	" M. LIGHTOWLER, J.P.
	Coun. E. W. LYON.

## Sub-Committees

*Appointed by the Health Committee.*

### Health Services Sub-Committee.

*Appointed by the Health Committee.*

THE CHAIRMAN.	COUNCILLOR LYON.
VICE-CHAIRMAN.	" MUFF.
ALDERMAN LONGBOTTOM.	" FARRAR.
COUNCILLOR WILLIAMSON.	" HANSON.

### Hospital Committee.

THE CHAIRMAN.	COUNCILLOR LIGHTOWLER
VICE-CHAIRMAN.	" SHARP.
ALDERMAN HEY.	" CHAMBERS.
" WALTERS.	" BARRETT.
	ALDERMAN WADDINGTON.

### St. Luke's Hospital Sub-Committee.

THE CHAIRMAN.	COUNCILLOR BARRETT.
VICE-CHAIRMAN.	" CHAMBERS.
COUNCILLOR LYON.	" LIGHTOWLER.
" HANSON.	" WILLIAMSON.
	COUNCILLOR SHEPHERD.

### Accounts Sub-Committee.

THE CHAIRMAN.	COUNCILLOR WILLIAMSON.
VICE-CHAIRMAN.	" BARRETT.
ALDERMAN WALTERS.	" LYON.
	COUNCILLOR HANSON.

### Joint Recovery Sub-Committee.

COUNCILLOR BARRETT.	COUNCILLOR CHAMBERS.
" FARRAR.	" LYON.
" SHARP.	" WILLIAMSON.
MRS. TOWNEND.	MRS. WHITAKER.
	MRS. SMITH.

### Maternity and Child Welfare Committee.

The Health Committee with the following additional Members :—

MISS DOROTHY WRIGHT.	MRS. LAVINIA LUMB.
MRS. E. WHITAKER.	MISS FLORENCE WHITLEY.
MRS. E. E. ROTHERA.	MRS. MARY E. WILLIAMSON.
	MRS. S. GLEDHILL.

### Committee for the Care of the Mentally Defective.

COUNCILLOR L. CHAMBERS	COUNCILLOR J. W. ALDHAM.
(Chairman).	" P. BARRETT.
ALDERMAN W. M. BRANSON	" E. W. LYON.
(Vice-Chairman).	" M. LIGHTOWLER.
MR. ROBERT MCHUGH.	" J. H. MAUDE.
MR. D. SUTCLIFFE.	MRS. A. SMITH.
	MRS. E. TOWNEND.

### Welfare of the Blind Sub-Committee.

COUNCILLOR H. THORP.	COUNCILLOR WILLIAMSON.
" SHARP.	" LYON.
	COUNCILLOR MUFF.



# Staff of the Health Department.

## Medical Officer of Health.

GEORGE C. F. ROE, L.R.C.P. & S., L.M., D.P.H., D.P.M.

## Assistant Medical Officers of Health.

\*WILFRID SMITH, M.Sc., M.B., B.Ch., B.A.O., Clinical Tuberculosis Officer and Resident Medical Officer, Sanatorium.

\*ALICE LATCHMORE, M.D., Ed., Medical Officer to Maternity and Child Welfare Centre.

\*F. W. WATERWORTH, M.B., Ch.B., D.P.H., Assistant School Medical Officer.

DUNCAN C. LIDDLE, M.B., Ch.B., Resident Medical Officer, Borough Fever Hospital.

## Medical Staff, St. Luke's Hospital.

JAMES DAWSON, F.R.C.S. (Eng.), Medical Superintendent.

JOHN CAMPBELL, F.R.C.S. (Ed.), Senior House Surgeon.

Vacant, Junior House Surgeon.

## Part Time Medical Officers.

PRIESTLEY LEECH, F.R.C.S. (Eng.), Venereal Diseases Clinic.

J. F. HODGSON, M.D., D.P.H., Venereal Diseases Clinic.

F. W. GOYDER, F.R.C.S. (Eng.), Orthopaedic Surgeon.

H. FRANKLYN, M.R.C.S., L.R.C.P., Radiologist.

HARRY V. PHELOM, M.R.C.P., Pathologist and Bacteriologist.

D. W. HEYNEMANN, M.B., Ch.B., Assistant School Medical Officer.

## Public Vaccinators.

A. GARVIE, M.D.

J. J. MURPHY, M.B., Ch.B.

J. MORRISON, M.B.

P. MILNES, L.R.C.P., L.R.C.S.

R. DAVIDSON, M.B., Ch.B.

C. S. OGILVY, L.R.C.P.,

E. D. WELLBURN, L.R.C.P., L.R.C.S.

L.R.C.S.

## District Medical Officers.

A. GARVIE, M.D.

W. R. THOMPSON, L.R.C.P.,

J. MORRISON, M.B.

L.R.C.S.

R. DAVIDSON, M.B., Ch.B.

J. J. MURPHY, M.B., Ch.B.

(Vacant).

## Veterinary and Meat Inspector.

J. POLLARD, M.R.C.V.S., D.V.S.M. (Vict.)

oJ. FLANAGAN, Assistant Meat Inspector.

STAFF OF THE HEALTH DEPARTMENT.—*Continued.*

**Sanitary Inspectors.**

‡J. W. BEAUMONT, Chief Sanitary Inspector.  
†F. TEAL, District Sanitary Inspector.  
†J. G. WALSHAW                    "  
†E. WILSON                         "  
†H. LEAPER                         "  
‡H. MARGERISON, Housing Inspector.  
T. FEARNLEY, Shops' Inspector.

**Clerical Staff.**

†C. CARLTON, Chief Clerk.  
Clerks—H. WRIGHT.                   H. CARLTON.                   A. CLEGG.  
          N. BRADLEY.                   Miss M. FAWTHROP.

**Vaccination Officer.**

Visitor Mental Deficiency Acts.  
Boarding Out Order (Children under 5).   Children Act (Part I.).  
Miss E. CLARKSON.

**Maternity and Child Welfare.**

**Health Visitors.**

x§\*Miss E. R. ORAM, Senior Health Visitor.  
\*E. MARSHALL.   x§\*O. WILSON.   x§\*S. BRIGGS.  
§\*M. MOORE.   x§\*N. DINGSDALE.

**Tuberculosis Visitor:** M. A. OATES.

**Matron, Borough Fever Hospital:** F. WILSON.

**Matron, Sanatorium:** \*W. DAVIDSON.

**Removal Officer:** W. P. SHARP.

**Public Analyst:** H. T. LEA, B.Sc. (Hons.), M.Sc., F.I.C.

**St. Luke's Hospital.**

Steward: A. WHEELDON.  
Matron: E. A. WOODWARD.  
Clerks—A. F. PIDGEON.   L. WATSON.   L. JACKSON.

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\*Salary contributed to, under Public Health Acts or by Exchequer Grants.

†Certificate Sanitary Inspector, Royal Sanitary Institute.

‡Royal Sanitary Institute Certificates as Sanitary Inspector, Meat and other Foods Inspector, and Sanitary Science as applied to Buildings and Public Works.

§Certificate Central Midwives Board.

oRoyal Sanitary Institute. Certificates as Sanitary Inspector, Inspector of Meat and other Foods.



# COUNTY BOROUGH OF HALIFAX.

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## REPORT OF THE MEDICAL OFFICER OF HEALTH, FOR THE YEAR 1931.

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### INTRODUCTION.

*To the Chairman and Members of the Health  
Committee.*

Mr. Chairman, Madam and Gentlemen,

I have the honour to submit to you herewith my Fourth Annual Report, being the fifty-ninth of the series, for the year ended December 31st, 1931.

\* \* \* \*

The Report is divided into 16 sections. Each division of the work is dealt with as a separate section, and all information relating to any particular division is included in the appropriate section.

\* \* \* \*

The Report is of necessity somewhat standardised, but I have endeavoured to present portions of it in such a way as to interest, guide and enlighten public opinion regarding certain vital aspects of public health.

\* \* \* \*

The Birthrate was 12.6. For England and Wales the rate was 15.8, and in the 107 Great Towns it was 16.0. The birth-rate in this country reached its maximum of 36 per thousand in 1876, and since then it has steadily declined until, in 1930, it had fallen to 16.3, equivalent to a reduction of 45 per cent.



Simultaneously with the decline in the birthrate there has been an almost equally remarkable fall in the deathrate, and especially in the infant deathrate. The Deathrate was 14.9. The deathrate for England and Wales was 12.3. The excess of deaths over births was 220. The decline of the birthrate is a well-worn subject. It is argued by some to be deplorable and by others to be desirable. The subject is too immense and controversial for adequate elaboration in an annual report. The infant mortality rate was 77. Last year it was 66 per thousand. Maternal Mortality during the last nine years has been above the average. Since 1925, the rates have been 5.6, 5.7, 7.4, 10.2, 6.8, 9.2, and 3.2, suggesting that some adventitious factors have been at work militating against improvement. What those factors are it is hard to say because of the difficulty of obtaining reliable evidence. On the whole the vital statistics are markedly encouraging. No relationship between cases of scarlet fever and puerperal fever was observed, and no connection between puerperal sepsis and other infectious processes was noted. The Health Visitors attached to the Maternity and Child Welfare Clinic visit children between the ages of 1 and 5 years. These arrangements (as set out in the Maternity section of the Report) appear to be adequate.

\* \* \* \*

I have not sufficient data before me to warrant any accurate statement on the effect of the continued industrial depression on the health of the people. The physical and mental condition of the people are so closely bound up together that I think one may fairly say that every advance in the happiness and contentment of the people depends upon the maintenance of a certain standard of health in the community.

\* \* \* \*

The most notable event of the year was the appropriation of St. Luke's Hospital as a General Hospital under the Public Health Acts. The next step will be to equip, staff and develop the hospital according to its newly-found status.

\* \* \* \*

### Heart Disease and Arterio-Sclerosis.

Though the average duration of life has considerably increased there has been an increase in the mortality rate among males of middle age. In late middle life almost one-third of the total deaths are due to degenerative diseases of the heart and blood-vessels. But this is not by any means the whole of the picture. Many more deaths could be included under these headings, for many deaths from cerebral haemorrhage and paralysis are officially scheduled under those



designations but are really the end results of hardened and degenerated arteries. The causes lie in our habits and the high pressure lives that so many are compelled nowadays to live. It is the brain-worker, whose work involves worry and anxiety, rather than the manual worker that develops cardiovascular degeneration. He lives and works under a constant sense of strain. The result of such a life is degeneration of the heart and blood vessels. Placid temperaments may escape, anxious temperaments seldom do. Our aim must be to enlighten people in respect of the causes of degenerative conditions with a view to their early detection, prevention, and treatment.

\* \* \* \*

### **Cancer.**

Cancer is dealt with in section 3 of the Report. It continues to exact its toll and is the most dreaded disease of modern times. Mystery shrouds its cause. It has been established that although chronic irritation is not the sole cause of cancer it plays a big part in the process of cancer formation. The commonest cancers are cancers of the breast, the womb and the digestive tract. Section 3 of the Report points out some of the pinnacles of fact climbed by those who are endeavouring to grapple with the cancer problem and emphasises the supreme importance of early diagnosis.

\* \* \* \*

The section on smoke abatement relates what smoke abatement measures are doing to-day, and what their achievements are likely to be in the future. The Chief Sanitary Inspector makes out a strong case against the mischief and wastefulness of burning raw coal in factories, offices, and homes. What is needed is a public conscience alive to the need for the cleansing of our atmosphere.

The Respiratory diseases bulk largely in the deathrates. These diseases are predisposed to by atmospheric impurities. Halifax is not peculiar in this respect. A high respiratory deathrate obtains in the industrial towns of the North as compared with the agricultural districts of the South.

\* \* \* \*

The combined activities of the dispensary, the sanatorium and the tuberculosis nurse have made it possible to considerably reduce the deathrate.

\* \* \* \*

The Tuberculosis Service continues to do excellent work. Close co-operation has been maintained between this service



and the other Health Departments. The Dispensary is a centre for diagnosis and advice. From it are drafted patients to the Sanatorium. Reference to the Tuberculosis section of the Report shows an increase of the work in every direction.

\* \* \* \*

Mental Deficiency continues one of our greatest problems. There are altogether about 300,000 mental defectives in England and Wales. Of these one-third require institutional provision, and two-thirds some other form of care. Sterilisation has been advanced as a partial solution of the problem, but I am of the opinion that sufficient data are not yet available on which to base any definite recommendation in that direction. The recommendation that the marriage of defectives should be prohibited has also been advanced as a "safeguard," but the prohibition of marriage for mental defectives would not prevent them from propagating. What we need is an expert inquiry to go into the whole matter. The time has arrived when (in addition to continual vigilance in respect to environment) civilisation must give serious attention to the inborn qualities of the race. "A corrupt tree cannot bring forth good fruit," and there is a danger of the cumulative effects of dysgenic selection resulting in social degeneracy.

\* \* \* \*

Another very important part of the work of the Public Health Department is the supervision of food (especially milk), to ensure its purity and freedom from contamination. Particulars of this work appear in Section 13 of the Report.

\* \* \* \*

A perusal of the foregoing (and the report which follows) will have enabled the reader, I hope, to realise something of what is being done to make Halifax a healthier place to live in. A distinguished statesman of Victorian days enunciated the truism that "the health of a nation is its wealth." The activities of the Health Department, therefore, may be regarded as contributing to the national wealth.

\* \* \* \*

The cost of the Health Services is about 11/6 per capita, per annum. Eleven and sixpence would buy a cinema ticket, a box of chocolates and a few gallons of petrol. This particular 11/6 buys protection from typhoid fever, cholera, dysentery and other infectious diseases, the reduction of infant mortality, the lowering of the tuberculosis incidence and deathrate, the correction of hundreds of physical defects in our child population, the supervision of food supplies, the care of the blind, the treatment of venereal disease, the care and treatment of

large numbers of ailing people, and the general administration of numerous other health services.

\* \* \* \*

My thanks are again due to all the members of the Health Department Staff for the loyal and painstaking manner in which they have discharged their duties throughout the year.

\* \* \* \*

In conclusion, I wish to thank the members of the Health Committee for the careful consideration they have given to any proposals I have submitted to them, and for their support and encouragement at all times.

I am,

Your Obedient Servant,

(Signed) G. C. F. ROE,

Medical Officer of Health.

Health Department,  
Powell Street, Halifax.  
July, 1932.



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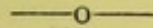
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## **SECTION 1.**



**Social Conditions.**

**Vital Statistics.**

# REPORT.

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## Statistics.

Latitude	53	44°	North.		
Longitude	1	50°	West.		
Mean height above sea level, feet	...	...	...	...	780
Area in acres	...	...	...	...	13,984
Population (Mid year, 1930).	For Birthrate	...	...	...	98,270
	For Deathrate	...	...	...	98,060
Density of population per acre	...	...	...	...	.14
Number of inhabited houses (1921 Census)	...	...	...	...	26,506
Average number of persons to each occupied house...	...	...	...	...	3.8
Rateable Value	...	...	...	...	£550,705
Sum represented by a penny rate...	...	...	...	...	£2,140

### Summary of Vital Statistics.

Birthrate per 1,000 population	...	...	...	...	12.6
Deathrate per 1,000 population	...	...	...	...	14.9
Infantile deathrate per 1,000 births	...	...	...	...	77
Natural decrease of population (Excess of Deaths over Births)	...	...	...	...	220
Respiratory deathrate	...	...	...	...	1.7
Phthisis deathrate	...	...	...	...	.51
Deathrate from other forms of Tuberculosis	...	...	...	...	.20
Deathrate from Cancer	...	...	...	...	1.9



## Summary of Deaths.

(Based on the Registrar General's "Short List" of causes of death).

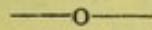
Cause of Death	Number
Enteric Fever	2
Smallpox	—
Measles	9
Scarlet Fever	3
Whooping Cough	4
Diphtheria	17
Influenza	38
Encephalitis Lethargica	3
Meningococcal Meningitis	—
Tuberculosis of respiratory system	50
Other Tuberculous Diseases	20
Cancer, Malignant Disease	191
Rheumatic Fever	—
Diabetes	23
Cerebral Hæmorrhage, etc.	95
Heart Disease	327
Arterio-sclerosis	115
Bronchitis	52
Pneumonia (all forms)	109
Other Respiratory Diseases	6
Ulcer of Stomach or Duodenum	14
Diarrhœa, etc.	10
Appendicitis and Typhlitis	10
Cirrhosis of Liver	6
Acute and Chronic Nephritis	52
Puerperal Sepsis	—
Other Accidents and Diseases of Pregnancy and Parturition	4
Congenital Debility and Malformation, Premature Birth	49
Suicide	24
Other deaths from violence	41
Other defined Diseases	189
Causes ill-defined or unknown	2
Total	1,465



	Year	Birthrate per 1,000 Total Population	Annual Deathrate per 1,000 Population								Rate per 1,000 Births	
			ALL CAUSES	Enteric Fever	Small-Pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Diarrhoea and Enteritis (under two years)	TOTAL DEATHS under one year
England and Wales ... 107 County Boroughs and Great Towns including London ...	1931	15.8	12.3	0.01	0.00	0.08	0.01	0.06	0.07	0.36	6.0	66
	1931	16.0	12.3	0.00	0.00	0.10	0.01	0.07	0.08	0.33	8.4	71
HALIFAX ...	1923	15.2	13.8	0.01	0.00	0.05	0.01	0.00	0.02	0.30	7.2	90
	1924	14.9	15.3	0.01	0.00	0.08	0.01	0.06	0.05	0.73	6.7	96
	1925	14.5	15.9	0.04	0.00	0.18	0.01	0.10	0.09	0.40	4.2	93
	1926	14.5	14.3	0.01	0.00	0.02	0.01	0.10	0.09	0.14	7.8	79
	1927	13.8	15.4	0.00	0.00	0.20	0.02	0.06	0.08	0.67	6.7	90
	1928	12.9	12.3	0.02	0.00	0.00	0.02	0.00	0.16	0.10	3.9	67
	1929	13.4	14.7	0.01	0.01	0.03	0.03	0.14	0.09	0.59	6.0	76
	1930	13.3	13.4	0.01	0.00	0.06	0.01	0.02	0.07	0.12	4.6	66
	1931	12.6	14.9	0.02	0.00	0.09	0.03	0.04	0.17	0.38	4.8	96

(Provisional figures. The rates have been calculated on a population estimated to the middle of 1931.  
The mortality rates refer to the whole population as regards England and Wales, but only to civilians  
as regards London and the group of towns.

## SECTION 2.



# General Provision of Health Services.

## Bacteriological Service.



## General Provision of Health Services.

(Arranged as required by the Ministry.)

Hospitals provided or subsidised by the Corporation :—

**Tuberculosis**—The Sanatorium at Shelf provides accommodation for 50 adults (25 early and 25 other cases) and for 12 children. It is provided by the Halifax Corporation and receives cases from other districts, including Lancashire County.

The Health Committee has a call on 5 beds at the Bermer-side Residential School for children in the pre-tubercular stage, or children suffering from non-pulmonary tuberculosis of a non-infectious character.

**Maternity Hospital**—The Maternity Homes in connection with St. Luke's Hospital and the Royal Halifax Infirmary appear amply to meet the needs of the town. The Corporation makes a grant of £300 per annum towards the Infirmary Maternity Home.

**Hospital for Children**—The Education Committee has an arrangement with the Royal Halifax Infirmary with reference to operations on tonsils and adenoids, and the Maternity and Child Welfare Committee an arrangement with the same Institution for the treatment of Ophthalmia Neonatorum.

**Fever Hospital**—The Corporation provides the Stoney Royd Fever Hospital which admits cases of Scarlet Fever, Diphtheria, Enteric and other fevers from Halifax, and from the areas of neighbouring Local Authorities. Accommodation for 46 cases.

**Small Pox**—The Halifax Corporation maintains the Small Pox Hospital at Belle Vue, Mount Tabor, which has accommodation for 26 patients. This hospital is subsidised by the Brighouse Joint Hospital Board and the Urban District Councils of Luddenden Foot, Midgley and Sowerby.

**Venereal Diseases**—The Corporation has an arrangement with the Royal Halifax Infirmary for both out-patient and in-patient treatment. See page 41.

**General Nursing**—Under the Local Government Act, 1929. St. Luke's Hospital, containing 394 beds was, on April 1st last, transferred to the Local Authority and is administered by the Health Committee.



## AMBULANCE FACILITIES.

### (a) For Infectious Cases—

The Corporation's Motor Ambulance Service (1 "Vulcan" 22 H.P., 1 "Guy" 20 H.P.) worked from Stoney Royd Hospital, serves Halifax and the other districts from which cases are admitted to the Hospital.

### (b) For non-Infectious and Accident Cases—

(1) The Corporation's Motor Ambulance Service, worked by the Fire Brigade (Tel. 3222). (1 "Mercedes" 45 H.P., 1 "Vulcan" 20 H.P., 1 "Austin" 20 H.P.)

(2) The Health Committee's Ambulance at St. Luke's Hospital (Tel. 4259). ("Austin" 20 H.P.).

(3) The Ambulance Service of the St. John Ambulance Brigade and British Red Cross Society. ("Austin" 20 H.P.).

Commandant—Mr. A. E. Rawbon (Tel. 61197).

Transport Officer—Mr. L. Chambers (Tel. 3831).

## CLINICS AND TREATMENT CENTRES.

Unless otherwise stated, the following are all provided by the Halifax Corporation :—

### Tuberculosis—

Tuberculosis Dispensary, 8, Clare Road.

Mondays—Evening.

Thursdays—Evening.

### Maternity and Child Welfare—

Child Welfare, 66, 68, Northgate.

Monday—Afternoon.

Tuesday—Morning and Afternoon (Queen's Road Branch).

Wednesday—Morning and Afternoon.

Friday—Morning and Afternoon.

Ultra-Violet Light and Massage.

Monday—Morning.

Thursday—Morning.

Saturday—Morning.

Maternity (Ante-Natal).

Thursday—Afternoon.

Tuesday—Morning and Afternoon (St. Luke's Hospital).

Thursday—Evening (St. Luke's Hospital).

Wednesday—Afternoon and Evening (Royal Halifax Infirmary, subsidised by the Corporation).

Thursday—Afternoon.

One Evening Session Monthly at the Halifax District Nursing Association, Clare Road. Subsidised by the Corporation.



**Cleansing.** (Treatment of Scabies and Vermin)—  
At Stoney Royd as required.

**Venereal Diseases—**

Royal Halifax Infirmary.

Tuesday—Afternoon & Evening (for Women and Children).

Thursday—Evening (for Men).

Daily—Morning and Evening (for Men).

Sunday—Morning (for Men).

**School Clinic, Horton Street—**

Medical Inspection—Two half-days per week.

Minor Ailments—Six half-days per week.

Dental—Treatment, six days per week. Inspection, one half-day per week.

Ophthalmic—Two half-days per week.

Remedial Exercises—5 full days.

An Orthopædic Clinic is now in operation.

**Public Health Officers of the Corporation :—**

These are set out in the introductory pages of the Report.

**Nursing in the Home—**This is provided by :—

Halifax District Nursing Association.

Siddal Nursing Association.

Illingworth Nursing Association.

Luddenden Nursing Association.

**Midwives—**See Maternity and Child Welfare Section, page 43.

**Chemical Work—**All chemical analyses are performed by Mr. H. T. Lea, M.Sc., the Borough Analyst. This work includes not only the analysis of samples taken under the Sale of Food and Drugs Acts (page 109), but also the examination of water from wells and other sources, which from time to time occupy the attention of the officers of the Health Department.

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## Bacteriological Examinations.

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The arrangements are as follows :—

Bacteriological examinations are carried out at the Royal Halifax Infirmary, where swabs, etc., may be sent direct.

A swab is said to be positive when Kleb's Loeffler Bacilli are found, and negative when they are not found. Failure to find K.L.B. does not negative the presence of diphtheria, and in suspicious cases it is wrong to wait for the result of a swab before giving anti-toxin.



A small Bacteriological Laboratory has been equipped at the Fever Hospital, and the resident doctor examines the hospital throat swabs for K.L.B.

### **Enteric Fever.**

Blood outfits for the agglutination test are supplied by the Health Department, and may be sent direct to the Royal Halifax Infirmary.

### **Tuberculosis.**

Sputum and other material is examined only at the Tuberculosis Clinic, 8, Clare Road, Halifax, and should not be sent to the Royal Halifax Infirmary. Sputum must be sent in special outfits which will be supplied on the application of the practitioner.

### **Examinations 1931.**

The following Table shows the number of examinations carried out either at the Royal Halifax Infirmary, the Tuberculosis Clinic, or the Fever Hospital during the year, either for the medical practitioners of the town, the clinic, or the Health Department :—

Sputum for Tubercle	...	...	...	648
Diphtheria Swabs	...	...	...	2152
Hair for Ringworm	...	...	...	1
Agglutination Test (Widal) T.A.B.	...	...	...	14
Others (Fluids, etc.)	...	...	...	49
Total ...				2864

In addition to the above, samples of milk from cows suspected to be suffering from tuberculosis of the udder have been taken by the Veterinary Inspector and submitted to bacteriological tests in other Laboratories.

### **Issue of Sera and Vaccines.**

#### **Diphtheria Antitoxin.**

As the Health Department is usually prepared to remove diphtheria cases to hospital on the shortest notice, the issue of diphtheria antitoxin for use in the town should be rarely required; a supply is kept at the Health Department for issue in certain circumstances.

#### **Botulism Antitoxin.**

The Ministry of Health has placed botulism antitoxin at certain centres about the country. The nearest to Halifax are Manchester and Leeds. The Medical Officers of Health of these places are in charge of the supplies.

A good botanical knowledge is not necessary for the study of the history of the country, and the student should not be discouraged by the fact that the history of the country is not a science.

The history of the country is not a science, but a study of the past. It is a study of the past, and the student should not be discouraged by the fact that the history of the country is not a science.

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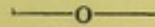
THE HISTORY OF THE COUNTRY

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### SECTION 3.



## Cancer.

## Cancer.

This subject has been dealt with at some length in the introduction to the Report.

Preventive measures include the removal of sources of chronic irritation, e.g., jagged teeth, excessive smoking and drinking very hot fluids.

The following Table shows the frequency with which organs were affected during the past year :—

Males.				Females.			
Stomach	...	...	15	Stomach	...	...	19
Tongue	...	...	6	Tongue	...	...	—
Intestines	...	...	15	Breast	...	...	16
Other organs and tissues	41			Uterus	...	...	30
				Other organs and tissues	49		
Total.....				77	Total.....		
					114		

The following preventive points in connection with Cancer are of general interest :—

- (1) If you see or feel a small lump about your body consult your doctor at once.
- (2) If you notice unusual discharges or bleeding from the openings of the body consult your doctor at once.
- (3) Avoid chronic irritation, e.g., excessive smoking, jagged teeth, ill-fitting false teeth and the practice of drinking fluids at very high temperatures.
- (4) Consult your doctor re Chronic Indigestion.
- (5) Remember the importance of the time factor in Cancer.

It is a mistake to look upon cancer as a hopeless disease. Research must continue and the disease must be grappled with.

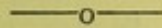
Radium although a valuable weapon against cancer, is not a cure for all cases. Radium costs about £12 per milligramme. A hundred milligrammes is required to treat one case of cancer of the cervix uteri, but it can be used for an indefinite number of cases. There is a danger lest the glamour of novelty puts a spurious value upon radium, which can only be appraised at its true value when time and experience shall have shown its limitations.

A Radium Clinic, under the direction of Dr. Chester Williams, is now functioning at the Royal Halifax Infirmary, and I hope the Health Committee will see their way to make a grant towards the cost of this Clinic.

Cancer now stands second amongst the killing diseases. Heart Disease comes first. Between them they cause rather more than one quarter of all deaths.



## **SECTION 4.**



**Infectious Disease.**

**Fever Hospital.**

## Borough Fever Hospital.

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I am indebted to Dr. D. C. Liddle, Resident Medical Officer at the Borough Fever Hospital, for the following report :—

The Fever Hospital is situated at Stoney Royd on a site of  $3\frac{1}{2}$  acres, at a height of 450 feet above sea level.

As the result of a survey of the Health Services by the Ministry of Health the accommodation of the Hospital has been reduced from its previous number of 52 beds to 46 beds. As the building is entirely unsuited for a Fever Hospital, the Council has decided to build a new Fever Hospital at Northowram.

The allocation of the beds for the various diseases is now as follows :—Diphtheria 12 beds, Scarlet Fever 28, and other diseases 6 beds. As the accommodation is entirely inadequate during an epidemic of one disease, the beds for other diseases are utilised for the epidemic disease.

The Fever Hospital supplies, when necessary, the staff required for the Small-Pox Hospital. The laundry at Stoney Royd does the laundry work for the Sanatorium and the Small-Pox Hospital.

The Hospital is a recognised Training School for Fever Nurses in accordance with the regulations laid down by General Nursing Council, and during the year 6 Probationer Nurses received training.

Routine Bacteriological work is carried out at the Hospital.

During the year 340 patients were admitted to the Hospital, of whom 296 were Borough cases and 44 were from areas outside the Borough. Of the 340 cases, 140 were admitted as Scarlet Fever, 190 as Diphtheria, 5 as Enteric, 4 as Cerebro-Spinal Meningitis, and 1 for observation.

### Scarlet Fever.

The number of cases admitted to Hospital as Scarlet Fever was 140, of which 125 were true cases, the remaining 15 consisted of :—9 Measles, 1 Diverticulitis, 2 Chicken Pox, and in 3 cases nothing abnormal was found. The average length of stay in hospital for Scarlet Fever cases was 38.3 days. 129 were Borough cases, 11 were " Outside the Borough " cases.



The following complications and sequelæ occurred among the patients suffering from Scarlet Fever :—

	Present on admission	Onset after admission	Total
Rhinorrhoea ... ..	5	7	12
Cervical Adenitis ... ..	6	11	17
Rheumatism ... ..	1	3	4
Sore Nose, etc. ... ..	1	5	6
Septic Spots, etc, ... ..	1	4	5
Albuminuria of Convalescence	—	6	6
Otitis Media ... ..	5	5	10
Heart Disease ... ..	2	1	3
Bronchitis and Broncho-Pneumonia ... ..	2	—	2
Conjunctivitis ... ..	—	1	1

There were 3 deaths among the cases of True Scarlet and 2 deaths among the False Scarlet, one being a Measles-Broncho Pneumonia and one a Diverticulitis.

Since the introduction of serum treatment, the prognosis of Scarlet Fever seems to be more favourable than previously. The number of complications and sequelæ appear to be reduced in frequency and in severity. The length of stay in Hospital has also been reduced.

As is the case with Diphtheria Antitoxin however, the value of the serum is greatest in the cases to which it is given early in the course of the disease.

### Diphtheria.

During the year 190 cases were removed to Hospital suffering from Diphtheria, of which 171 were true cases, the remaining 19 consisted of 10 Follicular Tonsillitis, 3 Acute Laryngitis, 1 Measles, 1 Scarlatina and 1 Post Tonsillectomy-Trauma, and in 1 case no disease was detected, and 2 Broncho-pneumonias. Of the 190 cases admitted 158 were Borough cases, 32 were from areas outside the Borough. The length of stay in Hospital for Diphtheria cases was 50.2 days.

The following complications and sequelæ occurred :—

Complication	Before admission	After admission	Total
Palatal Paresis ... ..	2	9	11
Albuminuria ... ..	1	6	7
Septic Spots and Abscesses ...	3	3	6
Other Paralysis (Orbits and Legs, etc.) ... ..	1	4	5
Cervical Adenitis ... ..	2	4	6
Otorrhoea ... ..	4	1	5
Heart Disease ... ..	2	1	3

Deaths from Diphtheria totalled 18, in two of these the disease was complicated by Measles.

The length of stay in Hospital of the uncomplicated cases was 9.2 days.

The length of stay in Hospital of the cases complicated by Measles was 1 day.

The following Table gives an analysis of the fatal cases of Diphtheria :—

Case No.	Day of Disease on Admission	Condition on Admission	Antitoxin given before admission or not
1	3rd	Ill	No
2	3rd	Ill	No
3	3rd	Seriously ill	No
4	5th	Dangerously ill	No
5	4th	Ill	No
6	3rd	Seriously ill	No
7	2nd	Seriously ill	No
8	5th	Seriously ill	No
9	3rd	Seriously ill	No
10	25th	Moribund	?
11	2nd	Ill	?
12	3rd	Seriously ill	No
13	3rd	Ill	No
14	5th	Seriously ill	No
15	5th	Moribund	Yes
16	3rd	Moribund	No
17	6th	Dangerously ill	Yes
18	5th	Dangerously ill	No



The prognosis of Diphtheria depends on its early diagnosis and adequate serum treatment. The Hospital admits all suspected cases without awaiting the results of a Bacteriological examination of swabs. During the last quarter of the year, Halifax experienced an epidemic of unusual extent and severity.

### **Immunisation, Schick and Dick Testing.**

The necessity of protecting the staff of an Infectious Diseases Hospital is obvious. All members of the staff at the Hospital are given the opportunity of being Dick or Schick tested to ascertain susceptibility and if susceptible they are offered immunisation. The Schick Test determines the susceptibility to Diphtheria and the Dick to Scarlet Fever.

In the matter of immunisation there are two stages, (1) a test to determine susceptibility to the disease and (2) the immunisation of those who are found to be susceptible.

A scheme is under consideration for the setting up of a Diphtheria Prevention Clinic and for the provision of facilities for Diphtheria Immunisation by General Practitioners in Halifax.

The Diphtheria Immunisation Schemes in Germany and the United States have proved beyond doubt the value of the measures.

During the year the Resident Medical Officer has been called into consultation by the General Practitioners on many occasions. Schick and Dick Testing and the Immunisation of susceptible cases have been carried out.

### **Cerebro-spinal Meningitis.**

Four cases were admitted as Cerebro-spinal Fever but none of these was a true case.

One was a Tuberculous Meningitis, one a Pneumococcal Meningitis, one a Cellulitis of the scalp and Bronch-pneumonia, and one a post-Morbilli Arthritis and Adenitis.

### **Enteric Fever.**

During the year four cases were sent in as Typhoid Fever and one as Para-Typhoid.

Three cases were true Typhoid and one was a Para-Typhoid and one was a Basal Pneumonia.

All of these except one were Borough cases. One death occurred from Typhoid.

Three cases gave the Widal Reaction for Typhoid. One case gave the Widal Reaction for Para-Typhoid B.



The average stay for the Typhoid cases was 51 days. The average stay for the Para-Typhoid cases was 63 days.

### Laboratory Report.

The following examinations of specimens for organisms were carried out :—

	Positive	Negative	Total
Nose and Throat Swabs for K.L.B. ... ..	174	505	679
Pus from Chest (Staphylococci)	1	0	1
Cerebro-spinal Fluid ... ..	0	3	3
Fluid from Knee ... ..	0	1	1
Faeces for B. Typhosus ... ..	2	0	2
Sputum for Tubercle Bacilli...	0	1	1

### Operations performed at Stoney Royd.

Nature	Number
Incisions and Drainage ... ..	7
Lumbar Puncture ... ..	3
Resection of Ribs for Empyema ... ..	1
Tracheotomy ... ..	0
Total ... ..	11

### Disinfection.

A steam disinfecter and Formalin disinfectors are part of the equipment at Stoney Royd.

During the year the following have been disinfected :—

Hospital beds and bedding ... ..	1,789
Bundles of dresses and suits ... ..	249
Bundles of jerseys, stockings and bedjackets...	304
Bundles of sundries (books, hair, etc.) ... ..	278

The following Table shows the number of cases suffering from Infectious Diseases transferred from other Hospitals and Institutions to Stoney Royd :—

Disease	Royal Infirmary	St. Luke's Hospital	Halifax Sanatorium	School Clinic
Scarlet Fever ... ..	1	—	—	—
Diphtheria... ..	13	1	1	1
Enteric Fever ... ..	1	—	—	—
Total ... ..	15	1	1	1



The following Table shows the Monthly Admissions to Hospital for the various diseases for the year :—

Month	Scarlet Fever	Diphtheria	Enteric & Paratyphoid	Other Diseases	Total
January ... ..	5	11	—	1	17
February ... ..	8	6	—	3	17
March ... ..	13	7	—	2	22
April ... ..	8	9	—	—	17
May ... ..	6	12	—	2	20
June ... ..	1	4	—	3	8
July ... ..	4	15	—	4	23
August ... ..	2	9	1	3	15
September ... ..	11	11	—	4	26
October ... ..	22	32	1	7	62
November ... ..	19	23	2	4	48
December ... ..	26	32	—	3	61
Total ... ..	125	171	4	36	336

In four cases nothing abnormal was found.

The following Table shows the distribution of "outside the Borough cases" :—

Area	Scarlet	Diphtheria	Others	Total
Shelf ... ..	3	4	1	8
Luddenden Foot ...	2	19	—	21
Soyland ... ..	—	2	—	2
Greetland ... ..	—	1	—	1
Elland ... ..	2	1	—	3
Stainland ... ..	—	1	—	1
Midgley ... ..	3	—	—	3
Southowram ... ..	1	1	—	2
Rishworth ... ..	—	1	—	1
Ripponden... ..	—	1	—	1
Sowerby Bridge ...	—	1	—	1
	11	32	1	44

14 other Outside the Borough cases came from the Crossley & Porter School, making the total O.B. cases 58.

### Ambulance Facilities for Infectious Cases.

Two ambulances are garaged at Stoney Royd for the removal of infectious cases to Hospital. They are (1) a "Vulcan," 22 h.p.; (2) a "Guy," 20 h.p. The latter is reserved for the removal of Small-Pox cases.

### Small-Pox Hospital, Mount Tabor.

This Hospital, maintained by the Council, is under agreement to admit cases from the Brighouse Joint Hospital Board's area, from Luddenden Foot, Midgley and Sowerby. Some income could have been derived by admitting cases from other areas which wanted accommodation, but the beds were jealously reserved for the use of the districts named, in view of the anxiety which prevailed as to the spread of Small-Pox on a large scale.

The following cases were admitted during the year :—

Halifax	...	...	...	12
Other areas	...	...	...	43

---

55

The Hospital was staffed (in addition to the resident caretaker and his wife) by nurses from Stoney Royd Fever Hospital, and the victualling and nursing was supervised by Miss Wilson, Matron, Stoney Royd. The Medical Officer of Health and the Assistant Medical Officer of Health, provided the medical attendance. The situation of the Hospital, on the open moorland, is such as to expose it to wild weather, and the wood and iron buildings are not the most suitable type for such a situation, the upkeep being costly. Still, the patients seemed very comfortable.

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## Prevalence of, and Control over, Infectious Diseases.

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### Enteric Fever.

Four cases of this disease were notified during the year, all of which were removed to the Borough Fever Hospital. Two deaths occurred. Routine enquiries with regard to food, water, etc., failed to reveal the source of infection.



### Small-Pox.

The subjoined Table shows the incidence of Small-Pox in Halifax during the year :—

	Inside the Borough	Outside the Borough	Total
	No. of Cases	No. of Cases	
January ...	6	19	25
February ...	1	10	11
March ...	2	3	5
April ...	2	—	2
May ...	1	5	6
June ...	—	2	2
July ...	—	1	1
August ...	—	1	1
September ...	—	—	—
October ...	—	1	1
November ...	—	1	1
December ...	—	—	—
	12	43	55

The following steps are taken on the outbreak of a case of Small-Pox in Halifax :—

- (1) The certifying doctor is communicated with and the patient immediately removed to Hospital.
- (2) The house is disinfected.
- (3) The vaccinating officer is advised.
- (4) Medical Officer of Health and staff proceed to the spot and ascertain extent of the mischief.
- (5) History of source of infection is sought.
- (6) List of contacts is compiled.
- (7) Vaccination or re-vaccination is offered to all contacts.
- (8) Contacts are kept under supervision for 21 days.
- (9) Medical Officers of Health in other districts are advised about contacts proceeding thither.
- (10) Practitioners informed when new outbreak occurs.
- (11) Heads of common lodging-houses, casual wards, work-houses, infirmaries and hospitals informed when a new outbreak occurs.

Other measures are dictated by circumstances of the case.

### Scarlet Fever.

The number of notifications of this disease received during the year was 163, and the total number of cases admitted to hospital was 140. One hundred and twenty-nine cases were from within the Borough, and 11 from outside the Borough.



The present type of Scarlet Fever is mild and the deathrate very low. It varies between two and five per cent. The mortality rate is higher in children between the ages of 1 and 5 years than in those who are attacked earlier or later in life. The disease is rare among infants, especially when at the breast. Second attacks are uncommon but they are met with. Infection is usually conveyed by nose, ear and mouth discharges. It is unlikely that desquamation is infectious. Scarlet Fever, like the poor, is always with us, but is liable to great seasonal variations. The autumn and winter are the most usual periods for epidemics, especially the autumn.

The disease caused three deaths during the year.

### **Diphtheria.**

There were 165 notifications received and 190 cases (including 32 non-residents) were admitted to the Fever Hospital as suffering from Diphtheria.

There were 17 deaths from the disease.

Attention is drawn to the need for **IMMEDIATE** medical advice in ailments of children, and especially when there is anything wrong with the throat, or when breathing is difficult. Diphtheria is a disease which comes on with very slight symptoms, and the patients are always more seriously ill than they seem to the inexperienced. The antitoxin treatment of Diphtheria, which is of such remarkable value when applied early, is of little use when several days have been wasted in the hope that domestic remedies may cure. Parents should keep Diphtheria always in mind and send for the doctor early when a child is poorly.

Diphtheria is a serious disease. The progress of a case of Diphtheria depends very much on how long the disease has lasted before it is seen by a doctor. It is not uncommon to find that the initial sore throat of Diphtheria is disregarded by the parents, and it is only when after some days' illness the child's condition becomes alarming that a doctor is called in. It is in this class of case that heart failure, paralytic manifestations and toxæmia occur. Diphtheria obstructing the larynx is very dangerous and usually necessitates immediate operation. Another danger in connection with this type of Diphtheria is the tendency for Broncho-Pneumonia to occur. Swabs should be examined in all cases, but where there is a reasonable probability that the disease is Diphtheria—and the swab is negative—it is advisable to give anti-toxin.

### **Puerperal Fever and Puerperal Pyrexia.**

Three cases of Puerperal Fever were notified. All recovered.

Thirteen cases of Puerperal Pyrexia were notified. All recovered.



Puerperal Fever—the most potent cause of death in child-birth—is caused by streptococci, but obstetricians are divided in their opinion upon the question of the channel of infection in these cases. Prevention depends primarily on good mid-wifery practice.

### **Cerebro-Spinal Fever.**

No case of this disease occurred during the year.

### **Acute Polioencephalitis.**

This is a disease of the central nervous system and is possibly connected with the stress and strain of modern life. Fatigue is a causative factor. No case occurred during the year.

### **Influenza and Pneumonia.**

Halifax was not visited by a severe epidemic during the year under review. The mortality is mainly from influenzal pneumonia, but it should not be forgotten that an influenza epidemic raises the mortality for the time being in sufferers from Pulmonary Tuberculosis. During an outbreak every opportunity is taken of impressing upon the public of the necessity of going to bed at the first signs. This is done in the interests of the patient and the community.

During the year 41 notifications of Influenzal Pneumonia and 83 of Primary Pneumonia were received.

## **Non-Notifiable Infectious Diseases.**

### **Measles.**

The control of Measles is specially difficult owing to the fact that it is infectious for some days before the rash appears.

Known, or suspected cases are visited at their homes by the Health Visitors, who, if no doctor is in attendance, advise parents as to treatment, and arrange, when such a course appears to be indicated, for medical or institutional treatment. Appropriate leaflets are also left at the homes, and distributed through the Health Department and Child Welfare Clinics.

During the year the incidence of this disease was fairly heavy, and 190 cases were visited, 25 being removed to hospital. Nine deaths occurred.

### **Whooping Cough.**

The control of this disease is very difficult because of the insidious nature of its onset.

Cases cropped up throughout the year, but the disease did not assume an epidemic form until the last quarter.

Similar measures to those outlined above are adopted for controlling the spread of this disease, and 71 cases were visited by the Health Visitors, 11 being admitted to hospital. The disease caused 4 deaths.

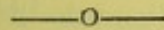
### Notification.

The following Table shows the number of notifications of infectious disease received during the year :—

Disease					Number
Smallpox	...	...	...	...	12
Typhoid Fever	...	...	...	...	4
Scarlet Fever	...	...	...	...	163
Diphtheria	...	...	...	...	165
Puerperal Fever	...	...	...	...	3
Puerperal Pyrexia	...	...	...	...	13
Erysipelas	...	...	...	...	37
Ophthalmia Neonatorum	...	...	...	...	6
Encephalitis Lethargica	...	...	...	...	—
Acute Polio Encephalitis	...	...	...	...	—
Acute Polio Myelitis	...	...	...	...	1
Cerebro-spinal Fever	...	...	...	...	—
Pneumonia :—					
Influenzal	...	...	...	...	41
Primary	...	...	...	...	83
Tuberculosis :—					
Respiratory	...	...	...	...	142
Other Forms	...	...	...	...	44
Total					714



## SECTION 5.



# Tuberculosis.

I am indebted to Dr. Wilfrid Smith, Tuberculosis Officer, for the following report :—

## Tuberculosis.

TUBERCULOSIS DEATH-RATE.			
PERIOD		Respiratory only	All Forms
10 years average 1920-29 ...		'69	'89
1931 ... ..		'50	'71

The following Table shows the ages of the cases at the time of notification and at death :—

AGE PERIOD		TUBERCULOSIS							
		*NEW CASES				DEATHS			
		Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
		M	F	M	F	M	F	M	F
Under 1 year	...	—	—	—	—	—	—	—	—
1 to 5 years	...	1	—	5	3	—	—	2	4
5 to 10 "	...	8	7	6	8	1	—	—	1
10 to 15 "	...	3	9	5	3	—	2	1	1
15 to 20 "	...	5	11	4	—	1	1	—	—
20 to 25 "	...	7	7	3	2	4	6	—	2
25 to 35 "	...	19	18	2	2	9	5	1	2
35 to 45 "	...	12	16	—	—	3	4	—	1
45 to 55 "	...	16	2	1	—	3	2	1	1
55 to 65 "	...	4	2	1	1	7	—	1	—
65 and upwards	...	2	2	—	1	1	1	1	1
TOTALS	...	77	74	27	20	29	21	7	13

\*Includes primary notifications, and cases not notified during life, but first intimated by death returns.

The ratio of non-notified tuberculosis deaths to total deaths from this disease was 15 per cent.



The following Table shows the number of notified cases of Tuberculosis remaining in the Borough on December 31st, 1931 :—

Total Cases	Pulmonary			Non-Pulmonary		
	Males	Females	Total	Males	Females	Total
723	294	241	535	98	90	188

Public Health (Prevention of Tuberculosis) Regulations, 1925.  
No action appeared to be called for.

Public Health Act, 1925 ; Section 62.

No action was taken.

### Tuberculosis Clinic.

The Tuberculosis Clinic is situated at 8, Clare Road. It is a sorting house, advisory centre, and consultative clinic ; not a treatment centre. Patients are sent from the clinic to sanatoria, and recommended domiciliary treatment by their private doctors. Close co-ordination exists between the Clinic, Medical Practitioners, and the Health Department.

### Tuberculosis Scheme.

Diagnosis	Pul- monary	Non-Pul- monary	Total
A—New cases (excluding contacts) :			
(a) Definitely tuberculous ...	126	26	152
(b) Diagnosis not completed ...	—	—	15
(c) Non-tuberculous ...	—	—	66
B—Contacts :			
(a) Definitely tuberculous ...	10	3	13
(b) Diagnosis not completed ...	—	—	5
(c) Non-tuberculous ...	—	—	75
C—Cases written off Clinic Register as :			
(a) Recovered ...	2	5	7
(b) Non-tubercular (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous ...	—	—	151
D—Number of cases on Dispensary Register on December 31st :—			
(a) Definitely tuberculous ...	483	110	593
(b) Diagnosis not completed...	—	—	20

Number of cases on Dispensary Register on Jan. 1st...	540
Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ... ..	7
Number of cases transferred to other areas, cases not desiring further assistance under the scheme and cases "lost sight of" ... ..	49
Cases written off during the year as dead (all causes)	53
Number of attendances at the Dispensary (including contacts) ... ..	1,169
Number of insured persons under Domiciliary Treatment on the 31st December ... ..	20
Number of consultations with medical practitioners :—	
(a) Personal ... ..	29
(b) Other ... ..	214
Number of visits by Tuberculosis Officers to homes (including personal consultations) ... ..	79
Number of visits by Nurses or Health Visitors to homes for Dispensary purposes ... ..	1,989
Number of	
(a) Specimens of sputum, etc., examined ... ..	648
(b) X Ray examinations made in connection with Dispensary work ... ..	49
Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above ...	3
Number of "T.B. Plus" cases on Dispensary Register on December 31st ... ..	229

### Halifax Sanatorium.

Admissions and Discharges during the year :—

	Halifax cases	Other Cases	Total
Remaining in on December 31st, 1930 ...	42	16	58
Admitted during the year... ..	136	35	171
Discharged during the year ... ..	130	33	} 163
Died ... ..	9	0	
Remaining in on December 31st, 1931 ...	39	18	57



Grouping of cases admitted during the year :—

A. Non-Pulmonary—8.

B. Pulmonary :—		Male.	Female.	Total.
Observation	... ..	... 1	1	2
Group 1.	Early cases	... 29	28	57
Group 2.	Intermediate cases	... 28	34	62
Group 3.	Advanced cases	... 21	29	50

We still have to deplore the small percentage of early, i.e., really suitable Sanatorium cases.

The average length of stay was 129 days, as compared with 125, 133 and 128 days in the preceding three years respectively.

The condition of the patients discharged was as follows :—

Improved.	No Change.	Worse.	Dead.	Total.
127	17	19	9	172

All the deaths were pulmonary cases and Halifax residents.

### **Tuberculosis After-Care Committee.**

This Committee, which works in close co-operation with the Medical Officer in charge of the Halifax Sanatorium undertakes, where necessary, the after-care of patients discharged from the Sanatorium.

The objects of the Committee are to keep in close touch with the patients, investigate their economic position, and provide nourishment and other assistance for those who, without this help, would lose the benefit they had derived from their treatment.

Other forms of help, when required, are provided from voluntary funds raised by the Committee for this purpose.





## SECTION 6.

# Venereal Disease.

## Venereal Diseases.

In conjunction with the County Authority, a joint clinic for the treatment of venereal diseases is held at the Royal Halifax Infirmary.

The clinic is open for women and children every Tuesday afternoon from 3-30 to 4-30, and from 6 to 8. For men, every Thursday between 6 and 8 p.m. Also an auxiliary treatment centre for men is open daily from 10 a.m. to 12 noon, and 6 to 8 p.m., and on Sundays from 10 a.m. to 12 noon. It appears that these arrangements are sufficient and adequate for the needs of the Borough.

There is a Medical Officer with an Assistant Medical Officer in charge of this clinic.

The following figures refer to local patients attending the Treatment Centre—

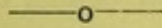
Number of persons dealt with for the first time during the year, and found to be suffering from :—				Local Clinic	Other Clinics
Syphilis	...	...	...	45	—
Soft Chancre	...	...	...	—	—
Gonorrhoea	...	...	...	72	—
Conditions other than Venereal	...	...	...	124	—
Total				241	—
Total attendances at the out-patient clinic...				8009	—
Aggregate number of in-patient days...				182	—
Number of doses of Salvarsan Substitutes given				571	—
Specimens sent to an approved Laboratory for :					
Detection of Spirochaetes	...	...	...	4	—
Detection of Gonococci	...	...	...	—	—
Detection of other organisms	...	...	...	—	—
Wassermann Reaction	...	...	...	244	—
Total				248	—

746 examinations for detection of Gonococci were carried out at the Treatment Centre.

There are 7 medical practitioners not including the two officers of the clinic, in the Borough, qualified to receive free supplies of Salvarsan substitutes.



## SECTION 7.



# Maternity and Child Welfare.

## Maternity and Child Welfare.

I am indebted to Dr. A. Latchmore, the Medical Officer i/c of Maternity and Child Welfare, for the following report :

### Midwives.

Number practising in the Borough of Halifax during the year (this includes Midwives working in Institutions)	30
Number holding the Central Midwives Board Certificate (by examination) ... ..	28
Number of bona fide Midwives (i.e., holding the Certificate granted by the Central Midwives Board to those women who were in practice before 1902, in virtue of such practice and not by reason of having passed the examination) ... ..	2
Number of cases in which Medical aid was summoned ...	132
Medical aid Notices sent on behalf of the child... ..	36
Of these 10 were for inflammation of the eyes.	
16 were for feebleness of the infant.	
2 were for skin condition of the infant.	
1 for deformity of legs.	
1 for vomiting.	
1 for tongue tie.	
1 for convulsions.	
1 for chest condition.	
*3 " B.B.A. dead baby."	

\*In these three cases, the midwife sent for Medical aid because the births had occurred before her arrival, and the infants were dead, and she was uncertain in two of the cases as to whether they had been born alive or dead. Inquests were held on two of these cases, and the verdict was brought in of "want of attention at birth" in each case. The unusual feature in the third case was an alarming abnormality, but the infant was premature, and could not have been saved.

### Notifications received in accordance with C.M.B. Rules.

Intention to resort to artificial feeding ... ..	9
Liability to be a source of infection ... ..	2
Having laid out a dead body ... ..	1

### Midwifery Services subsidised by the Corporation.

#### Bradshaw and Luddenden.

The total number of cases attended by the Halifax and District Nursing Association Midwives during the year was



377. Of these 45 were in the Bradshaw area. A doctor was also engaged in 79 out of the 377 cases (in 74 cases of the ordinary district Midwifery, and in 5 cases in the Bradshaw area).

### Luddenden.

Nurse Gibson resigned her post as Nurse Midwife for Luddenden Nursing Association in November, 1931. Nurse Kniveton was appointed as her successor, and began work in December, 1931.

Nurse Gibson attended 8 maternity cases in the Halifax Borough during 1931, but this represents only part of her work, as she usually did more work for the West Riding Authority than for Halifax.

### Notification of Births Act 1907.

Number of births notified...	} including births transferable to other districts.	{	1,491
Number of births registered			1,590
*Ratio of notified to registered	...	...	93.77
Number of stillbirths	...	...	44
Number of notified births attended by doctors with or without midwives	...	...	301
Number of notified births attended by midwives only	...	...	531
Number of births notified from St. Luke's Hospital...	...	...	297
Number of births notified from Royal Halifax Infirmary	...	...	362
Number of births transferred to other districts	...	...	254

\*This improved notification is gratifying.

### Health Visiting Summary.

Primary visits	...	...	1,168
Visits 1-5 years	...	...	4,397
Repeat visits	...	...	3,988
Ante-natal visits	...	...	165

The Health Visitors devoted part of their time to visiting cases of tuberculosis, from January 1st to April, when the newly-appointed Tuberculosis Department Nurse took over this work.

The duty of visiting mental defectives was, during the year, transferred to an officer of the Health Department, and this new arrangement gives the Health Visitors more time to pay infant welfare visits.

### Infant Welfare Centres.

#### Northgate—

Number of Sessions...	...	...	228
New cases	...	...	563
Re-visits	...	...	7,894
Average attendance per Session	...	...	37



## Queen's Road—

Number of Sessions...	...	...	91
New cases ...	...	...	221
Re-visits ...	...	...	3,303
Average attendance per Session	...	...	38.72

It must be remembered that mothers who are bringing children to the Sunlight Clinic twice a week, rarely attend the ordinary clinics.

## Ante and Post-Natal Clinics—

Number of Sessions...	...	...	43
Number of new cases	...	...	127
Total attendances ...	...	...	317
Average attendance per Session	...	...	7.3

The Medical Officer also holds an Evening Ante-Natal Clinic at the Halifax District Nursing Association, at Clare Road, about once a month.

Ten such Clinics were held during 1931, and 58 new patients were examined. Sometimes the mothers seen at Clare Road Nursing Association subsequently attend the Thursday Afternoon Clinic at Northgate.

The Toddlers' Clinic was not held during 1931 owing to staff shortage and changes.

## Artificial Sunlight—

Number of Sessions...	...	...	132
Number of cases treated	...	...	196
Attendances	...	...	3,436
Average attendance per Session	...	...	26
Attendances of non-tuberculous children under School age	...	...	2,637
Attendances of non-tuberculous children of School age	...	...	639
Attendances of tuberculous children...	...	...	160

As mentioned in last year's Report, we still find it difficult to assess accurately the benefits derived from treatment by Artificial Sunlight, as these do not always show in terms of added weight and height.

The enthusiasm of parents concerning the increased well-being of the children receiving treatment is encouraging. The attendances for 1931 are, however, fewer than in 1930. (The tide of enthusiasm has been higher during the first half of 1932).

**Infant Mortality.**

Of the 92 deaths under one year, 51 were boys and 41 girls. Of these, 62 deaths occurred during the first month, namely 37 boys and 25 girls.



On examination of the causes of death of infants dying under one month, it is again seen that the great majority of them were weakly from the start, and had very little chance of surviving.

This leakage of infant life can only be lessened by greater ante-natal care, and indicates the great importance of this branch of the work.

Of the 30 infants who died between 1 and 12 months, respiratory diseases are again responsible for more than half the deaths.

### Midwives' Inspection.

The midwives have been inspected periodically during the year, and with the exception of one, who was persuaded to resign her certificate in November, 1931, they gave much satisfaction in the discharge of their duties.

They recognise the need for great care in dealing with the eyes of the newly born, and there have not been any cases where damage to the sight has occurred.

Six cases of Ophthalmia Neonatorum were notified, but they were mostly of a mild type.

### Maternal Mortality.

There are only four maternal deaths recorded during 1931, but the actual state of matters is hidden in this instance, by the inevitable but arbitrary division of time into years.

Several deaths occurred in January, 1932, which were due to pregnancy or child-bearing, the confinements having taken place in the latter part of 1931. (In one case the death followed abortion).

Although the deathrate from causes associated with maternity showed a considerable fall during the year, this rate over a period of years is most unsatisfactory as the following Table shows :—

	1923	1924	1925	1926	1927	1928	1929	1930	1931
Sepsis ...	3	0	1	1	1	5	3	4	—
Other causes	7	6	7	7	9	8	6	8	4
Per 1,000 births	6·5	4·0	5·6	5·7	7·4	10·2	6·8	9·2	3·2

While this is to be deplored, analysis of the causes of death in this group would appear to suggest that in many cases associated conditions were primary factors in the cause of death.



The following services are in operation in Halifax for the purpose of combating maternal mortality :—

- (a) Ante-natal Clinics at the Maternity and Child Welfare Centre ; the Halifax and District Nursing Association, Clare Road ; the Royal Halifax Infirmary and St. Luke's Hospital.
- (b) An adequate supply of competent qualified midwives, who are inspected and supervised by Dr. Latchmore.
- (c) The Maternity Homes at the Royal Halifax Infirmary and St. Luke's Hospital.
- (d) Laboratory facilities for bacteriological and pathological examinations.
- (e) The provision, free, of sterile maternity outfits.
- (f) A service of "Home Helps."
- (g) The supply of milk, free, to nursing and expectant mothers.

### **Home Helps.**

Two women, Mrs. Gaukroger and Mrs. Mitchell, were appointed for this work, and were ready to take duty on May 1st, 1930.

The demand for their services however, was not at first encouraging, and Mrs. Mitchell resigned in July, 1930, having been employed for only two weeks out of this period.

Mrs. Gaukroger attended 3 cases in 1930.

Thirteen cases were attended in 1931, representing 171 days work, but temporary home helps had to be engaged for 3 of these cases, as Mrs. Gaukroger was not available.

It is impossible to predict dates accurately in Midwifery work, consequently, on occasion, the regular Home Help may be detained with a case, when she is sent for to go to another woman who has engaged her, and emergency arrangements have to be made.

### **Artificial Sunlight Clinic.**

I am glad to be able to report that the artificial sunlight is a very satisfactory feature of the Health Department's activities.

Cases of rickets, debility, anaemia, malnutrition, nervous irritability, tuberculosis of the spine, glands of the neck, and bones are treated, also Mothers suffering from defective lactation.

The following is the routine course of dosage :—

For first dose, two minutes back and two minutes front.

For a very young child less than this.

Two treatments per week arranged, and the dose gradually increased up to eight minutes back and eight minutes front.



If treatment appears doubtfully beneficial the dose is not increased and is even diminished, should unaccounted for loss of weight or other indication be found.

The average duration of treatment per patient extends over a period of three months.

The danger of a new and spectacular form of treatment like Heliotherapy is that there is a tendency for it to be overestimated. While artificial sunlight has not come up to the expectations of everybody, it is undoubtedly a useful weapon in the modern armoury of therapeutic measures. Appropriately applied it is undoubtedly beneficial in many cases.

### **Inspection of Maternity Homes.**

In the Halifax Corporation Act 1926, powers were given for the compulsory registration of Maternity Homes in Halifax. These provisions were later included in the Midwives' and Maternity Homes' Act 1926, which established the powers for the whole country.

Only one Maternity Home has been registered (those at the Halifax Royal Infirmary and St. Luke's Hospital not being subject to registration). This home has been inspected in accordance with the Act, and was found to be satisfactory.

### **Staff.**

Nurse Roseveare resigned her appointment and left Halifax on March 14th, 1931.

Nurse Marshall was off duty for 6 weeks owing to ill-health.

Nurse Briggs was allowed time off duty to attend classes in Bradford, and in order to sit for her examination in London.

Nurse Moore and Nurse Briggs were allowed time to enable them to accompany the Sanitary Inspectors on some of their visits.

Nurse Wilson commenced duty June 1st, 1931, and Nurse Briggs was appointed whole time Health Visitor, as from 29th July, 1931, having passed her examination.

Sister Oram, the Superintendent Health Visitor, has again done invaluable work in the supervision and organisation of the various services.

### **Voluntary Workers.**

We again wish to express our gratitude to the Voluntary Helpers for their untiring and unselfish work during the year under review.





## Mr. Geyder's Report.

### SECTION 8.

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## Orthopædic Service.

## Mr. Goyder's Report.

### Orthopædic Clinic.

The Orthopædic or Cripple Clinic founded jointly by the Maternity and Child Welfare, Health and Education Committees, has done excellent work. The sessions were originally held in the School Clinic, but as regards the children from the Infant Welfare Centre this was not found successful, as the mothers attended badly. It was therefore arranged that sessions should be held occasionally at the Northgate Centre, and the massage and remedial exercise sessions are also held there. Children requiring operative treatment for rickets were sent to St. Luke's Hospital, Bradford, so as to be treated by the Orthopædic Surgeon of the Clinic, Mr. F. W. Goyder, F.R.C.S.

I am indebted to Mr. F. W. Goyder, F.R.C.S. (Eng.), Orthopædic Surgeon, for the following report:—

The Orthopædic Surgeon has attended at this Clinic on 6 occasions as against 7 in 1930. 54 new cases were examined and 91 re-examinations of children already under treatment were made; the total being almost exactly the same as in last year.

No. of children under treatment on Dec. 31st, 1930	...	17
New children admitted for treatment	...	44
Discharged during year	...	10
Ceased attendance	...	22
Remaining under treatment	...	29

The 61 children under treatment have made 809 attendances for massage and remedial exercises, and 878 sunlight treatments have been given, 76 and 104 in excess of last year's figures, thus showing a continued increase in the work that is being done. An analysis of the cases treated shows the following results:—

Tuberculous conditions	...	0
Deformities of legs, feet and ankles	...	10
Paralytic conditions	...	6
Miscellaneous conditions	...	45
		61

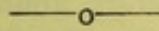
There is now no waiting list and children can be given treatment as soon as they apply for it.

Seven operations have been done on children attending the Clinic, five for deformities due to rickets, one for club foot, and one for nævus of the scalp.

The only unsatisfactory feature of the report is the large number of children whose treatment was discontinued before it could be completed. This has always been the case since the formation of the Clinic, and cannot be completely eliminated because many parents have other children and find great difficulty in attending for treatment. Still there has been some improvement in this direction.



## SECTION 9.



# Mental Deficiency.

## Mental Deficiency Acts, 1913 - 1927.

During the year the Board of Control issued their certificate for Craigie Lea Home. The certificate is for a period of 3 years from December 16th, 1931, and in respect of 28 low-grade patients under 16 years of age (16 Males, 12 Females) excluding cot or chair cases.

By agreement with the West Riding of Yorkshire County Council, 9 places have been reserved for patients from the County area (4 Males, 5 Females).

In order to comply with the requirements of the Board of Control extensive alterations were necessary, and steps were taken during the early part of the current year to have the work carried out.

Mental Deficiency is caused by a sub-development of the convolutions of the brain, especially in the frontal lobes. The causes are bad heredity and bad environment. The cure, then, is the elimination of degenerate human stock and the improvement of environment. It is a tremendous problem because we are embarrassed by our lack of knowledge of the basic springs of heredity.

The following Table shows the Institutional arrangements provided for the accommodation of local patients :—

Name of Institution	Sex of Cases Received	Ages	Accommodation for		Grade	Remarks
			Males	Females		
Mid Yorkshire Institution, Whixley, nr. York	Males	Over 16 years	21	—	High	
St. Catherine's, nr. Doncaster	Females	Over 16 years	—	15	All Grades	This arrangement will be in operation in the early part of 1932
Gibbet Street, Institution, Halifax	Males and Females	Over 16 years	12	12	Mostly Low Grade	To be increased to 52 cases (29 males and 23 females) in 1932
Craigie Lea Certified Institution, Halifax	Males and Females	Under 16 years	16	12	Low Grade excluding Cot or Chair Cases	In operation during 1932. Accommodation reserved for 4 males & 5 females from the West Riding County Area



In addition to the above Halifax patients have been placed in the following Institutions :—

Royal Albert Institution, Lancaster.  
 Pontville R.C. Special School, Ormskirk.  
 Rampton State Institution.  
 Whittington Hall, Chesterfield.  
 Settle Institution, Giggleswick.  
 The Home, Everton Terrace, Liverpool.

The following Table shows the position on December 31st, 1931 :—

Cases " Subject to be dealt with " :—

Under " Order "

In Institutions (excluding cases on licence)	Under 16	Over 16	M.	F.	Total
	3	29	3	24	4
On Licence from Institutions	Under 16	Over 16	—	—	—
	2	—	2	—	2
Under Statutory Supervision ...	...	...	37	33	70
In receipt of Poor Law Relief :—					
In Public Assistance Institutions not approved under Section 37 ...	...	...	—	—	—
In Institutions certified under the Mental Deficiency Acts (including those approved under Section 37)					
Placed under Section 3 ...	...	...	—	—	—
Other Cases ...	...	...	9	16	25

Cases notified by Local Education Authority (Section 2 (2)) :—

Method of Disposal :—

Sent to Institutions by " Order " ...	...	...	—	—	—
Placed under Guardianship by " Order " ...	...	...	—	—	—
Placed under Statutory Supervision ...	...	...	—	1	1
Placed in " Places of Safety " ...	...	...	—	—	—
Died or removed from the area ...	...	...	—	—	—

Of the total number of mental defectives known to the Local Authority :—

- (a) Number who have given birth to children during 1931 :  
 (1) After marriage ... Nil  
 (2) While unmarried ... Nil  
 (b) Number who have married during 1931... Nil

The particulars given above relate solely to cases under the care of the Statutory Committee, and have nothing to do with children of school age, who, so long as they are capable of receiving benefit from instruction in a special school remain under the care of the Education Committee. Particulars regarding them are to be found in the reports of the School Medical Service published separately, in which the work of the special school at Quarry House is described.

The following table shows the results of the experiments conducted on the effect of the various factors on the growth of the plants. The results are given in terms of the percentage increase in the weight of the plants over the control.

The results show that the growth of the plants is affected by the various factors in the following manner:

1. The growth of the plants is increased by the application of the various factors.

2. The growth of the plants is decreased by the application of the various factors.

3. The growth of the plants is not affected by the application of the various factors.

The results of the experiments are given in the following table:

Factor	Percentage Increase in Weight
Control	100
Factor A	120
Factor B	110
Factor C	130
Factor D	140
Factor E	150
Factor F	160
Factor G	170
Factor H	180
Factor I	190
Factor J	200



## SECTION 10.

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# Vaccination.

## The Vaccination Acts 1867-1898, and the Vaccination Act 1907.

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The duty of administering these Acts has been delegated by the Council to the Health Committee.

The Borough has been divided into 7 Vaccination Districts, and the following Table shows the constitution of the districts, together with the names and addresses of the Public Vaccinators :—

District.	Public Vaccinator.
No. 1. Copley Ward.	Dr. E. D. Wellburn, Beech House, Sowerby Bridge.
No. 2. Central, Pellon, Southowram, East, South, Kingston, West and Skircoat Wards.	Dr. T. P. Braim, Whitegate View, Siddal, Halifax.
No. 3. North and Akroydon Wards.	Dr. A. Garvie, Woodlands, Halifax.
No. 4. Illingworth and Ovenden Wards.	Dr. J. Morrison, Oak Leigh, Halifax.
No. 5. Northowram Ward.	Dr. J. J. Murphy, 50, West End, Queensbury.
No. 6. Warley Ward.	Dr. C. S. Ogilvy, Wood Bank, Luddenden Foot.
No. 7. St. Luke's Hospital and Gibbet Street Institution.	Dr. R. Davidson, Woodgate, Halifax.

Stated quite briefly, the Acts make it obligatory—unless a statutory declaration of conscientious objection is made—upon all parents to have their infants vaccinated before they attain the age of six months.

The following short summary outlines the main provisions of the Acts, and indicates the lines of local procedure.

### NOTES ON VACCINATION PROCEDURE.

**Form A.** This is handed by the Registrar to the person registering the birth. It contains :—

- (a) Form of statutory declaration of conscientious objection to vaccination. It must be completed and returned before the child attains the age of 4 months.
- (b) Medical certificate of postponement of vaccination owing to the state of the child's health. Postponement must



- not exceed two months from the date of certificate, but may be renewed from time to time.
- (c) Medical certificate of postponement of vaccination owing to the condition of the house, or recent prevalence of infectious disease in the district. This also must not exceed two months.
  - (d) Medical certificate of insusceptibility to successful vaccination, or of child having had smallpox. The number of times unsuccessfully vaccinated must not be less than three.
  - (e) Medical certificate of successful vaccination must be completed and returned before the child attains the age of 6 months.

**Form Q.** If Form A has not been received by the Vaccination Officer before the child reaches the age of 3 months 8 days, Form Q is sent reminding the parents that they have still 3 weeks in which to complete and return the form.

NOTE.—The 8 days is not a statutory period of grace. [Steps must have been taken under either (a), (b) or (c), before the child reaches the age of 4 months]. It is a period allowed to parents to complete and return the Form. It was considered to be somewhat arbitrary to place persons in default, who, having complied with the requirements of the Act within the statutory period, neglected to return the Form for a day or two.

**Form H.** This Form contains the names, addresses, etc., of those who have failed to secure exemption. It is completed by the Vaccination Officer and sent to the Public Vaccinator, whose duty it is, within 4 weeks, to call and offer vaccination.

**Form K.** This is a final notice sent to parents who have failed to have their child vaccinated, and gives them 14 days in which to comply. Failure to do so places the parent in default and the matter is reported to the Health Committee.

The following figures are extracted from the Return which was prepared for the Registrar General, and relate to the year 1930 :—

Number of births returned in the "Birth List Sheets" 1,524

No. of these births duly entered by 31st January, 1932,  
in Cols. I., II., IV. and V. of the Vaccination Register, viz. :—

Successfully vaccinated	...	...	...	261
Insusceptible of vaccination	...	...	...	6
Had Smallpox	...	...	...	—
No. of Statutory declarations of conscientious objection	...	...	...	1,098
Died unvaccinated	...	...	...	103



No. of these births which on 31st January, 1932, remained unentered in the Vaccination Register on account of :—

Postponement by Medical Certificate ... ..	4
Removed to other Districts (V.O.'s duly appraised)	15
Removed to places unknown, cannot be reached or unfound ... ..	15
No. of these births remaining on 31st January, 1932, neither duly entered on Vaccination Register nor temporarily accounted for in Report Book ... ..	22
Total number of Certificates of successful primary vaccination of children under 14 received during the Calendar Year, 1931 ... ..	228
No. of Statutory Declarations of Conscientious Objection, irrespective of the dates of birth of the children to which they relate, during the Calendar Year, 1931...	1,137
No. of children successfully vaccinated after declaration Conscientious Objection had been made ... ..	3
No. of Certificates of successful primary vaccination of children under 14 sent to other Vaccination Officers	3

The following Table shows the number of persons successfully vaccinated and re-vaccinated at the cost of the rates, by the Public Vaccinators during the year ended 30th September, 1931 :—

No. of successful primary vaccinations of persons :—

Under 1 year of age ... ..	139
One year and upwards ... ..	135
Total ... ..	274

No. of successful re-vaccinations of persons who have been successfully vaccinated at some previous time 135

It is pleasing to note that parents are now carrying out their obligations, either by making the statutory declaration of conscientious objection or by taking steps to have their children vaccinated within the statutory period.

That the policy of instituting proceedings against those in default was justified is shown by the fact that in only one instance was it found necessary to resort to summary proceedings during the year, against 11 in 1929.



**SECTION 11.**

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## **Transferred Poor Law Services:**

(a) Children Act 1908. Part I.

(b) Boarding Out

(Children under 5 years of age).

## Children Act, 1908.

The duties and powers under Part I. of the above Act (Infant Life Protection) are administered by this department.

The Act provides that any person undertaking for reward the nursing and maintenance of one or more infants under the age of 7 years apart from their parents, or having no parents shall within 48 hours from the reception of any such infant give notice in writing thereof to the Local Authority.

It is the duty of the local authority to appoint infant protection visitors to visit from time to time to satisfy themselves as to the proper nursing and maintenance of such infants, or to give necessary advice or directions thereon.

The following is a summary of the work carried out during the year :—

### I. Notification :—

(i) Number of foster parents on the Register :—			
(a) at the beginning of the year ...	...	...	15
(b) at the end of the year ...	...	...	15
(ii) Number of children on the Register :—			
(a) at the beginning of the year...	...	...	19
(b) at the end of the year ...	...	...	16
(c) who died during the year ...	...	...	1
(d) on whom inquests were held during the year ...	...	...	—

### II. Visiting :—

(i) Number of Visitors holding appointments under Section 2 (2) at the end of the year :—			
(a) Health Visitors ...	...	...	6
(b) Female, other than Health Visitors ...	...	...	1
(c) Male ...	...	...	—
(ii) Number of persons or societies authorised to visit under the proviso to Section 2 (2) ...	...	...	—

### III. Number of cases (if any) in which proceedings were taken during the year :—

(i) Under Section 1 (7) ...	...	...	2
(ii) Under Section 2 (5) ...	...	...	—
(iii) Under Section 2 (6) ...	...	...	—
(iv) Under Section 3 ...	...	...	—
(v) Under Section 4 ...	...	...	—
(vi) Under Section 5 (2) ...	...	...	—
(vii) Under Section 6 (2) ...	...	...	—
(viii) Under Section 7 ...	...	...	—
(ix) Under Section 8 (1) ...	...	...	—

Total ... 2



IV. Number of cases in which the local authority has given a sanction during the year :—

(i) Under (a) of Section 3	...	...	...	—
(ii) Under (b) of Section 3	...	...	...	—
(iii) Under (c) of Section 3	...	...	...	—
Total	...	...	...	—

V. Number of orders obtained during the year :—

	From a Justice	From the Local Authority
(i) Under (a) of Section 5 (1)	...	—
(ii) Under (b) of Section 5 (1)	...	—
(iii) Under (c) of Section 5 (1)	...	—
Totals	...	—

## Boarding-Out of Children.

(Under 5 years of age).

The Council's Administrative Scheme under the Local Government Act, 1929, made Maternity and Child Welfare a "declared" service; therefore, duties under the above Order in respect of children under five years of age were imposed upon the Department.

	Males	Females
Number on Register, Jan. 1st, 1931	...	2
Transferred to the Education Department on attaining the age of 5 years	...	1
Number on Register, Dec. 31st, 1931	...	1

The children were visited, the homes, bedding, and clothing were inspected at regular intervals, and enquiries were made to ensure that the rules as laid down in the Order were duly observed.

The children showed evidence of exceptional care and attention on behalf of their foster parents, and it was not found necessary to take punitive action in any case.

The number of visits paid by the official visitor was 34.

During the year, 3 children in respect of whom the powers and rights of parents are vested in the Council, were sent to the Northumberland Village Homes, Whitley Bay.

With the exception of one child who was returned to our Sanatorium suffering from a tubercular gland, which cleared up after treatment, the health of the children was good, and the report from the Home satisfactory.





**SECTION 12.**

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**Public Health Propaganda.**

# Health Education & Propaganda.

Health Education is a primary duty of any Public Health Department. Co-operation of the citizens is necessary if preventive medicine is to achieve all it sets out to do. Propaganda work has continued in Halifax throughout 1931, and the following Table briefly sets out some of the more important lectures delivered to the Public.

## LECTURES — 1931.

Date	TITLE	TO	AT	BY	No. of Audience (Approx.)
13-1-31	Dreams	The Wesley Guild	St. John's Hall	Dr. Roe	60
16-1-31	Mental Deficiency	United Temperance Society	Central Hall	Dr. Roe	40
28-1-31	Progress in Smoke Abatement	Power Engineers' Society	Friendly and Trade's Hall	Mr. Beaumont	30
28-1-31	Heart Diseases	Young People's Society	The School Hall	Dr. Roe	40
12-2-31	Personal Hygiene	Scouts' Association	St. Paul's Hall	Dr. Wood	90
14-2-31	The Housing Act, 1930	Sanitary Inspectors' Association	The Town Hall	Mr. Beaumont	100
16-2-31	Inheritance and Preventive Medicine	St. Hilda's Men's Association	St. Hilda's School	Dr. Roe	60
16-2-31	Man versus Microbe	Northgate Literary Society	Literary Society Rooms	Dr. Wood	40
18-2-31	Cancer	Queensbury Industrial Society	Queensbury Indust. Society Rooms	Dr. Roe	40
20-2-31	The Pre-School Child	Nursing Association	M. & C.W. Clinic	Dr. Roe	40
5-3-31	Birth Control	The Round Table	Y.M.C.A. Hall	Dr. Roe	60
22-3-31	Tuberculosis	Northgate Chapel Adult Class	Northgate Chapel	Dr. Roe	40
26-3-31	Ultra Violet Light Treatment	British Commercial Gas Assoc.	Alexandra Theatre	Dr. Roe	250
9-4-31	Any Evening after Work	Men (only)	Town Hall	Film by B.S.H.C.	250
10-4-31	The Irresponsibles	Women (only)	Town Hall	Film by B.S.H.C.	250
8-10-31	Racial Degeneration	Northgate Old Scholars' Assoc.	Northowram Council School	Dr. Roe	140
12-10-31	Medical Uses of Electricity	Electricity Association	Electricity Department	Dr. Roe	100
30-10-31	Fighting Infection (Illustrated with slides)	Nursing Association	M. & C.W. Clinic	Dr. Roe	60
1-11-31	Our Invisible Foes	St. Augustine's Men's Class (Afternoon)	Memorial Hall, St. Augustine's School	Dr. Roe	60
1-11-31	Preventive Psychology	Y.M.C.A. (Evening)	Y.M.C.A. Hall	Dr. Roe	250
11-11-31	Mental Deficiency Problems	Queensbury Industrial Society	Queensbury Indust. Society Rooms	Dr. Roe	60
12-11-31	Food and Health	Old Men's Parliament	Old Men's Parliament House	Dr. Roe	100
15-11-31	T.B. (Illustrated by Film slides)	Pye Nest P.M. Men's Class	Pye Nest Rooms	Dr. Roe	50
18-11-31	The Social Problems connected with Armentia	Young People's Union	Lightcliffe Rooms	Dr. Roe	60
29-11-31	T.B. (Illustrated with slides)	Northgate Congregational Church Union	Northgate Congregational Church Rooms	Dr. Roe	40
15-12-31	Tests for death and disposal of the dead	Halifax and District Undertakers' Association	Birch's Cafe	Dr. Roe	100



**SECTION 13.**

—o—

**Milk Production.**

**Food Inspection.**

**Farms.**

**Offensive Trades.**

## Inspection and Supervision of Food.

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### Milk Supply.

I am indebted to Mr. J. Pollard, the Veterinary Inspector, for the particulars given below :—

At the end of the year there were on the Register—

Cowkeepers and Dairymen (Wholesale only) ...	47
Cowkeepers and Dairymen (Wholesale and Retail) ...	20
Cowkeepers and Retail Purveyors ...	95
Retail Purveyors only (Premises outside the Borough) ...	22

As it is difficult to measure the amount of progress made each year, it is perhaps the best way to take a survey over a number of years to realize what has been done. In 1922 conditions were in a worse state than in pre-war days, which might be attributed to the favourable demand for labour in what has been termed the "boom period." In 1924 under the auspices of the Council of Social Welfare, Mr. Wilfred Buckley, C.B.E., was invited to address a meeting of those interested in the dairying industry and the public. This was followed up the following year by a meeting of dairy farmers and dairymen which was addressed by Mr. E. J. Burndred, M.C., M.R.C.V.S., of Blackburn, when particular attention was drawn to the sterilisation of dairy utensils. At a later date a demonstration on clean milk production was arranged by the Department of Agriculture of the Leeds University at the request of the local branch of the National Farmers' Union. It was quite evident that the interest of the dairy farmers had been aroused as was indicated by their keen desire to put into practice the more hygienic methods of dairying.

It was in May, 1925, that samples of milk were first taken during the course of retail delivery for bacteriological examination, and it was surprising how good some of the samples proved to be. It upset preconceived ideas of some producers and enabled us to proffer advice for improvement. At that period the samples of milk were retained at a temperature of 60° F. for 24 hours before cultivation for bacteria and testing for coli bacillus—a much more severe test than is done to-day. When taking samples of milk from dairymen outside the Borough, opportunity was taken to explain the meaning of the reports and to discuss improvements in the production and distribution of milk. A few acted on the advice and have become enthusiastic and progressive supporters of the movement. In 1926 one of our producers had become so interested that he entered the Clean Milk Competition and was successful in winning the Challenge Cup and Gold Medal for his class.



This competitor appreciated the difficulty of cleansing dairy utensils by the time-honoured process of scalding with boiling water, and being of a mechanical mind, devised a steam sterilizer which has been of great benefit to the dairy industry. There have been several entrants for the Competitions since and awards received. The Clean Milk Competitions have proved to be a great stimulus and of educational value—in fact revolutionary in ideas—as they introduced the clipping of cows; the washing of udders; the necessity of having facilities for washing of hands; the use of the covered pail for milking; steam sterilisation of dairy utensils. They have been the greatest help in breaking down prejudice. The introduction of brine cooling refrigerators followed at a later date.

Demonstrations of the effects of steam sterilisation were given so that it was possible for them to judge the advantage of it by comparing reports of samples of milk taken before and after sterilisation. Without the support of the Committee progress could not have been maintained. Credit must also be given to some of our cowkeepers who retail or distribute their own milk supply for the great improvement that has taken place, who have not been content with practising their principles but have exercised their influence on others to adopt them also. There is still ample room for improvement. If further progress has to be made administration of the legislation will have to be applied equally to the Producer and Retailer, and in the case of milk from sources outside the Borough, the consuming authority should have some voice regarding the conditions under which it is produced. Although great stress has been made on the hygienic conditions equal attention has been paid to the health of the cows.

### **Milk and Dairies (Amendment) Act 1922.**

Under Section 2 of the above-named Order, 10 retailers were invited to appear before the Health Committee to show cause why their names should not be removed from the Register. Eight complied with the reason for their objection, one was removed from the Register, and in the other case it was decided to take legal proceedings.

### **Re-Registration.**

One retailer who was reported in the previous Annual Report as having had his name removed from the Register decided to appeal, but the Justices gave the appellant a limited time to comply with the requirements of the Committee. The retailer having complied, his name was restored to the Register. This was taken in the nature of a test case on the question of boiling water or steam, vide Art. 21 (1) of the Milk and Dairies Order 1926.



**Article 25.**

Statutory notice was served on two cowkeepers to render the floors of their cowsheds impervious, etc. One has complied.

**Bacteriological Examination of Samples.**

Total number of samples taken for bacteriological examination as an index for general cleanliness	...	58
Number of samples taken within the Borough...	...	35
Number of samples taken from sources outside the Borough	...	4
Number of graded samples	...	19
Number of samples taken from sources outside the Borough for the detection of tubercle bacilli	...	10
Number reported positive	...	0
The Following Alterations were carried out :—		
Alterations to cowsheds for light	...	1
Alterations to cowsheds for floors	...	7
Dairies provided	...	7
Town's water supply obtained	...	1
Estimated number of dairy cows	...	1,884
Number of dairy cows examined	...	2,832
Visits to farms	...	714

Legal proceedings were instituted under the Milk and Dairies Order 1926, for contravention of :—

- (a) Articles 22 (1 and 2) Failing to cleanse and limewash a cowshed. Penalty £2.
- (b) Article 20 (1) Failing to thoroughly wash dairy utensils and to scald with boiling water or steam. Adjourned.

**Milk (Special Designations) Order 1923.**

There are within the Borough two producer-retailers and one producer of Graded milks, one producing certified milk and the other two Grade A.

In addition, a producer of Certified Milk outside the Borough, distributes and has agents within the Borough. There is also one retailer licensed to sell Grade A (T.T.) milk.

**Tuberculosis Order—Diseases of Animals Acts.**

Number of reports	...	10
Number of reports confirmed...	...	8
Tuberculosis of the udder	...	5
Bacteriological examination of milk	...	36
Number reported positive	...	4
Number of cattle examined	...	108

Microscopical examinations of suspected samples of milk have not proved very helpful in diagnosis, but thanks to the co-operation of the pathologist of the Royal Halifax Infirmary, a considerable advance had been made in that respect at the end of the year.



**Private Slaughterhouses.**

Registered	...	...	5
Licensed	...	...	0
			<hr/> 5

The approximate number of animals slaughtered therein during the year is as follows :—

Cattle.	Calves.	Sheep and Lambs.	Pigs.
261	30	1,000	75

**Meat Inspection, etc.**

The following Table shows the number of visits paid to the slaughterhouses, butchers' shops, markets, etc. :—

Description of Premises				Number of Visits
Public Slaughterhouse	...	...	...	782
Private Slaughterhouses	...	...	...	203
Borough Market	...	...	...	428
Wholesale Market	...	...	...	293
Lairages	...	...	...	205
Potted Meat Houses	...	...	...	369
Tripe Boiling Houses	...	...	...	162
Butchers' Shops	...	...	...	1800
Auction Mart	...	...	...	44
Other Visits	...	...	...	900
Total				5,186

The following Table shows the number of animals slaughtered during the year and the number condemned :—

	Cattle.	Calves.	Sheep and Lambs.	Pigs.	Offals.	Total.
Number of Animals slaughtered at the public slaughter-house ...	8360	1564	23040	5820	lbs. ...	38784
Do. condemned...	51	8	12	57	...	128

NOTE.—Of the 51 beasts condemned, 10 were received under the Tuberculosis Order 1925, of which number 8 were condemned.

The following Table shows the total Approximate weight of meat and offals destroyed on account of tuberculosis, and from other causes :—

Total Amount of Meat Destroyed ... ..	lbs. 42960
Total Amount of Offals Destroyed ... ..	11339
Total Amount of Meat Destroyed on account of Tuberculosis ... ..	36322
Total Amount of Offals Destroyed on account of Tuberculosis ... ..	8597
Total Amount of Meat Destroyed from other causes	6638
Total Amount of Offals Destroyed from other causes	2742
Total Meat and Offals Destroyed ...	54299

Kinds of Food Destroyed	Quantity in lbs.
51 Carcases of Beef ... ..	27485
Beef not in Carcase ... ..	7814
8 Carcases of Veal ... ..	533
Veal not in Carcase ... ..	20
12 Carcases of Mutton and Lamb ... ..	499
57 Carcases of Pork ... ..	5917
Pork not in Carcase ... ..	692
35 Rabbits ... ..	77
Fish ... ..	1415
Fruit and Vegetables ... ..	11221
Canned Provisions ... ..	888
Total Weight ... ..	56561

During the year attention has been paid to the suitability of premises where the sale of meat was contemplated. I consider registration of premises would be beneficial to the trade and to the public.

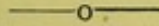
#### **Merchandise Marks Act 1926.**

During the year special attention has been given to the enforcement of this Act, under which duties are continually increasing.

#### **Offensive Trades.**

These premises have been visited regularly during the year.



**SECTION 14.**

**Sanitary Circumstances.**

**Housing.**

**Food Sampling.**

**Milk**

(Retail Supply and Distribution).

**Smoke Abatement.**

**Atmospheric Pollution.**

# Sanitary Circumstances

AND

## Sanitary Inspection of the Area.

I am indebted to Mr. J. W. Beaumont, Chief Sanitary Inspector, for the following report :—

### Inspections and Visits.

#### Dwellinghouses :—

Recorded Inspections—Housing Consolidated Regs. 1925	120
Re Complaints ... ..	985
Re Infectious Disease ... ..	463
Re Dirty and/or Verminous Houses ... ..	34
Re Overcrowding ... ..	30
Re Cellar Dwellings and Underground Rooms ...	103
Re Tents, Vans, Sheds, etc. ... ..	10
Re Water Supply ... ..	71
Re Common Lodging Houses ... ..	49
Re Houses let in Lodgings ... ..	206

#### Drainage :—

Drains inspected, etc. ... ..	2001
Drains tested ... ..	505
Sewers, etc., inspected ... ..	16

#### Factory and Workshop Act :—

Re Factories ... ..	91
Re Workshops ... ..	157
Re Bakehouses ... ..	305
Re Outworkers' Premises ... ..	4

#### Sampling :—

Food and Drugs (Adulteration) Act, 1928 ... ..	302
Fertilisers and Feeding Stuffs Act, 1926 ... ..	14
Rag Flock Acts, 1911 and 1928 ... ..	4
Bacteriological Examination ... ..	108
Water Analysis and Bacteriological Examination ...	19

#### Food Inspection :—

Dairies and Milkshops ... ..	174
Ice Cream Premises ... ..	149
Fried Fish Shops ... ..	226
Other Food Premises ... ..	28

#### Smoke Abatement :—

Smoke Observations ... ..	117
Visits to Works re Smoke ... ..	62



**General :—**

Rat-infested Premises	...	...	...	...	2
Stables	...	...	...	...	22
Accumulations of Manure, etc.	...	...	...	...	29
Swine, Fowls and other Animals	...	...	...	...	6
Schools	...	...	...	...	35
Places of Public Amusement—Theatres, etc....	...	...	...	...	132
Canal Boats	...	...	...	...	3
Closet Conversions	...	...	...	...	494
Public Sanitary Conveniences	...	...	...	...	21
Miscellaneous Visits	...	...	...	...	2588
Total number of Inspections	...	...	...	...	9685
Total number of re-Inspections	...	...	...	...	2126

**Sanitary Improvements Effected.****Dwellinghouses :—**

	By Notice	Without Notice
Dampness remedied	122	64
Lighting improved	4	—
Ventilation improved	73	12
Food Storage provided or improved	3	3
Cooking accommodation provided or improved	56	25
Washing accommodation provided or improved	8	2
Sinks provided or renewed...	45	57
Floors relaid or repaired	34	11
Eaves, gutters or fallpipes provided or renewed	130	97
Additional water closets provided	8	2
Sanitary accommodation improved	51	56
Yards and/or Passages paved or repaired	9	11
Water Supply provided or improved	44	37
Cleansed and/or Vermin disinfested	6	18
Overcrowding abated	3	5
Cellar Dwellings closed	6	4
Other sanitary defects remedied	137	145

**Drainage :—**

New drains constructed	28	50
Drains re-constructed	63	38
Repaired or cleansed	94	205

**Factories and Workshops (including Bakehouses) :—**

Cleansed and Limewashed...	3	20
Ventilation improved	—	1
Overcrowding abated	—	2
Additional sanitary accommodation provided...	3	2
Sanitary accommodation improved	19	9
Separate sanitary accommodation for sexes provided	—	5
Other sanitary defects remedied	12	2



**Smoke Abatement :—**

Boiler Plants improved ... ..	—	1
Other improvements effected ... ..	6	—

**Common Lodging Houses :—**

Cleansed and Limewashed ... ..	—	11
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**Houses Let in Lodgings :—**

Sanitary condition improved ... ..	5	4
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**Dairies and Milkshops :—**

Cleansed and Limewashed ... ..	1	—
Sanitary condition improved ... ..	1	—
Provision made for cleansing utensils with boiling water or steam ... ..	—	1
New Premises provided ... ..	1	3

**Ice Cream Premises :—**

Cleansed and Limewashed ... ..	—	1
Sanitary condition improved ... ..	—	2
New Premises provided ... ..	—	2

**Fried Fish Shops :—**

Cleansed and Limewashed ... ..	—	1
Sanitary condition improved ... ..	—	4

**Other Food Premises :—**

Cleansed and Limewashed ... ..	—	1
Sanitary condition improved ... ..	—	2

**General :—**

Sanitary condition of Stables improved ...	1	—
Manure and/or Refuse accumulations removed	9	24
Swine, Fowls, and other Animals. Nuisance abated ... ..	—	3
Places of Public Amusement—Sanitary condition improved ... ..	9	1
Miscellaneous (not included above) ... ..	8	16

**Statutory Action.**

Matters reported to the Health Committee for Statutory Action were as follows :—

**Housing Act, 1930.**

Sanitary Defects (Section 17) ... ..	13 houses
Sanitary Defects (Section 19) ... ..	37 houses
Sanitary Defects (Section 20) ... ..	3 houses

**Public Health Act, 1875.**

Cellar Dwellings illegally occupied (Secs. 72 and 73) ... ..	5 houses
Defective rainwater fallpipe (Secs. 91 & 94) ...	2 houses
Premises in such a state, etc. (Secs. 91 & 94)	1 house
Premises in such a state, etc. (Secs. 91 & 94)	2 workshops
Choked drains, etc. (Secs. 91 and 94) ...	5 houses
Defective drains (Secs. 91 and 94) ... ..	2 houses
Right of entry (Section 102) ... ..	1 house



*Public Health Act, 1875.* Section 41.

*Public Health Acts Amendment Act, 1890.* Section 19.

Defective drains ... 18 houses

*Public Health Act, 1875.* Section 41.

*Public Health Acts Amendment Act, 1890.* Section 19.

*Halifax Corporation Act, 1905.* Section 43.

Defective drains ... 17 houses

Defective drains ... 1 workshop

*Public Health Acts Amendment Act, 1890.* Section 22

*Halifax Corporation Act, 1900.* Section 130.

Lack of proper and suitable sanitary accommodation ... 1 factory

*Halifax Corporation Act, 1900.* Section 122.

Lack of proper and sufficient water supply ... 4 houses

*Food and Drugs (Adulteration) Act, 1928.*

*Public Health (Regulations as to Food) Act, 1907.*

*Public Health (Preservatives, etc., in Food) Regs., 1925/6 7.*

Excess preservative in sausages ... 3 retailers

*Food and Drugs (Adulteration) Act, 1928.*

Gin—Added water ... 1 retailer

Rum—Added water ... 1 retailer

Milk deficient in fatty solids ... 6 retailers

*Milk and Dairies (Consolidation) Act, 1915.*

*Milk and Dairies (Amendment) Act, 1922.*

*Milk and Dairies Order, 1926.*

No drainage to dairy, and lack of facilities for cleansing milk utensils with boiling water or steam ... 1 retailer

No proper dairy, and lack of facilities for cleansing milk utensils with boiling water or steam ... 2 retailers

Lack of proper facilities for cleansing milk utensils with boiling water or steam ... 1 retailer

Selling milk whilst unregistered ... 1 retailer

*Milk and Dairies (Amendment) Act, 1922.*

High bacterial count and B. Coli ... 5 retailers

## Prosecutions during 1931.

Date	Act	Offence	Penalty
24/2/31	Food and Drugs (Adulteration) Act, 1928	Selling Gin more than 35° under proof	Case dismissed on payment of £1 16s. 6d. costs
24/2/31	Do. do.	Selling Rum more than 35° under proof	Do. do.
23/6/31	Food and Drugs (Adulteration) Act, 1928 Public Health (Reg. as to Food) Act, 1907 Public Health (Preservatives, etc., in Food) Regulations 1927	Selling Sausages containing an excessive amount of preservative	Fined £2 and 10/6 costs
23/6/31	Do. do.	Do. do.	Do. do.
23/6/31	Do. do.	Do. do.	Fined £5 and 10/6 costs
25/6/31	Food and Drugs (Adulteration) Act, 1928	Selling Milk deficient in fatty solids	Fined £3
25/6/31	Do. do.	Do. do.	Do. do.
7/8/31	Do. do.	Do. do.	Fined £10 and 10/6 costs
7/8/31	Do. do.	Do. do.	Do. do.
7/8/31	Do. do.	Do. do.	Fined £5 and 10/6 costs
7/8/31	Milk and Dairies (Amendment) Act, 1922 Milk and Dairies Order, 1926	Selling milk whilst unregistered as a retailer	Fined £1
3/11/31	Food and Drugs (Adulteration) Act, 1928	Selling milk deficient in fatty solids	Fined £5 and 10/6 costs



### Factories and Workshops.

*Factory and Workshop Act, 1901.*

*Public Health Acts Amendment Act, 1890. Section 22.*

*Halifax Corporation Act, 1900. Section 130.*

### Workshops.

The number of workshops on the register at the end of 1931 was 520.

Inspections made during the year were as follows :—  
Factories 91 ; Workshops 462 (including 305 visits to Bake-houses) ; Outworkers 4 ; Total 557.

H.M. Factory Inspector sent 24 notices under Section 5 of the Factory and Workshop Act, 1901, 20 of which referred to factories and 4 to workshops, whilst the following were dealt with during the year :—Factories 18 ; Workshops 5 ; and 1 Factory in which no action was necessary.

**Table 1.**

### Inspection of Factories, Workshops and Workplaces.

Premises (1)	Number of		
	Inspections (2)	Written Notices. (3)	Occupiers Prosecuted (4)
Factories ... .. (including Factory Laundries)	91	3	—
Workshops ... .. (including Workshop Laundries)	462	3	—
Workplaces ... .. (Other than Outworkers Places)	—	—	—
Total ...	553	6	—

**Table 2.**  
**Defects found in Factories, Workshops and Workplaces.**

Particulars (1)	Number of Defects			Number of offences in respect of which Prosecutions were instituted (5)
	Found (2)	Remedied (3)	Referred to H.M. Inspector (4)	
Nuisances under the Public Health Acts—*				
Want of cleanliness ...	23	23	...	...
Want of ventilation ...	1	1	...	...
Overcrowding ...	2	2	...	...
Want of drainage of floors ...	...	...	...	...
Other nuisances ...	14	14	...	...
Sanitary Accommodation:				
Insufficient ...	5	5	...	...
Unsuitable or defective	28	28	...	...
Not separate for sexes...	5	5	...	...
Offences under the Factory and Workshops Acts—				
Illegal occupation of underground bakehouse.. (S. 101)	...	...	...	...
Other offences ... (Excluding offences relating to out-work and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers Order 1921.)	...	...	1	...
<b>Total ...</b>	<b>78</b>	<b>78</b>	<b>1</b>	<b>...</b>

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

### **Bakehouses.**

*Factory and Workshop Act, 1901.*

*Ministry of Health Act, 1919.*

*S.R.O. 958 of 1926.*

The number of bakehouses on the register at the end of 1931 was 125, which includes 33 factory bakehouses.

305 inspections have been made and the premises were found to be in a generally satisfactory condition.



## SMOKE ABATEMENT.

*Public Health Act, 1875.*

*Public Health (Smoke Abatement) Act, 1926.*

The number of smoke observations taken of other than domestic chimneys during the year was 117, and details are given in the following Table. Engineers, firemen, etc., were interviewed on 62 occasions, and 4 notices were served on offending firms..

Attention is drawn to the fact that so long as manufacturers and others are allowed to discharge black smoke from their chimneys for any period less than three minutes during any consecutive period of thirty minutes during the whole twenty-four hours of the day, we cannot hope for much improvement in the state of the atmosphere as the result of taking legal proceedings. It is indeed rare to find that smoke emission is not kept within these limits, although the aggregate amount of smoke which is discharged is a serious menace to the health of the community.

It is an unfortunate fact that the inhabitants of industrial districts are so accustomed to the sight of smoke from factory chimneys, etc., that they fail to appreciate the fact that much of it is avoidable. It is only by continually focussing public opinion upon the subject and stressing its importance from a health standpoint, that we can hope in time there will be such a public demand for more stringent law upon the subject that it cannot be withstood.

In the meantime local authorities must continue to try to convince manufacturers and others that excessive smoke emission means waste of fuel, less efficiency, and higher costs in steam raising, etc. A great deal of the smoke from which we in industrial districts suffer could be prevented by paying proper attention to the needs of the boiler house respecting plant, equipment and practice. Stokers and boiler attendants should be encouraged, if not required, to attend the courses of tuition in smoke abatement practice and boiler control, which have been inaugurated by the West Riding Regional Smoke Abatement Committee in conjunction with the education authorities within their area, where such are available.

It is a pleasure to record that these courses were held in 10 centres during the winter and were attended by 243 students, 68 of whom entered for the subsequent examination. Out of these 54 were successful and will be awarded the Certificate of the Regional Committee. Halifax provided nine of these candidates and seven were successful in passing the examination.

The local gas and electrical undertakings continue to contribute their quota towards the abolition of smoke—especially in regard to domestic smoke—by supplying in increasing numbers various appliances at minimum cost, whilst solid smokeless fuel in the form of gas coke increases in popularity.



## Smoke Observations—1931.

CHIMNEY (1)	No. of Observations (2)	Total minutes of Observations (3)	Average minutes of black smoke per Observation (4)	CHIMNEY (1)	No. of Observations (2)	Total minutes of Observations (3)	Average minutes of black smoke per Observation (4)
Albert Street Mills	...	...	...	Keighley Mills	...	...	...
Atlas Dyeworks	...	...	...	Ladyship Mills	...	...	...
Bankfield Mills	...	...	...	Lee Bank Mills	...	...	...
Battinson Road Mills	...	...	...	Miall Street Mills (North chimney)	...	...	...
Beechwood Mills	...	...	...	Miall Street Mills (South chimney)	...	...	...
Blackwood Mills	...	...	...	Mixenden Carbonizing Company	...	...	...
Box Tree Mills	...	...	...	New Bank Mills	...	...	...
Bradshaw Mills	...	...	...	Old Lane Dyeworks	...	...	...
Brunswick Mill	...	...	...	Ovenden Wood Brewery	...	...	...
Canal Works	...	...	...	Pioneer Works	...	...	...
Clay Pits Mills	...	...	...	Queen's Road Chocolate Factory	...	...	...
Courtauld's Mill	...	...	...	Queen's Road Mills	...	...	...
Craven Edge Mill (Square chimney)	...	...	...	Raglan St. Dyeworks (Stone chimney)	...	...	...
Craven Edge Mill (Round chimney)	...	...	...	Raglan St. Dyeworks (Brick chimney)	...	...	...
Crossland's Works, Bedford St. N.	...	...	...	Range Royd Mills	...	...	...
Crossley and Porter School	...	...	...	Rawson's Mill	...	...	...
Dunkirk Mills	...	...	...	Royal Halifax Infirmary	...	...	...
Ellen Royde Brickworks	...	...	...	Royal Mills	...	...	...
Ellen Royde Mills	...	...	...	Ryburne Mills	...	...	...
Falcon Laundry	...	...	...	Salterhebble Mills	...	...	...
Fenton Estate Dyeworks	...	...	...	Savile Mills	...	...	...
Forest Mills	...	...	...	Sedburgh Mills	...	...	...
Globe Mills	...	...	...	Shaw Lodge Mills	...	...	...
Grove Mills	...	...	...	Shay Lane Dyeworks	...	...	...
Halifax Corporation—	...	...	...	Spring Edge Works	...	...	...
Electricity Works (Stone chimney)	...	...	...	Sun Works	...	...	...
Electricity Works (Brick chimney)	...	...	...	Trafalgar Mills	...	...	...
Gas Works	...	...	...	Victoria Mills	...	...	...
Gibbet Street Institution	...	...	...	Warley Springs Dyeworks	...	...	...
Salvage Works	...	...	...	Wellington Mills	...	...	...
St. Luke's Hospital	...	...	...	West Croft Mills	...	...	...
Warley Road Schools	...	...	...	West End Cabinet Works	...	...	...
Halifax Steam Laundry	...	...	...	West Grove Mills	...	...	...
Hanson Lane Mills	...	...	...	Wheatley Dyeworks	...	...	...
Illingworth Mills	...	...	...	White Rose Boiler Works	...	...	...

Total number of chimneys observed ...  
Total number of observations ...

Total minutes of observations ... 69  
Average minutes of black smoke per hour of observation ... 117

... 3540  
... 1.3



### Atmospheric Pollution Records.

In the last Annual Report it was stated that the Health Committee had resolved to support the work carried on by the Department of Scientific and Industrial Research, by installing five gauges at various points within the Borough.

These are all fixed at ground level and are all situate within  $1\frac{1}{2}$  miles of the centre of the town. We can, therefore, justly claim that the results obtained are a fair indication of the extent of atmospheric pollution in Halifax.

The central Standard Deposit Gauge is situate in Wade Street about 200 yards East of the Town Hall, where atmospheric pollution is at its maximum in our area, whilst others are in operation at Belle Vue Park ( $\frac{1}{2}$  mile West of Town Hall), Akroyd Park ( $\frac{1}{2}$  mile North of Town Hall), Royal Halifax Infirmary (1 mile South of Town Hall), and West View Park ( $1\frac{1}{2}$  miles West of Town Hall).

At two of the stations—Wade Street and West View Park—we are also obtaining records of the measurement of daylight by the Potassium Iodide method.

Although observations were commenced on November 1st, 1930, the following Tables deal with the period covered by this Report.

A careful study of these Tables will reveal much of particular interest. In those giving records of our atmospheric deposit, it will at once be noticed that the pollution at Wade Street is far in excess of that recorded at our other stations. This may be accounted for by the fact that it is in the centre of an essentially industrial area and situate in one of the lowest-lying parts of the Borough, being only about 430 feet above sea level as compared with heights varying between 1000 and 1400 feet on the surrounding hills. In fact, four of our five gauges are situate within a valley which runs approximately from the North to the South through this area. The fifth gauge situate at West View Park overlooks Sowerby Bridge, an industrial centre lying to the South-West, and there is no doubt but that the prevailing winds carry with them much of the smoke produced in that area and further afield in South-East Lancashire towns which add to our own atmospheric deposit.

From an atmospheric pollution point of view Halifax is geographically badly placed by reason of the surrounding hills previously referred to. These hills seriously interfere with the scavenging action of the winds, which instead of dissipating the smoke produced in our area, tend to confine it within the



valley mentioned. Any close observer will have repeatedly noticed this when standing upon any of these hills and looking down upon the town in the valley.

Despite all these natural disadvantages however, our records of atmospheric pollution compare most favourably with those of other industrial towns in the country. According to the last Annual Report on atmospheric pollution issued by the Department of Scientific and Industrial Research, the average deposit is between 200 and 300 tons per square mile as recorded by ninety-eight observation stations in forty-two important towns and cities, whilst our figures are shown to be 180 tons.

Another important factor respecting deposited atmospheric pollution should not be overlooked. The constant relationship between heavy rainfall and heavy deposits tends to show that in this respect Northern industrial towns are at a disadvantage when compared with those in the Midlands and the South.

Is smoke abatement work worth while? This is a question frequently asked. Nowadays, almost everyone knows all that is stated about the matter from a health point of view. Perhaps the following particulars respecting costs, excluding those which cannot be computed and have relation to the effects of smoke upon health, will be of interest. Sir Napier Shaw and Dr. Owens in their book "The Smoke Problem of Great Cities," state a formula by which this cost can be obtained approximately as follows:— $\frac{S}{11.9}$  = the cost per head per annum in shillings where S = tons per square mile of soot fall. As these are pre-war figures they have been increased by 40 per cent. Upon this basis it is estimated that the annual cost to every man, woman and child in Halifax is £1 1s. 3d., which based upon a population of 98,000 amounts to an aggregate of £104,135, which is equal to 3/9 in the £ on the rateable value.

At our Wade Street and West View Park stations, we also obtain daily records of the measurement of daylight. Twenty cubic centimetres of a potassium iodide solution are exposed in a small glass bottle. This solution in the presence of daylight liberates free iodine which is measured in milligrams. The results obtained during the year are most striking as will be seen from the following Tables. They provide indisputable proof of the fact that there is a definite relationship between atmospheric pollution and light obstruction. It is at once noticeable that the light obstruction at Wade Street is in all cases greater than at West View Park. This is most marked during the winter months, and our records show that from October to March there is 38 per cent. more daylight at West



View Park than at Wade Street ; which falls to 19 per cent. during the summer months. Over the whole year, therefore, there has been over 25 per cent. more daylight at West View Park than at Wade Street, only  $1\frac{1}{2}$  miles away. Several factors must be taken into consideration in attempting to find a reason for this extraordinary variation. In the first place the atmospheric pollution in the vicinity of Wade Street is as previously mentioned, considerably in excess of that at any of our other stations. This is undoubtedly the prime reason for the difference. In addition, however, the ordnance datum level of Wade Street is 430 feet as compared with 830 feet at West View Park. This means that at the latter place there is a much greater "sky line" and consequently more length of daylight in addition to greater intensity. Probably one reason why there is a much greater variation between the records for the winter months than there is between the summer months, is that as the parabola of the sun during winter is much less than during summer, much longer shadows are thrown which will have a marked effect in decreasing the amount of daylight in such a low-lying—comparatively—and congested area as Wade Street.

It must be clear to the most unobservant that the obtaining of records of atmospheric pollution are most valuable if only because of the fact that they provide data by which we can estimate the extent of the evil, and give a general indication of the plan of campaign which should be adopted to effect a remedy.



TABLE 1.

Month	WADE STREET (Central)				BELLE VUE PARK ( $\frac{1}{4}$ mile West)				AKROYD PARK ( $\frac{1}{2}$ mile North)				INFIRMARY (1 mile South)				WEST VIEW PARK ( $\frac{1}{2}$ miles West)			
	Rainfall in Inches	Insoluble Solids	Soluble Solids	Total Solids	Rainfall in Inches	Insoluble Solids	Soluble Solids	Total Solids	Rainfall in Inches	Insoluble Solids	Soluble Solids	Total Solids	Rainfall in Inches	Insoluble Solids	Soluble Solids	Total Solids	Rainfall in Inches	Insoluble Solids	Soluble Solids	Total Solids
January ...	3.86	13.37	10.08	23.45	3.79	6.55	7.85	14.40	3.73	5.02	6.38	11.40	3.52	5.43	10.84	16.27	3.48	3.54	4.87	8.41
February ...	4.89	11.35	13.14	24.49	5.10	7.32	19.82	27.14	3.80	9.61	7.87	17.48	4.37	4.84	8.60	13.44	4.55	4.10	11.78	15.88
March ...	0.40	21.06	5.09	26.15	0.32	8.87	3.93	12.80	1.73	19.84	6.93	26.77	0.37	6.43	3.34	9.77	0.49	9.41	4.40	13.81
April ...	4.22	17.78	9.30	27.08	4.30	8.96	6.58	15.54	3.97	8.74	5.95	14.69	4.12	7.22	6.23	13.45	3.90	6.19	5.95	12.14
May ...	2.58	21.67	6.06	27.73	2.96	8.74	6.60	15.34	2.78	10.30	6.11	16.41	2.72	6.95	4.51	11.46	3.44	8.06	5.44	13.50
June ...	5.78	14.45	8.51	22.96	5.90	8.35	7.18	15.53	5.56	8.09	6.04	14.13	5.93	6.79	5.37	12.16	6.16	6.82	9.87	16.69
July ...	3.74	14.80	7.41	22.21	3.54	6.51	5.08	11.59	3.22	8.25	6.25	14.50	3.85	5.17	5.48	10.65	3.24	4.34	4.98	9.32
August ...	5.14	17.84	8.32	26.16	4.97	5.89	4.51	10.40	4.76	4.31	4.43	8.74	4.61	4.14	4.84	8.98	5.03	5.65	4.87	10.52
September ...	4.26	9.02	5.92	14.94	4.26	4.19	4.46	8.65	4.37	3.73	4.64	8.37	3.73	2.81	3.14	5.95	4.16	3.02	3.66	6.68
October ...	1.68	20.84	4.68	25.52	1.70	9.02	4.71	13.73	2.01	7.52	3.54	11.06	1.78	6.07	3.96	10.03	1.81	4.86	3.58	8.44
November ...	5.94	16.49	8.37	24.86	5.93	5.24	6.68	11.92	6.18	9.30	8.08	17.38	5.91	4.90	8.03	12.93	6.78	4.79	9.49	14.28
December ...	1.78	8.64	8.82	17.46	1.79	3.83	7.71	11.54	1.71	3.80	7.69	11.49	1.71	4.39	7.66	12.05	1.94	2.75	9.54	12.29
AGGREGATES	44.27	187.31	95.70	283.01	44.56	83.47	85.11	168.58	43.82	98.51	73.91	172.42	42.62	65.14	72.00	137.14	44.98	63.53	78.43	141.96
MONTHLY AVERAGES...	3.69	15.61	7.97	23.58	3.71	6.96	7.09	14.05	3.65	8.21	6.16	14.37	3.55	5.43	6.00	11.43	3.75	5.29	6.54	11.83

Monthly Average for whole Borough :— Rainfall in inches  
 Insoluble Solids  
 Soluble Solids  
 Total Solids

... 3.67  
 ... 8.30 tons per square mile.  
 ... 6.753  
 ... 15.053

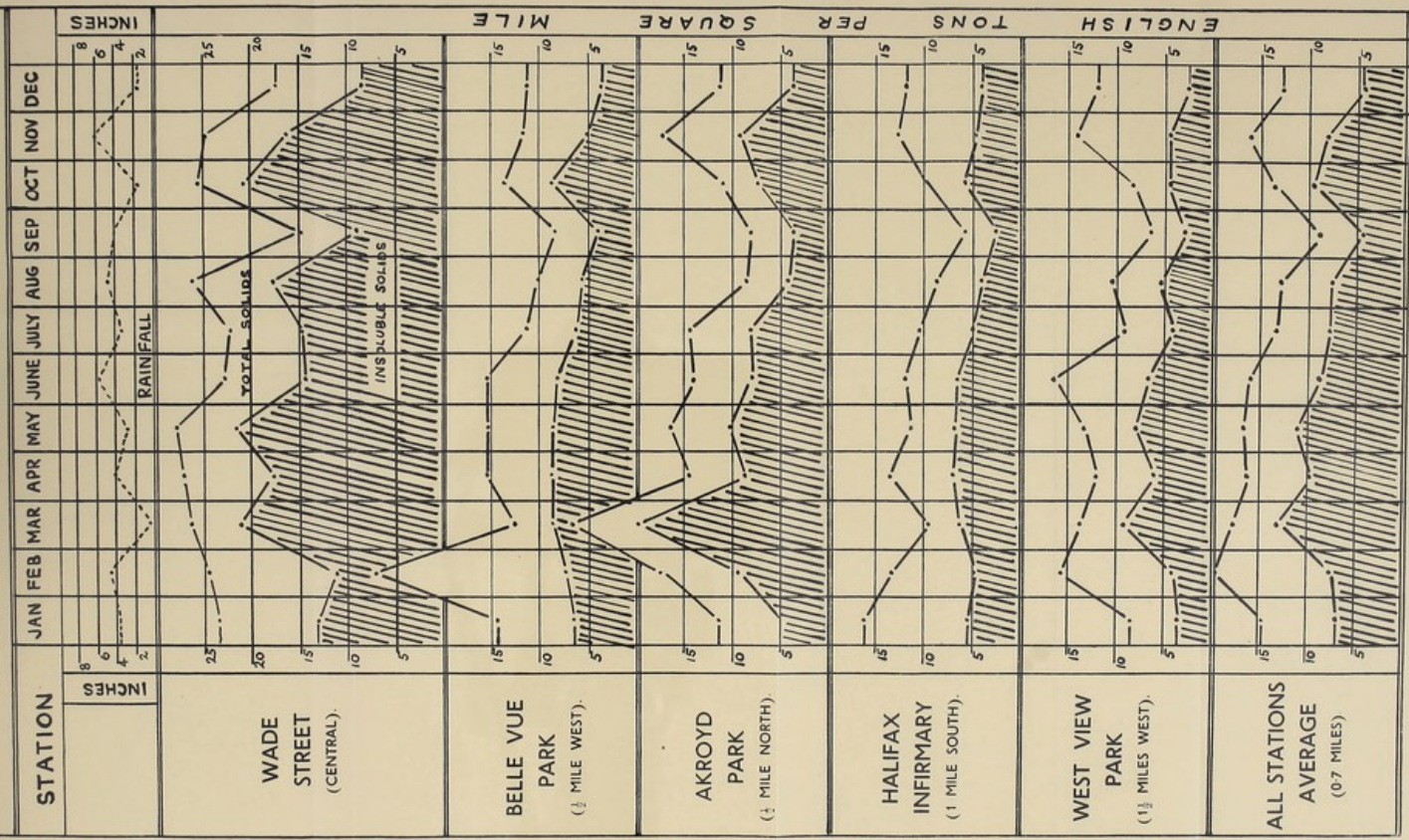
Total Annual Deposit for whole Borough = 180.636 tons per square mile.

Aggregate Annual Deposit for whole Borough (22 square miles) = 3,973.992 tons.



2. MONTHLY ATMOSPHERIC DEPOSIT,  
1931.

FIVE HALIFAX STATIONS.



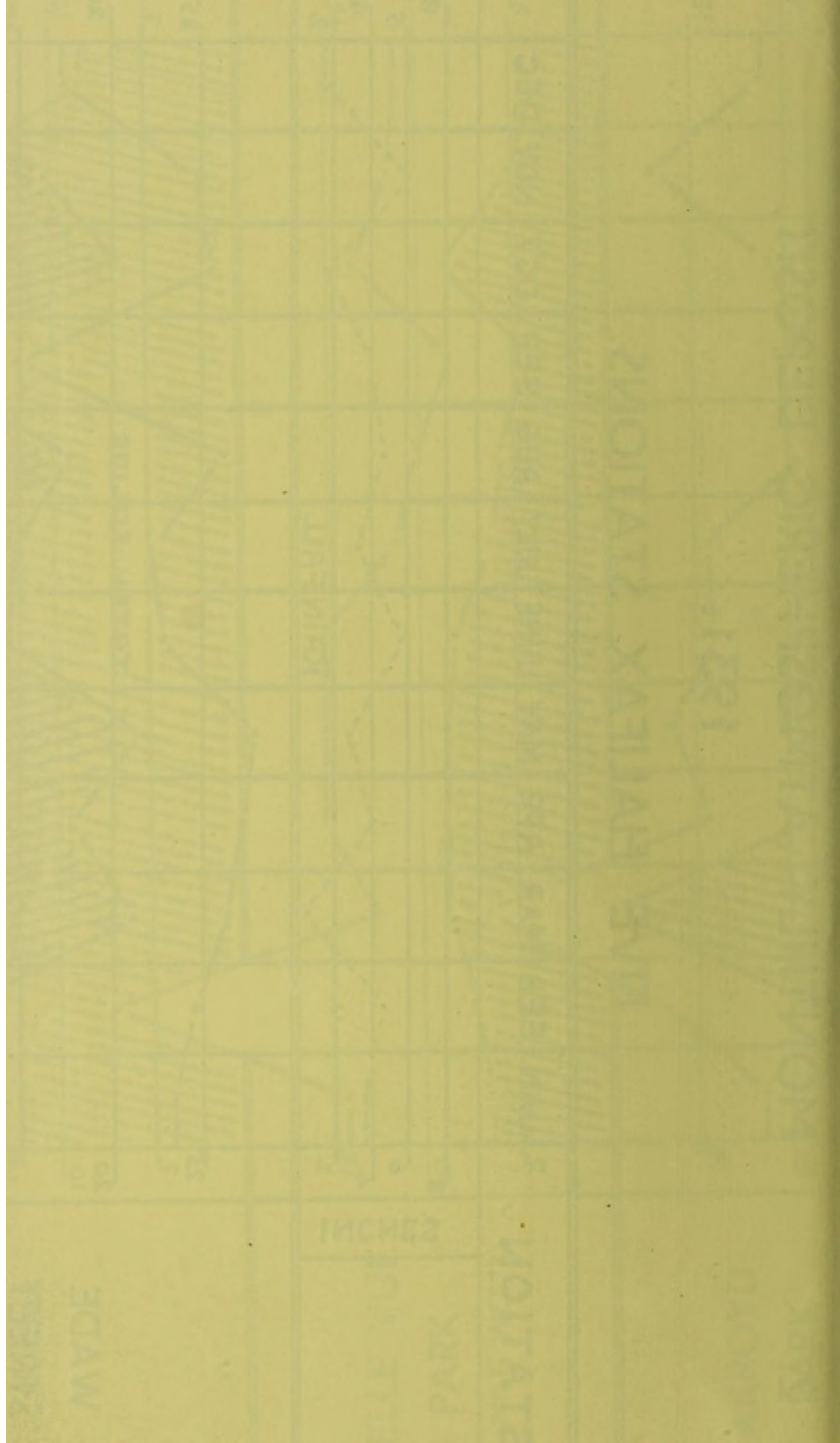


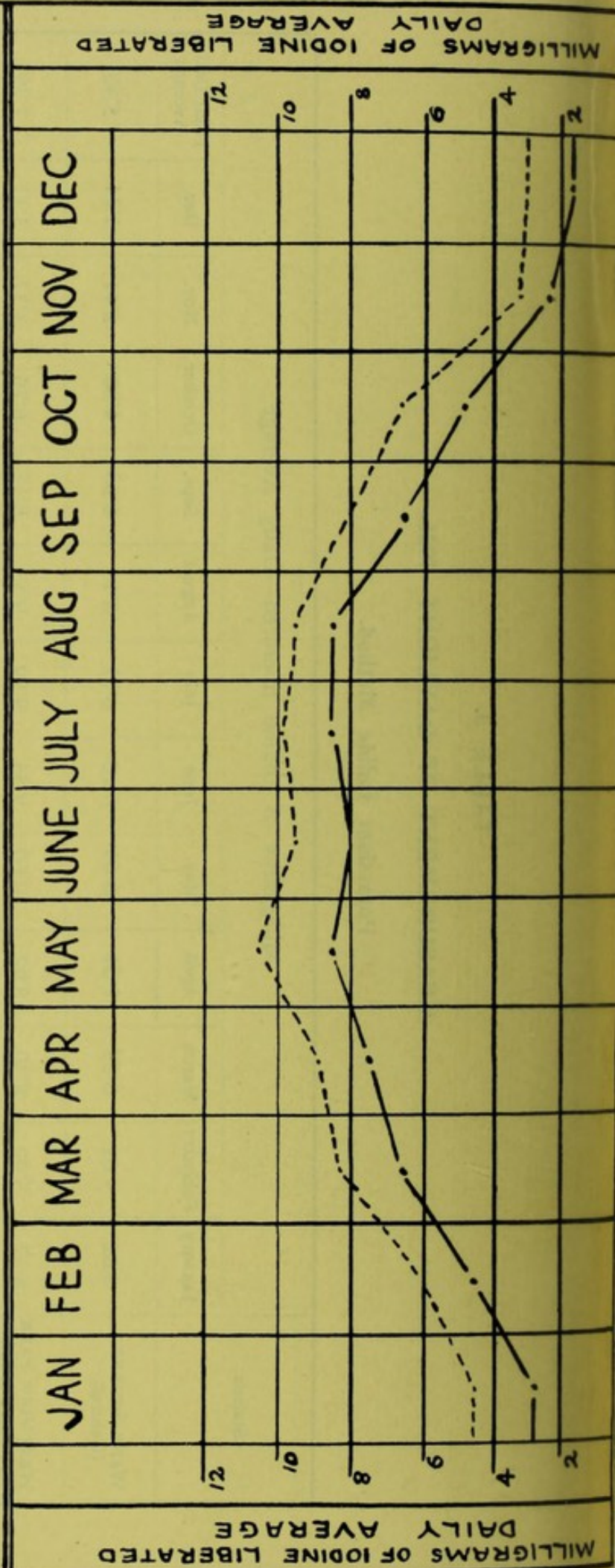


TABLE 3.  
MEASUREMENT OF DAYLIGHT—1931.  
Potassium Iodide Method.

Station	Milligrams of Iodine liberated—Daily Average.												Total Daily Average
	January	February	March	April	May	June	July	August	Sept.	October	Nov.	Dec.	
WADE STREET (Central)	2.82	4.62	6.69	7.51	8.64	8.10	8.71	8.18	6.58	4.80	2.44	1.74	5.90
WEST VIEW PARK (1½ miles West)	4.57	5.99	8.30	8.92	10.60	9.54	9.99	9.53	8.12	6.70	3.37	3.11	7.39
Total Daily Average ...	3.69	5.30	7.49	8.21	9.62	8.82	9.35	8.85	7.35	5.75	2.90	2.42	6.64

# 4. MEASUREMENT OF DAYLIGHT, 1931.

WEST VIEW PARK ----- WADE STREET -----





## Housing.

### (a) Statistics.

Number of New Houses erected during the year :—

(a) Total (including numbers given separately under (b))	271
(1) By the Local Authority ... ..	106
(2) By other Local Authorities ... ..	Nil
(3) By other bodies and persons... ..	165

(b) With State assistance under the Housing Acts :—

(1) By the Local Authority	
(a) For the purpose of Part 2 of the Act of 1925 ... ..	70
(b) For the purpose of Part 3 of the Act of 1925 ... ..	36
(c) For other purposes ... ..	Nil
(2) By other bodies or persons ... ..	Nil

1. Inspection of Dwellinghouses during the year :—

(1) (a) Total number of dwellinghouses inspected for housing defects (under Public Health or Housing Acts) ... ..	1806
(b) Number of inspections made for the purpose... ..	3517
(2) (a) Number of dwellinghouses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 ... ..	120
(b) Number of inspections made for the purpose... ..	379
(3) Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ... ..	See footnote
(4) Number of dwellinghouses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation ... ..	1277

NOTE.—As terms used are not applicable to present day Housing Legislation it is not clear what information is desired. During 1931 we dealt with 92 defective houses under Sections 17, 19 and 20 of the Housing Act, 1930. In the case of 39 of these houses no report was made to the Health Committee as the houses were rendered fit as the result of Informal Action.



2.	Remedy of Defects during the year without service of formal notices :—	
	Number of defective dwellinghouses rendered fit in consequence of informal action by the Local Authority or their officers ... ..	900
3.	Action under Statutory Powers during the year :—	
	A. Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930 :—	
	(1) Number of dwellinghouses in respect of which notices were served requiring repairs ...	13
	(2) Number of dwellinghouses which were rendered fit after service of formal notices :—	
	(a) By owners ... ..	13
	(b) By Local Authority in default of owners	1
	B. Proceedings under Public Health Acts :—	
	(1) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied ... ..	44
	(2) Number of dwellinghouses in which defects were remedied after service of formal notices :—	
	(a) By owners ... ..	26
	(b) By Local Authority in default of owners	Nil
	C. Proceedings under Sections 19 and 21 of the Housing Act, 1930 :—	
	(1) Number of dwellinghouses in respect of which Demolition Orders were made ... ..	15
	(2) Number of dwellinghouses demolished in pursuance of Demolition Orders ... ..	1
	D. Proceedings under Section 20 of the Housing Act, 1930 :—	
	(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ... ..	Nil
	(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ... ..	Nil
	E. Proceedings under Section 3 of the Housing Act, 1925 :—	
	(1) Number of dwellinghouses in respect of which notices were served requiring repairs ...	Nil



- (2) Number of dwellinghouses which were rendered fit after service of formal notices :—
- |   |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|
| (a) By owners                               | ... | ... | ... | ... | Nil |
| (b) By Local Authority in default of owners |     |     |     |     | Nil |
- (3) Number of dwellinghouses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close
- |     |     |     |     |     |
|-----|-----|-----|-----|-----|
| ... | ... | ... | ... | Nil |
|-----|-----|-----|-----|-----|

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

- |  |     |     |     |
|--|-----|-----|-----|
| (1) Number of dwellinghouses in respect of which Closing Orders were made  | ... | ... | Nil |
| (2) Number of dwellinghouses in respect of which Closing Orders were determined, the dwellinghouses having been rendered fit | ... | ... | Nil |
| (3) Number of dwellinghouses in respect of which Demolition Orders were made   | ... | ... | 2   |
| (4) Number of dwellinghouses demolished in pursuance of Demolition Orders  | ... | ... | 2   |

NOTE.—Action under Statutory Powers during the year :—

- A. (2) The excess of houses rendered fit over the number in respect of which notices were served, is accounted for by the fact that in one case the notices were served in 1930 and complied with in 1931.
- B. (2) Eighteen houses in respect of which notices were served to remedy defects in 1931, were remedied in 1932.
- C. In addition to figures given, there were 22 houses reported under Section 19 in respect of which the Health Committee accepted undertakings to make fit, whilst in 2 cases undertakings were accepted not to re-let for human habitation.
- D. Although this is a "nil" report, three underground dwellings were reported under Section 20, and the Health Committee accepted undertakings to make fit in two cases, whilst in the third an undertaking not to re-let was accepted.

**Re - housing of persons displaced as a result of the Local Authority taking action under Section 19 of the Housing Act, 1930.**



A report has been presented to the Health Committee upon this subject in which it is pointed out that it is very desirable that a Local Authority should provide houses to replace those which are demolished under this Section. It is a fact, however, that there is no statutory obligation placed upon Local Authorities in this connection as is the case when dealing with a "clearance" or "improvement" area.

This would appear to be unfortunate, as under present conditions Local Authorities are naturally anxious not to increase their already heavy liabilities in connection with the building of houses. There is also the added objection in many cases to the principle of "preferential renting," coupled with the difficulties of putting such a system into practice.

On the other hand, if Local Authorities do not undertake the responsibility of re-housing persons displaced as a result of action taken under this Section of the Act, the unfortunate dispossessed tenant is in many cases forced—probably by reason of poverty—into other occupied property, where the conditions may be even more insanitary than in the premises from which he has been ejected. It is probably generally true that the majority of the occupants of old, insanitary property, live there rather because of their inability to pay a higher rent, than because of a desire to live under such conditions. They will be classed as "undesirable tenants" by all house owners—including Housing Committees of Local Authorities—and as such it is almost impossible for them to obtain other and better housing accommodation, unless such is provided by the Local Authority.

It would seem, therefore, that in many cases a Local Authority has only two courses open to it. One is to suspend all operations under Section 19 of the Housing Act, 1930, or on the other hand, to accept the moral if not the statutory liability of providing the re-housing accommodation found to be necessary as a result of action taken under this Section.

### **Premises and Occupations which can be controlled by Byelaws or Regulations.**

#### **Common Lodging Houses.**

Duties are divided between the Watch Committee and the Health Committee. The Chief Constable on behalf of the Watch Committee is responsible for the registration of all common lodging houses, carrying out the provisions of the Public Health Acts, the Halifax Corporation Act, 1900, and any other Act or Acts of Parliament in relation thereto, except as far as the same relate to cleanliness, ventilation, infectious



disease and supply of water, these coming under the supervision of the Health Department on behalf of the Health Committee.

There are 10 Common Lodging Houses registered to accommodate 592 lodgers. Forty-nine inspections have been made by the Sanitary Inspectors during the year.

They have been found to be kept in good condition and no sanitary improvements were found to be necessary.

### **Houses Let in Lodgings.**

There are 89 houses let in lodgings, comprising 222 furnished rooms and 5 unfurnished. 206 inspections have been made and in 9 cases sanitary improvements have been effected.

The housing accommodation provided in these dwelling-houses is of the lowest order and not conducive to the well-being of their inhabitants, especially the children. One cannot help but sympathise with those who are compelled to live there and who are in many cases the helpless victims of avaricious landlords who charge exorbitant rents. Ten shillings per week for a single room is quite an ordinary charge, and in many cases 12/6 per week is charged for a room, the furniture of which is probably not worth more than one week's rent.

### **Tents, Vans, Sheds, etc.**

There are not many of these dwellings in the Borough and a total of 10 visits only have been made.

Although there are no Byelaws in force within the district, and Section 43 of the Public Health Act, 1925, has not been adopted, we have not experienced any especial difficulty in dealing with this type of dwelling.

### **Theatres, Music Hall, Cinemas, and other places of Public Amusement.**

132 inspections have been made in connection with applications for stage play licences or the renewal of same. Sanitary improvements have been effected in respect of 10 premises. Works carried out include provision of adequate sanitary accommodation, lavatory basins, and ventilation.

### **Rats and Mice (Destruction) Act, 1919.**

The investigation of complaints under this heading is almost entirely carried out by the Shops' Inspector, and only two inspections have been made during the year by the Sanitary Inspectors.



It is very doubtful whether an investigation of complaints of this character can be considered to be complete without any especial examination, and if necessary testing of any drainage in connection with the premises infested.

### Inspection and Supervision of Food.

#### Milk Supply.

*Milk and Dairies (Consolidation) Act, 1915.*

*Milk and Dairies (Amendment) Act, 1922*

*Milk and Dairies Order, 1926.*

As previously stated, these duties are divided between the Veterinary Inspector and the Chief Sanitary Inspector.

The following information refers to those retailers under my supervision :—

Registered Retail Purveyors (within the Borough)	...	46
Registered Retail Purveyors (outside the Borough)	...	61
Registered Retail Purveyors (in Sealed Bottles only)	...	220
Registered Dairy Premises	... ..	36

A total of 174 visits have been made to the dairy premises referred to, which include 4 new dairies.

In one or two cases sanitary improvements have been effected, particularly in respect to the facilities provided for cleansing milk utensils with boiling water or steam.

Under Section 2 (1) of the Milk and Dairies (Amendment) Act, 1922, 9 retailers of milk were invited to appear before the Health Committee to show cause why they should not be refused registration (4 cases), or their names removed from the register (5 cases).

Reasons for objection were as follows :—

- (a) No proper dairy.
- (b) No drainage to dairy.
- (c) Lack of facilities for cleansing milk utensils with boiling water or steam.
- (d) Poor quality of milk as evidenced by Public Analyst's report upon its bacteriological condition.

In one case the retailer was refused registration and later prosecuted for selling milk whilst unregistered. At a later date, however, he was registered as a retail purveyor of milk, having in the meantime taken steps to conform to the necessary requirements.



In the other 8 cases, following the interviews referred to, such improvements were effected as to warrant the withdrawal of any objection to registration.

### **Bacteriological Examination of Milk.**

During the year 85 samples of ordinary "loose" milk were obtained and submitted to bacteriological examination. 12 of these samples were of milk produced within the Borough and 73 of milk produced outside.

The results obtained show that there has been a great improvement in the cleanliness of our ordinary milk supply, and we feel justified in our attempts to maintain the local presumptive bacteriological standard decided upon last year and referred to in our Annual Report. This standard is that laid down in the Milk (Special Designations) Order of 1923 for Grade A milk.

As will be seen from the following Tables, no less than 76.5 of the samples taken had a bacterial count of not more than 200,000 per cubic centimetre, and 52.9 of the samples had no coliform bacillus in one-hundredth of a cubic centimetre.

Attention is again directed to the importance of this work in effecting improvements to the bacteriological condition of the milk supplied to the public. The procedure adopted is as follows :—

Upon receiving the Public Analyst's report upon a bad sample, the retailer is communicated with and informed that unless the necessary improvement is effected the matter will be reported to the Health Committee. If the milk has been produced within the Borough, the producer is also notified, and requested to take all possible steps to ensure the cleanliness of his milk supplies. If the milk has been produced outside the Borough, the Sanitary Inspector to the Local Authority in whose area the producer's premises are situate, is supplied with a copy of the letter sent to the retailer concerned, and his co-operation is requested to assist in obtaining any necessary improvement in the producer's methods, etc.

Without exception, this procedure has resulted in the required improvement being effected, and it has been the means in many cases of causing the necessary dairy to be provided, together with adequate means for the thorough sterilisation of all milk utensils.

Table 1. General Bacteria Count.

Milk produced in Borough			Milk produced outside Borough			TOTAL		
Not more than 30,000 per c.c.	Not more than 200,000 per c.c.	Over 200,000 per c.c.	Not more than 30,000 per c.c.	Not more than 200,000 per c.c.	Over 200,000 per c.c.	Not more than 30,000 per c.c.	Not more than 200,000 per c.c.	Over 200,000 per c.c.
7 = 58.3%	16 = 83.3%	2 = 16.7%	30 = 41.1%	55 = 75.3%	18 = 24.7%	37 = 43.5%	65 = 76.5%	20 = 23.5%

Table 2. Coliform Bacillus Content.

Milk produced in Borough				Milk produced outside Borough.				TOTAL			
Absent in 1 <sup>st</sup> c.c.	Absent in 10 <sup>th</sup> c.c.	Absent in 100 <sup>th</sup> c.c.	Present in 100 <sup>th</sup> c.c.	Absent in 1 <sup>st</sup> c.c.	Absent in 10 <sup>th</sup> c.c.	Absent in 100 <sup>th</sup> c.c.	Present in 100 <sup>th</sup> c.c.	Absent in 1 <sup>st</sup> c.c.	Absent in 10 <sup>th</sup> c.c.	Absent in 100 <sup>th</sup> c.c.	Present in 100 <sup>th</sup> c.c.
6 = 50%	8 = 66.6%	10 = 83.3%	2 = 16.6%	24 = 32.9%	37 = 50.7%	53 = 72.6%	20 = 27.4%	30 = 35.3%	45 = 52.9%	63 = 74.1%	22 = 25.9%



# Food and Drugs (Adulteration) Act, 1928.

A total of 302 samples of Food and Drugs have been taken during the course of the year, and submitted to the Public Analyst for chemical analysis. These included 173 samples of milk and 129 samples of other foods and drugs.

Adulterated milk samples numbered 8 or 4.62%, whilst adulterated samples of other foods and drugs numbered 14 or 10.85%, making the total number of adulterated samples 22 or 7.28%.

The following Tables are self-explanatory and do not call for special comment.

TABLE 1.

Nature of Sample	Number of Samples taken			Number not Genuine		
	Formal	Informal	Total	Formal	Informal	Total
Milk ... ..	168	5	173	8	—	8
„ (Dried) ...	—	1	1	—	—	—
Baking Powder ...	—	18	18	—	—	—
Butter ... ..	—	5	5	—	—	—
Cheese (Cheshire) ...	—	6	6	—	—	—
Cream ... ..	2	10	12	—	1	1
Extract of Malt and Cod Liver Oil ...	—	1	1	—	—	—
Gin ... ..	2	10	12	2	2	4
Ginger (Ground) ...	—	6	6	—	—	—
Minced meat ... ..	1	7	8	—	—	—
Olive Oil ... ..	—	7	7	—	—	—
Potted Meat ... ..	—	6	6	—	—	—
Rum ... ..	5	10	15	1	4	5
Sausages ... ..	6	6	12	3	1	4
Sponge Buns ... ..	—	6	6	—	—	—
Suet (Beef) ... ..	—	1	1	—	—	—
Sugar ... ..	—	2	2	—	—	—
Sweets (Boiled) ...	—	1	1	—	—	—
Whisky (Scotch) ...	—	9	9	—	—	—
Wine ... ..	—	1	1	—	—	—
Total ... ..	184	118	302	14	8	22

Included in the above are two "Appeal to Cow" samples, both good milks, and twelve "In course of Delivery" samples, also good milks.

Adulteration of milk samples 4.62%

Adulteration of other samples 10.85%

**Other Offences.**—A sample of Dried Full Cream Milk was obtained which was sold without declaration label as required by the Public Health (Dried Milk) Regulations, 1923 and 1927. The vendor was cautioned and he immediately obtained a supply of the necessary labels.

TABLE 2.

Administrative Action taken in respect of Samples reported by the Public Analyst to be not genuine.

Sample No.	Nature of Sample and Result of Analysis	Administrative Action Taken
{ 1 6	Gin.—38°8' Under Proof Gin.—38° Under Proof	No. 1 was an informal sample and No. 6 was a formal sample taken a week later. Defendant was prosecuted at the Halifax Borough Police Court, 24th February, 1931, and case was dismissed on payment of £1 16s. 6d. costs.
21	Rum.—47°7' Under Proof	This was an informal sample, followed up by taking a formal sample two days later which proved to be genuine. Between the two samples, the brewery company concerned had caused all spirits supplied by them to be checked.
{ 23 25	Rum.—37°3' Under Proof Rum.—36°5' Under Proof	No. 23 was an informal sample and No. 25 was a formal sample taken two days later. Defendant was prosecuted at the Halifax Borough Police Court, 24th Feb., 1931, and case was dismissed on payment of £1 16s. 6d. costs.
86	Milk.—4% deficient in Fat	This sample was followed up by taking a sample in course of delivery from the producer to the retailer two days later which was found to be genuine. Defendant was prosecuted at the Halifax Borough Police Court, 25th June, 1931, and was fined £3.
89	Milk.—5% deficient in Fat	This sample was followed up by samples taken in course of delivery from the producer to the retailer two days later, which were found to be genuine. Defendant was prosecuted at the Halifax Borough Police Court, 25th June, 1931, and fined £3.
{ 105 110	Sausages.—Excess of Preservative (522 parts per million of Sulphites) Sausages.—Ditto. (600 p.p.m. of Sulphites)	No. 105 was an informal sample and No. 110 was a formal sample taken a week later. Defendant was prosecuted at the Halifax Borough Police Court, 23rd June, 1931, and fined £5 and 10/6 costs.
111	Sausages.—Ditto. (540 p.p.m. of Sulphites)	This was a formal sample. Defendant was prosecuted at the Halifax Borough Police Court, 23rd June, 1931, and fined £2 and 10/6 costs.



Sample No.	Nature of Sample and Result of Analysis	Administrative Action Taken
112	Sausages.—Ditto. (480 p.p.m. of Sulphites)	This was a formal sample. Defendant was prosecuted at the Halifax Borough Police Court, 23rd June, 1931, and fined £2 and 10/6 costs.
141	Milk.—29% deficient in Fat	This sample was followed up by an "appeal to cow" sample two days later which was found genuine (3.38% Fat). Defendant was prosecuted at the Halifax Borough Police Court, 7th August, 1931, and fined £10 and 10/6 costs.
152	Cream.—Preservative present (0.02% Boric)	This was an informal sample followed up by a formal sample obtained from the supplier a week later. Formal sample contained no preservative.
164	Milk.—12% deficient in Fat	This sample was followed up by taking a sample in course of delivery from the producer to the retailer two days later, which was found to be genuine. Defendant was prosecuted at the Halifax Borough Police Court, 7th August, 1931, and fined £5 and 10/6 costs.
172	Milk.—14% deficient in Fat	This sample was followed up by taking samples in course of delivery from the producer to the retailer two days later, which were found to be genuine. Defendant was prosecuted at the Halifax Borough Police Court, 7th August, 1931, and fined £10 and 10/6 costs.
222	Milk.—Slightly deficient in Fat (2.98% present)	This sample was followed up by taking a sample in course of delivery from the wholesaler to the retailer two days later, which was found to be genuine.
223	Milk.—6% deficient in Fat	This sample was followed up by taking a sample in course of delivery from the producer to the retailer the following day, which was found to be genuine. Defendant was prosecuted at the Halifax Borough Police Court, 3rd November, 1931, and fined £5 and 10/6 costs.
234	Milk.—9% deficient in Fat	This sample was followed up by taking an "appeal to cow" sample two days later, which was found genuine (3.6% Fat). Proceedings were instituted but case was withdrawn owing to technical error in service of summons on Defendant.
292	Rum.—36.1° Under Proof	This was an informal sample followed up taking a formal sample the following day, which proved to be genuine. A fresh supply had been obtained between the taking of the two samples.
293	Rum.—35.8° Under Proof	This was an informal sample, followed up by taking a formal sample the following day which proved to be genuine. A fresh supply had been obtained between the taking of the two samples.
298	Gin.—47.4° Under Proof	No. 298 was an informal sample and No. 300 was a formal sample taken the following day. Defendant was prosecuted at the Halifax Borough Police Court, 5th February, 1932, and fined £2 and £1 11s. 6d. costs.
300	Gin.—45.7° Under Proof	

TABLE 3.  
Monthly Average Composition of Milk Samples.

Month				No. of Samples	Analytical Data	
					Milk Fat per cent	Non-fatty Solids per cent.
January	...	...	...	15	4'00	8'99
February	...	...	...	14	3'57	9'08
March	...	...	...	16	3'80	8'96
April	...	...	...	7	3'69	8'94
May	...	...	...	18	3'46	9'00
June	...	...	...	24	3'73	9'11
July	...	...	...	29	3'70	9'16
August	...	...	...	2	4'00	8'93
September	..	...	...	22	3'59	9'19
October	...	..	...	12	3'61	9'10
November	...	...	...	9	3'79	8'98
December	...	...	...	5	3'80	9'15
Average for the year 1931				...	3'69	9'08
" " 1930				...	3'69	9'03
" " 1929				...	3'63	8'96
" " 1928				...	3'81	9'03
Requirements of the Sale of Milk Regulations, 1901				... ..	3'00	8'50



TABLE 4.

Articles of Food examined for Preservative in accordance with the Public Health (Preservatives, etc., in Food) Regulations, 1925.

Food	No. of Samples examin'd	Nature of Preservative	Amount		Remarks
			Allowed	Found	
Milk ... ..	173	Nil	Nil	Nil	
Butter ... ..	5	Nil	Nil	Nil	
Cream ... ..	12	Nil	Nil	0.02% Boric in one sample	See Table 2 for further information
Mincemeat ...	8	Nil	Nil	Nil	
Potted Meat ...	6	Nil	Nil	Nil	
Sausages ... ..	12	Sulphur dioxide	450 parts per million	1-17 pts. 1-74 „ 1-102 „ 1-137 „ 1-201 „ 1-256 „ 1-258 „ 1-347 „ 1-480 „ 1-522 „ 1-540 „ 1-600 „	See Table 2 for further information
Sugar ... ..	2	Sulphur dioxide	70 parts per million	Nil	Traces of Ultra Marine Blue dye were also found
Sponge Buns ...	6	Nil	Nil	Nil	
Wine ... ..	1	Sulphur dioxide	450 parts per million	Nil	

#### Manufacture and/or Sale of Ice Cream.

Registered Premises ...	118
Number of Inspections ...	149
New Premises provided ...	2

The strictest supervision has been kept over these premises and sanitary improvements have been effected in two cases.

Twenty-two samples of ice cream were submitted to bacteriological examination, together with one sample of ice cream powder and one sample of ice cream biscuit.

Only eight of the ice cream samples conformed to the local standard which we are endeavouring to apply, namely, that the number of organisms do not exceed 100,000 per cubic centimetre and that there are no *Bacillus Coli* present in less than one-tenth of a cubic centimetre.

The samples of powder and biscuit were found to be free from appreciable numbers of *B. Coli*.

The following Tables give details of examination :—

TABLE 1.—General Bacteria Count.

Not more than 30,000 per c.c.	Not more than 100,000 per c.c.	Not more than 200,000 per c.c.	Over 200,000 per c.c.
8 = 36·4%	11 = 50·0%	16 = 72·7%	6 = 27·3%

TABLE 2.—Coliform Bacillus Content.

Absent in 1/10th c.c.	Absent in 1/100th c.c.	Absent in 1/1000th c.c.	Present in 1/1000th c.c.
8 = 36·4%	13 = 59·1%	18 = 81·8%	4 = 18·2%

#### Fried Fish Shops.

Number on Register ...	...	171
Number of Inspections ...	...	226
Sanitary condition improved ...	...	4

During recent years there has been a great improvement in the methods of the purveyors of this food commodity, and the number of those vendors who continue to wrap up their fish, etc., in newspapers—not always clean—continues to diminish.

#### Fertilisers and Feeding Stuffs Act, 1926.

There were 14 samples of the above taken during the year, 13 of which were Feeding Stuffs and one of Fertilisers.

Five samples of Feeding Stuffs were reported as unsatisfactory by the Public Analyst.



Details are as follows :—

Sample No. 73—Molassine Meal. This was an informal sample and the Public Analyst reported, "the sample is not satisfactory in that the percentages of Fibre and Sugar have not been declared on the invoice."

Letter was sent to vendors calling their attention to the matter.

Sample No. 74—Alfalfa Meal. This was an informal sample and the Public Analyst reported, "the sample is not satisfactory in that the percentage of Fibre has not been declared on the invoice."

Letter was sent to vendors calling their attention to the matter.

Sample No. 77—Biscuit and Meal. This was an informal sample and the Public Analyst reported, "the sample is unsatisfactory in that the percentages of Oil and Albuminoids are considerably below those declared."

As the headquarters of the manufacturers were situate at Bootle, letter was sent to the Chief Sanitary Inspector giving particulars. Local dealer made the necessary alteration to the declaration respecting his remaining stock.

Sample No. 80—Ground Oats. This was an informal sample and the Public Analyst reported, "the sample is unsatisfactory in that a quantity of foreign cereals (Barley and Rye) is present to the extent of at least 10 per cent."

A formal sample, No. 81, was then taken, and reported upon by the Public Analyst as follows :—"The sample is unsatisfactory in that a percentage of Barley is present. I estimate the amount of Barley present to be not less than four (4.0) per cent."

Following an interview with the principal of the firm of suppliers, who explained that this was a sample of Russian Oats which normally contain anything up to eight per cent. of other grain, chiefly Barley, the facts were communicated to the Ministry of Agriculture and Fisheries, who concurred in our view that the case would not appear to be one in which the institution of a prosecution, on the basis of this sample, for an offence under Section 4 (3) of the Act would be justified.

The particulars of this case were later reported to the Health Committee.



### Rag Flock Acts, 1911 and 1928.

There are no manufacturers of rag flock within the Borough and only one dealer in same. There are several users, however, whose premises have been inspected under the Factory and Workshop Act, 1901.

Four samples of rag flock were obtained and submitted to the Public Analyst for examination. One of these samples was stated not to comply with the Act, as it contained 44 parts per 100,000 of Soluble Chlorine.

As this rag flock had been purchased from a Bradford merchant, the Bradford Health Department were communicated with. We were later notified that the Bradford merchant had in turn purchased the rag flock from a Leeds manufacturer, who had dispatched the consignment direct to Halifax.

The Leeds Health Department were then notified, and a reply was received from the Medical Officer of Health stating that the firm in question was one of the most dependable and conscientious in the City. They had their flocks analysed weekly, and over a considerable period of time they had averaged rather less than 8 parts per 100,000 of Soluble Chlorine. It was further suggested that the Bradford merchant who obtained supplies from other sources, had made a mistake in attributing this particular supply to the Leeds manufacturer.

A fortnight later, a further sample was obtained from the Halifax user, which on examination, proved to contain only three parts per 100,000 of Soluble Chlorine.

### Shop Inspection, etc.

I am indebted to Mr. Fearnley, the Inspector under the Shops Acts 1912 to 1928, the Children's Byelaws, the Fabrics (Misdescription) Act, the Rats and Mice (Description) Act 1919, and the Hairdressers and Barbers Shops (Sunday Closing) Act 1930, for the particulars given below :—

Half-holiday Closing Visits	...	...	...	974
Assistants' Half-holiday Visits	...	...	...	637
Registration and Administrative Visits...	...	...	...	607
Special	„	...	...	325
Early Closing	„	...	...	593
Children's Bye-Law	„	...	...	691
Fabrics (Misdescription) Act	„	...	...	211
Rats and Mice (Destruction) Act	„	...	...	530
Hairdressers (Sunday Closing)	„	...	...	248
Shops without Assistants' Half-holiday Notice (Sec. 1)				50
Do Young Persons	„	(Sec. 2)		21
Do Mixed Business	„	(Sec. 10)		164
Do Half-holiday Closing	„	(Sec. 4)		99
Do Seats for Female Assistants		(Sec. 3)		1



Contravention of Mealtimes	(Sec. 1, Sub. 5)	19
Do Assistants' Half-holiday	(Sec. 1, Sub. 1)	53
Do Closing Orders	(Sec. 5)	377
Do Early Closing	(1928 Act)	262
Do Young Persons' Hours	(Sec. 2)	0
Do Children's Bye-Laws ...	...	19
Warning Notices sent	...	10
Warnings and Complaints. Hairdressers (Sunday Closing)		6
Prosecutions	...	3

### **The Hairdressers and Barbers Shops (Sunday Closing) Act, 1930.**

The above Act came into operation on the 1st January, 1931. The Act prohibits all hairdressing in shops and in customers' homes on Sundays, with certain exemptions. The only one which applies locally is that a hairdresser may attend a customer at any place, who is unable to attend at his shop in consequence of bodily or mental infirmity.

I have found no general opening of shops on Sundays, but have given several warnings for "obliging" customers, also several who have attended customers in their own homes. Locally, the hairdressers generally are in favour of the Act and desire to comply with the regulations and restrictions imposed.

### **Rats and Mice (Destruction) Act, 1919.**

Number of premises that are or have been rat-infested during the year	...	112
Premises temporarily clear after Rat Week	...	27
Premises where numbers were reduced...	...	59
Premises at present rat-infested	...	85
Visits paid for National Rat Week purposes	...	182
Visits paid to rat-infested premises during the year	...	530
Number of rat tails brought to the Health Dept. during the year	...	1406
Number of rat tails brought to the Health Dept. during Rat Week	...	424
Number of rats killed in addition	...	360

The increase in the number of rat tails brought to the Health Department during Rat Week from 218 to 424, is due to the efforts of about 10 men, who hunt the rats with ferrets and dogs. The tendency of the rat population to concentrate on farms and refuse tips is more decided this year than usual, and, in consequence, fewer private houses and business premises complain about infestation by the rodents.





## SECTION 15.

# Analytical Work.

### BOROUGH ANALYST'S COMMENTARY.

I am indebted to Mr. H. T. Lea, M.Sc., F.I.C., the Borough Analyst, for the particulars given under this heading :

Of the 302 samples examined under the Food and Drugs (Adulteration) Act, 1928, eight milks and fourteen other samples were definitely adulterated. In addition, one sample of Full Cream Dried Milk contravened the Dried Milk Regulations.

Of the eight samples of milk found to be unsatisfactory, all were deficient in fat, the amounts varying from 4—29 per cent. In each case brought before the Borough Justices a conviction was obtained and fines were imposed.

Although the percentage of adulterated samples is higher than the average, the general high standard of Halifax milk has been maintained as the following averages of all samples examined under the Act in previous years, show :—

1929.	No. Examined 154.	Av. Fat 3.63%	Av. N.F.S. 8.95%
1930.	No. Examined 138.	Av. Fat 3.69%	Av. N.F.S. 9.03%
1931.	No. Examined 173.	Av. Fat 3.69%	Av. N.F.S. 9.08%

It is very gratifying to note that while the high standard of quality has been maintained there has been a definite improvement in the purity. Halifax is in a fortunate position in that the bulk of its milk supply is produced on farms directly under the supervision of the Local Authority and is delivered within a few hours of its production to the consumer. It is quite usual to find milk sold from "hand-cans" in the street reaching the purity standard of "Grade A Milk," whilst a really dirty sample is of rare occurrence. There has been an undoubted demand by the public of late years for hygienically produced milks and farmers have found that such milk can be produced without any great increase of expense.

One regrets that there is still a comparatively small demand for Certified and Grade 'A' T.T. Milk in Halifax. Two producers only, being at present sufficient to supply the whole Borough. The great advantages of Certified Milk are that it is the produce of Tuberculin Tested Herds, which are examined at regular intervals by Government Inspectors, and that it is bottled on the day of production at the farm and thus escapes any risk of contamination during transport.

The fourteen samples, other than milk, found to be unsatisfactory were as follows :—5 rums, 4 gins, 4 sausage, and 1 cream.



Under the Preservative Regulations it is an offence to add any preservative to cream. In the sample in question a small amount of Boric was found to be present. The amount was so small that there is a definite indication that the milk from which this cream had been separated had been preserved and that a trace of preservative had thus found its way into the cream.

In Section 2 of the Food and Drugs (Adulteration) Act, it is an offence to sell spirits which have been reduced by an admixture of water to a greater extent than 35° Under Proof. The vendors of the nine samples of spirits found to be under that strength were summoned before the Borough Magistrates and convictions were obtained in each case.

Under the Public Health Preservative in Food Regulations, sausage and sausage meat must not contain any preservative other than sulphite and only that in a quantity not exceeding 450 parts per million. The presence of preservative has to be notified to the purchaser by the vendor. One informal and three formal samples of sausage were found to contain preservative in excess of the maximum allowed. The vendors were fined an aggregate of £9 and costs by the Justices.

Miscellaneous





## SECTION 16.

—o—

## Miscellaneous.

## WATER SUPPLY.

I am indebted to the Waterworks Engineer, Mr. E. P. Brook, for the following report :—

The water supply is obtained from five valleys, viz.: The Hebble, the Luddenden, the Widdop, the Greave, and the Walshaw Dene.

The source of supply is chiefly moorland and high mountain pasture. The water is conveyed in by covered conduits and iron pipes, and is delivered at high pressure with a constant supply. The supply has been satisfactory both in quality and quantity.

The new Filtration Plant at Thrum Hall has been in operation since March 19, 1931.

The crude water, as collected from the gathering grounds, is an upland surface water with a strong acidic action and often highly coloured with peaty organic matter. During certain seasons of the year it is no uncommon thing to find as many as 1,000 organisms per cc. growing on gelatine, after 48 hours incubation at 20° C. and the *Bacillus Coli* present in 1 cc.

The water, after the addition of lime and Alumina, is passed through the high pressure sand filters and then further treated with lime. The resultant filtrate is supplied direct to the consumer and is a water, neutral in reaction, of high organic purity and low hardness and colour, and in every way suitable for all domestic and industrial uses.

A typical analysis of the filtered water is as follows :—

### Chemical Analysis.

Total Solids	...	...	...	7.73 Pts. per 100,000
Organic Solids	...	...	...	1.58   "   "
Chlorine	...	...	...	1.3   "   "
Free Ammonia	...	...	...	0.0010   "   "
Albuminoid Ammonia	...	...	...	0.0026   "   "
Nitric Nitrogen	...	...	...	0.028   "   "
Nitrous Nitrogen	...	...	...	Nil   "   "
Oxygen absorbed in 4 hrs. at 80° F.	...	...	...	0.0092   "   "
Temporary Hardness	...	...	...	0.8 Degrees.
Permanent Hardness	...	...	...	3.2   "
pH Value	...	...	...	7.6   "
Colour Lovibond Units.				
2ft. Strata. Green	...	...	...	0.6 Degrees.
Yellow	...	...	...	0.2   "



**Bacteriological Examination.**

Total Micro-organisms growing on Gelatine					
at 20° C.	2 days	...	...	...	Nil
	3 days	...	...	...	2
Total Micro-organisms growing on Agar at					
37° C.	2 days	...	...	...	1
	3 days	...	...	...	1
B. Coli	Absent in	...	...	...	100 cc.

I am indebted to Mr. D. T. Lloyd Jones, the Borough Engineer, for the particulars under these headings :—

**Rivers and Streams.**

Apart from the district of Northowram, where the sewerage falls to Brighouse and part of Warley draining to Luddenden, the whole of the sewerage of the Borough gravitates to the Sewage Works at Salterhebble, where the effluent is treated. No known pollution takes place. Surface water in isolated cases is taken direct to water courses.

Storm water overflows to main sewers are regulated to the requirements of the Ministry of Health and periodically inspected and cleansed.

**Sewerage.**

The sewerage and drainage of the Borough is generally in a satisfactory condition, and adequate to deal with the maximum flow.

Extensions are rendered necessary from time to time in the outer districts where development is taking place on private building estates and Corporation Housing Schemes, and the Conversion scheme also calls for minor extensions or replacements of old and worn sewers.

The Sewage Disposal Works, it is anticipated, will be adequate to deal with the whole of the effluent of the Borough for some time to come. In the light of recent research, modifications of the method of treatment may, however, be considered.

It is anticipated that extensions of sewerage in the Mixenden and Illingworth districts will be necessary in the near future.

### Disposal of Refuse and Street Cleansing.

I am indebted to the Director of Public Cleansing, Mr. A. J. Burrell, for the following report :—

#### Street Cleansing.

Approximate mileage cleansed daily	...	...	...	8
"	"	"	three times weekly	15
"	"	"	twice weekly	20
"	"	"	once weekly	51.5
"	"	"	less than once weekly	126.5

A "Karrier" mechanical sweeping and sprinkling machine is engaged each day on street cleansing work and does its work admirably.

During the year 63,029 gullies have been cleansed and re-sealed by means of a "Leyland" type Vacuum Gully Cleaner, and in addition to the above number, 187,007 gullies have been emptied by hand.

#### Refuse Collection.

There are approximately 30,000 premises in the Borough from which refuse has been collected at intervals varying from 7 to 9 days. From these premises the following weight of refuse has been removed :—

	T.	C.	Q.
By Horses and Carts	10,506	11	0
By "S.D." Freighters	4,381	6	2
By "Guy" Wagons	3,159	10	3
By "Fords"	2,100	5	3
	20,147	14	0

In addition, Abattoirs' refuse,  
Market's Garbage & Trade  
Refuse has been collected  
amounting to ... 2,863 18 1

Total weight dealt with 23,011 12 1

#### Refuse Disposal.

The House Refuse Disposal Plant has worked very satisfactorily throughout the year, having dealt with 16,198 tons 15cwts. 3qrs., which works out at an average of 60 tons 9cwts. per working day of 8 hours. The following analysis of the



refuse so dealt with might prove to be of some interest to you, and is as follows :—

	T.	C.	Q.	%
Dust ... ..	7,652	15	0	47.24
Cinders ... ..	1,547	0	1	9.55
Pots and Bricks ... ..	236	18	2	1.46
Tins ... ..	479	0	2	2.96
Iron ... ..	114	0	0	0.7
Glass ... ..	120	18	0	0.75
Tailings to Incinerator ...	5,160	12	2	31.86
Garbage to Incinerator ...	887	10	0	5.48
Total ... ..	16,198	15	3	100.00

The Waste Elimination Plant which—apart from plant which has been added during the last two or three years—has been in operation for 10 years, has continued to work with entire satisfaction and dealt with the following :—

	T.	C.	Q.
Raw Fish ... ..	483	17	0
Raw Blood ... ..	72	0	3
Condemned Meat ... ..	26	4	0
Fats ... ..	3	6	2
Slaughterhouse Offals ...	103	6	1
Bones ... ..	19	12	1
Dogs 817 ; Cats 448 ...	9	1	0
Serum ... ..	5	14	2
Total ... ..	723	2	1

The remaining 6,089 tons 14cwts. 1qr. has been disposed of by means of controlled tipping, mainly at tips situate at Birks Hall and Siddal, where this method of disposal has been carried out with satisfaction, and without nuisance.

### Refuse Receptacles.

During the year, 4,291 dust bins and 1,251 lids have been issued to renew worn out bins ; to replace tubs ; and for new property, and it is estimated that receptacles for storage of refuse now stand as follows :—

Dust Bins with lids ... ..	8,000
Dust Bins without lids ... ..	13,500
Wooden Ashtubs ... ..	8,000
	<hr/>
	29,500

### Goux Tub.

There are 1,701 Goux tubs in the Borough which are cleansed regularly. It is unfortunate that the conversion of these is progressing so slowly at the present time.

### Co-operation with Medical Practitioners.

Number of visits to houses by Doctors of the Health Department at the request of Private Practitioners	Number of Consultations with Private Practitioners exclusive of telephone consultations	Telephone Consultations	Total
23	32	110	165

(This Table does not include visits and consultations by the Tuberculosis Officer. These appear in the Tuberculosis section of the Report).

### Medical Examination of Corporation Employees.

Under Road Traffic Act	Other Examinations	Total	Examined by
37	16	53	Dr. Roe.
9	2	11	Dr. Liddle.
—	6	6	Dr. Smith.

### LEGISLATION IN FORCE.

An Act for paving lighting cleansing watching and improving the Township of Halifax and for supplying the same with water. 1823.

The Halifax Improvement Act 1853.

The Halifax Park and Improvement Act 1858.

The Halifax Improvement Act 1862.

The Halifax Extension and Improvement Act 1865.

The Halifax Corporation Waterworks and Improvement Act 1868.

The Halifax Water and Gas Extension Act 1870.

The Halifax Water and Gas Extension Act 1876.

The Halifax Corporation Act 1882.

The Halifax Corporation Waterworks Act 1888.

The Halifax Corporation Tramways Act 1897.

The Halifax Corporation Act 1898.

The Halifax Corporation Act 1900.

The Halifax Corporation Act 1902.

The Halifax Corporation Act 1905.

The Halifax Corporation Act 1911.

The Halifax Corporation Act 1915.

The Halifax Corporation Act 1920.

The Halifax Corporation Act 1922.

The Halifax Corporation Act 1924.

The Halifax Corporation Act 1926.

The Halifax Corporation Act 1929.



**CONFIRMATION ACTS.**

SHORT TITLE.	ORDER THEREBY CONFIRMED.
The Public Health Supplemental Act 1851 (No. 3).	The Halifax Order 1851.
The Public Health Supplemental Act 1856.	Section 2 relating to Hlfx.
The Local Government Board's Provisional Orders Confirmation (Halifax etc.) Act 1881.	The Halifax Order 1881.
The Local Government Board's Provisional Orders Confirmation (No. 4) Act 1886.	The Halifax Order 1886.
The Local Government Board's Provisional Orders Confirmation (No. 4) Act 1887.	The Halifax Order 1887.
The Local Government Board's Provisional Orders Confirmation (No. 11) Act 1889.	The Halifax Order 1889.
The Local Government Board's Provisional Orders Confirmation (No. 3) Act 1890.	The Halifax Order 1890.
The Local Government Board's Provisional Orders Confirmation (No. 4) Act 1892.	The Halifax (No. 2) Order 1892.
The Local Government Board's Provisional Orders Confirmation (No. 9) Act 1892.	The Halifax (No. 3) Order 1892.
The Local Government Board's Provisional Orders Confirmation (No. 10) Act 1892.	The Borough of Halifax Order 1892.
The Commons Regulation (Halifax) Provisional Order Confirmation Act 1895.	Provisional Order dated 30th April 1895.
The Local Government Board's Provisional Orders Confirmation (No. 4) Act 1896.	The Halifax Order 1896.
The Local Government Board's Provisional Orders Confirmation (No. 7) Act 1899.	The Borough of Halifax Order 1899.
The Local Government Board's Provisional Orders Confirmation (No. 5) Act 1901.	The Halifax and Sowerby Bridge Order 1901.
The Local Government Board's Provisional Orders Confirmation (No. 7) Act 1912.	The Halifax (Extension) Order 1912.
The Local Government Board's Provisional Orders Confirmation (No. 1) Act 1918.	The Halifax Order 1918.
Ministry of Health Provisional Orders Confirmation (No. 5) Act 1924.	The Halifax Order 1924.
Ministry of Health Provisional Orders Confirmation (No. 3) Act 1928.	The Halifax Order 1928.
Ministry of Health (Halifax and West Riding Provisional Orders) Confirmation Act 1928.	The Halifax (Extension) Order 1928.
Ministry of Health Provisional Orders Confirmation (No. 11) Act 1929.	The Halifax Order 1929.

**ADOPTIVE ACTS.**

The undermentioned Acts have been adopted in the Borough :—

- The Infectious Disease (Prevention) Act 1890.
- The Public Health Acts Amendment Act 1890.
- The Public Libraries Acts 1892 to 1919.

**BYELAWS, ETC.**

- Nuisances.
- Common Lodging Houses.
- Houses Let in Lodgings.
- Smoke Abatement.
- New Streets and Buildings.
- Offensive Trades.



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# General Summary of Meteorological Observations taken at the Public Library, Belle Vue, from January 1st, 1931, to December 31st, 1931.

By E. GREEN, LIBRARIAN.

LATITUDE OF STATION = 53° 43' N.

LONGITUDE = 1° 52' W.

HEIGHT ABOVE SEA LEVEL = 625 FEET.

Month.	Pressure of Atmosphere in Month.		Temperature of Air in Month.							Mean Temperature.		Vapour			Mean degree of Saturation = 100.	Mean Weight of a cubic foot of Air.	Mean Reading of Thermometer.					Wind.								Mean amount of Cloud.	No. of Days of Fall.	Rain.		REMARKS	
	Mean at 32° F. and 500 feet.	Range.	Highest.	Lowest.	Range.	Mean.			(Adjusted.)	Dew Points.	Electric Force.	In a cubic foot of Air.		Maximum in Hrs. of Sun.			Minimum in Shade.	Estimated Strength.	Relative proportion of																
						Of all Highest.	Of all Lowest.	Daily Range.				Mans.	Short of Saturation.						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calms.								
Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
January	29.851	1.412	48.9	21.5	27.4	41.8	31.3	10.5	36.8	37.4	209	2.3	0.3	91	541.0	42.1	31.3	3.0	6	1	0	2	0	5	6	15	15	6.0	19	3.71	The observations have been reduced to mean values by Glaisher's Barometrical & Diurnal Range Tables, and the Hygrometrical results have been deduced from the seventh edition of Hygrometrical Tables, after corrections for Index errors of the Instruments employed.				
February	29.796	1.160	50.5	29.6	20.9	41.1	31.7	9.4	36.1	30.4	170	2.0	0.4	77	542.4	59.7	23.9	2.5	2	10	0	0	7	5	13	7	8.0	23	4.27						
March	30.030	1.052	61.0	21.4	39.6	43.7	29.1	14.6	36.2	33.5	193	2.2	0.3	91	542.2	75.8	21.4	3.0	2	15	5	10	0	4	1	5	6	5.0	9	0.37					
April	29.871	1.186	63.4	26.5	36.9	48.3	36.1	12.2	43.2	39.6	244	2.2	1.2	65	533.6	92.9	28.3	3.5	2	9	2	4	2	2	2	12	6	7.0	21	3.84					
May	29.841	0.818	69.9	32.2	37.7	56.0	40.1	15.9	48.0	41.7	263	3.0	0.8	79	529.0	96.8	32.5	3.0	2	8	0	4	1	13	6	5	5	6.0	18	2.87					
June	30.000	0.742	69.4	39.9	29.5	59.9	45.5	14.4	52.6	48.0	335	3.8	0.6	86	524.4	100.0	39.3	3.0	1	3	4	0	2	12	13	6	6	8.0	18	5.78					
July	29.748	0.644	70.1	45.1	25.0	61.4	49.8	11.6	55.9	52.1	391	4.4	0.6	87	519.9	106.6	42.7	3.0	0	1	0	0	1	17	7	19	3	7.0	20	3.28					
August	29.891	1.228	70.0	37.9	32.1	61.1	46.8	14.3	53.8	48.1	334	3.8	0.9	80	522.3	103.9	39.1	3.0	5	16	4	1	0	1	5	6	6	7.0	18	4.79					
September	30.056	1.374	68.5	35.9	32.6	56.5	44.7	11.8	50.7	44.9	299	3.4	0.8	80	525.6	87.5	36.1	2.5	12	11	2	0	0	1	6	10	5	8.0	11	4.12					
October	29.103	1.122	63.1	23.3	39.8	52.3	38.4	13.9	45.6	41.7	265	3.1	0.5	86	531.0	83.0	29.0	3.0	6	2	0	0	0	14	3	9	14	6.0	11	1.58					
November	29.696	1.686	59.1	33.4	25.7	48.8	39.9	8.9	44.8	39.6	244	2.8	0.8	79	531.2	64.3	28.8	3.0	0	1	0	6	11	12	2	2	12	8.0	19	5.82					
December	30.191	1.362	53.3	22.9	30.4	44.8	34.5	10.3	39.8	35.4	207	2.4	0.5	84	537.8	52.1	23.7	3.0	1	3	0	0	0	8	9	8	16	8.0	8	1.40					
Annual Means	29.922	1.149	62.2	31.4	31.4	52.9	38.9	12.3	45.2	40.8	0.266	2.9	0.6	80	532.5	72.0	31.3	3.0	3	6	1	2	1	8	5	9	8	7.0							

The Mean Monthly Readings of the Earth Thermometer, four feet below the surface, were as follows:—

January, 41°

February, 41°

March, 40°

April, 43°

May, 46°

June, 50°

July, 54°

August, 55°

September, 53°

October, 52°

November, 48°

December, 45°

Highest Readings = 55° on July 27th to Aug. 8th.

Lowest Readings = 39° on March 17th to 21st.

Rain fell on 195 days, and measured 41.83 inches.

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Journal of the United States Geological Survey

Volume 1, No. 1, 1879

Washington, D. C.

Published by the United States Geological Survey

Under the direction of the Secretary of the Interior

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