

[Report 1933] / Medical Officer of Health, Halifax County Borough.

Contributors

Halifax (England). County Borough Council. nb2008024085

Publication/Creation

1933

Persistent URL

<https://wellcomecollection.org/works/nphrja7t>

License and attribution

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

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

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

**wellcome
collection**

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



COUNTY BOROUGH OF HALIFAX
HEALTH DEPARTMENT.

Annual Report

ON THE HEALTH
OF THE BOROUGH

For the Year 1933.

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





COUNTY BOROUGH OF HALIFAX
HEALTH DEPARTMENT.

Annual Report

ON THE HEALTH
OF THE BOROUGH

For the Year 1933.

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

Health Committee

(as on Dec. 31st, 1933).

Mayor - COUNCILLOR FREDERICK AUSTIN LEACH, J.P.

COUNCILLOR L. CHAMBERS *Chairman*.

COUNCILLOR A. MUFF, *Vice-Chairman*.

Ald. T. HEY, J.P.	Coun. M. WILLIAMSON, J.P.
" A. W. LONGBOTTOM, J.P.	" G. H. BUTTERS.
" A. WALTERS, J.P.	" F. SHARP, J.P.
" J. H. WADDINGTON, J.P.	" F. DRAKE.
" G. BARKER, J.P.	" T. W. HANSON.
" J. RADCLIFFE.	" T. STOTT.
	Coun. A. WAIGHT.

Sub-Committees

Appointed by the Health Committee.

Health Services Sub-Committee.

THE CHAIRMAN.	ALDERMAN RADCLIFFE.
VICE-CHAIRMAN.	COUNCILLOR BUTTERS.
ALDERMAN LONGBOTTOM.	" DRAKE.
" BARKER.	" WAIGHT.

Hospitals Sub-Committee.

THE CHAIRMAN.	COUNCILLOR HANSON.
VICE-CHAIRMAN.	" SHARP.
ALDERMAN HEY.	" STOTT.
" WALTERS.	" WILLIAMSON.
	ALDERMAN WADDINGTON.

Accounts Sub-Committee.

THE CHAIRMAN.	COUNCILLOR WILLIAMSON.
VICE-CHAIRMAN.	" BUTTERS.
ALDERMAN WALTERS.	" STOTT.
	COUNCILLOR HANSON.

Joint Recovery Sub-Committee.

ALDERMAN HEY.	COUNCILLOR CHAMBERS.
COUNCILLOR DRAKE.	" WILLIAMSON.
" STOTT.	MRS. WHITAKER.
" BUTTERS.	MRS. SMITH.

Maternity and Child Welfare Committee.

The Health Committee with the following additional Members :—

MRS. J. STIRK.	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 (Chairman).	COUNCILLOR J. W. ALDAM.
COUNCILLOR G. H. BUTTERS. (Vice-Chairman).	" W. H. R. SKEMP.
ALDERMAN E. SMITH, J.P.	" M. LIGHTOWLER, J.P.
MR. ROBERT MCHUGH.	" M. WILLIAMSON, J.P.
MR. D. SUTCLIFFE.	MRS. A. SMITH, J.P.
	MRS. E. TOWNEND.

Welfare of the Blind Sub-Committee.

THE CHAIRMAN.	ALDERMAN HEY.
VICE-CHAIRMAN.	COUNCILLOR SHARP.
	COUNCILLOR WILLIAMSON.

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.

W. J. L. FRANCIS, M.B., Ch.B., Senior House Surgeon.

J. A. PRICE, M.B., Ch.B., Junior House Surgeon.

S. R. DONNAN, M.B., Ch.B.

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., D.M.R.E., Radiologist.

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

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

W. MACADAM, M.A., M.D., F.R.C.P., Consulting Physician.

E. R. FLINT, F.R.C.S. (Eng.), Consulting Surgeon.

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.,

H. W. MORCK, M.R.C.S., L.R.C.P.

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.

G. C. SHARP, M.B., Ch.B.

H. FELDMAN, L.M.S.S.A.

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

V. C. MEYER, M.B., Ch.B.

L.R.C.S.

Veterinary and Meat Inspector.

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

o J. 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.
 oF. BURTON, Housing Inspector.
 T. FEARNLEY, Shops' Inspector.

Clerical Staff.

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

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.

Matron Superintendent, Craigie Lea Certified Institution: M. BAILEY.

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. J. PESTER.

*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.

xHealth Visitors' Certificate.

oRoyal Sanitary Institute Certificate as Sanitary Inspector and Inspector of Meat and other Foods.

COUNTY BOROUGH OF HALIFAX.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH,
FOR THE YEAR 1933.

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

Mr. Chairman and Gentlemen,

I have the honour to submit to you my Sixth Annual Report, being the sixty-first of the series, for the year ending December 31st, 1933.

* * * *

The arrangement follows that of last year. The Report is divided into appropriate sections. It is of necessity somewhat standardised, but I have endeavoured to present it in such a way as to interest and enlighten "the man in the street." The Report is unencumbered by medical technicalities and on this ground alone it has valuable advice to offer to the enquiring layman. Ignorance of the laws of health is responsible for many premature deaths and a great deal of preventable illness.

* * * *

The birthrate was 11.2. For England and Wales the rate was 14.4, and in the 118 Great Towns it was 14.4.

* * * *

The total male births numbered 584, the female 513, being a proportion of 1,099 males to 1,000 females.

The deaths numbered 1,501 compared with 1,441 last year ; 1,465 in 1931 ; 1,395 in 1930 ; 1,522 in 1929 ; 1,286 in 1928 ; 1,585 in 1927. For 1933 the deathrate was 15.4 The deathrate for England and Wales was 12.3, and for the 118 Great Towns 12.2.

* * * *

The excess of deaths over births was 404, or 4.1 per 1,000 of the population.

* * * *

The marriage rate was 15.7 per 1,000 of the population.

* * * *

The deathrate may possibly rise again within the next ten years owing to the ageing of the population.

* * * *

As regards Maternal Mortality we must be careful not to slow down by one pulsation our resolve to combat it. In this connection I am preparing a scheme for the payment of mid-wife's fees in necessitous cases. It is significant that maternal mortality is lowest in countries where the status and qualifications of midwives are highest. I cannot over-emphasise the great value of ante-natal and post-natal care. The facilities exist, and I would appeal for their greater usage.

* * * *

Pneumonia was fairly prevalent in the first quarter of the year. It is often a tragedy. Pneumonia rapidly kills people who but a few days before were in good health. Any method of reducing its mortality would be of great value to the country. It is perhaps unfortunate that only certain types are notifiable. The outlook in many cases of pneumonia can now be gauged by an examination of the blood.

* * * *

As will be noticed in the Report, Diphtheria is a deadly disease. The value of diphtheria immunisation is no longer open to question, but in England it makes slow progress, and unless a large proportion of our child population takes advantage of it, immunisation will not materially affect herd immunity and so limit diphtheria. Once diphtheria is established the progress of a case depends on how long the disease has lasted before antitoxin is administered. Sore throats should never be disregarded by parents, and if there is any suspicion of diphtheria a doctor should be called in without delay. The time factor is everything in this disease.

The control of Diphtheria in Institutions gives rise to problems which are sometimes difficult to solve. Too much reliance should not be placed upon swabbing and the removal of infected cases. Probably the best mode of procedure is to give prophylactic doses of serum to the contacts and, in the case of residential homes, to carry out active immunisation.

* * * *

I have dealt with Cancer, Heart Disease, Arterio-Sclerosis and Maternal Mortality at considerable length in former reports, and I have again referred to these conditions in the appropriate sections of this Report.

* * * *

Action taken with a view to securing a clean milk supply is depicted in Sections 13 and 14 of the Report. This is a matter of great importance, and I think the time has arrived when a bacteriological standard for ordinary milk deserves serious consideration. Every producer could attain a reasonable standard.

* * * *

With regard to Mental Deficiency—which occupies a large proportion of our time—I suggest that no thinking person, looking to the future and considering some social aspects of mental deficiency, can escape the conclusion that it is one of the greatest problems our generation is faced with. One hears a good deal of talk to-day about Sterilisation as a “cure” for mental deficiency, but in this connection it must be remembered that only a small proportion of mental defectives are the offspring of mentally defective parents and sterilisation would only reduce the number of defectives by the small proportion arising therefrom. It is said that about 5% of defectives have defective parents but I think this estimation is too low. Sterilisation (and its advocates mean voluntary sterilisation) would not “cure” mental deficiency; it would minimise it. Until research throws further light on the fundamental causes of mental defect segregation and communal care must remain our principal methods of treatment.

* * * *

On the subject of the hospitalisation of infectious diseases, I have for some years been of the opinion that the future rôle of the Fever Hospital will be curative rather than preventive. With regard to the admission of diseases I am of the opinion that accommodation should be provided for all notifiable infectious diseases and not only for diphtheria, scarlet fever and typhoid. I suggest that many cases of scarlet fever can be nursed at home provided adequate isolation is available. As regards smallpox, I am somewhat doubtful of the need for

separate smallpox hospitals. Modern medical measures would probably justify the admission of smallpox cases to a special block at an up-to-date isolation hospital. This may all sound very heterodox, but it is obvious that in these matters new horizons are opening up as our power over disease increases.

* * * *

This is an age when people are everywhere expecting value for money. We hear a lot about the debit side of the Public Health Service. But what can be placed on the credit side? Firstly, increased longevity. Secondly, the vanquishment of plague typhus and cholera. Thirdly, a great decrease of the infantile mortality rate, and fourthly (influenza excepted) protection from violent and killing epidemics. Although diseases like Cancer, Mental Disease and premature hardening of the arteries remain unconquered, I claim that there are no grounds for singing a Te Deum over our activities.

* * * *

I wish to tender my thanks to the Staff of the Health Department for the assistance they have rendered me in the compilation of the statistics, and for the creditable fashion in which they have, each and all, performed their various duties throughout the year.

* * * *

My thanks are due to you, Mr. Chairman and Gentlemen, for the encouragement and support you have given me at all times.

I am,

Gentlemen,

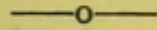
Your Obedient Servant,

(Signed) G. C. F. ROE,

Medical Officer of Health.

Health Department,
Powell Street, Halifax.
July, 1934.

SECTION 1.



Social Conditions.

Vital Statistics.

REPORT.

Social Conditions.

Halifax is essentially an industrial town, being almost unique in the wide variety of the industrial processes carried on. The chief industries being woollen, worsted textiles, carpet weaving, machine tool manufacture and toffee making.

Statistics.

Latitude	53	44°	North.		
Longitude	1	50°	West.		
Mean height above sea level, feet	...	...			780
Area in acres	...	...	...	...	14,081
Population (Census 1931)	...	...	...	...	98,115
(Males 44,600. Females 53,515).					
Population (Mid year, 1933)	...	...	...	...	97,150
Density of population per acre	...	...	...	...	7
Number of inhabited houses (1931 Census)	...	...	...	...	28,488
Average number of persons to each occupied house...	...	...	...	...	3.41
Rateable Value	...	...	...	...	£551,231
Sum represented by a penny rate	...	...	...	...	£2,115

Summary of Vital Statistics.

Birthrate per 1,000 population	...	...	...	...	11.2
Deathrate per 1,000 population	...	...	...	...	15.4
Infantile deathrate per 1,000 births	...	...	...	...	92
Natural decrease of population (Excess of Deaths over Births)	...	...	...	...	404
Respiratory deathrate	...	...	...	...	1.4
Phthisis deathrate	...	...	...	...	.57
Deathrate from other forms of Tuberculosis	...	...	...	...	.15
Deathrate from Cancer	...	...	...	...	1.6

Summary of Deaths.

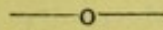
(Based on the Registrar General's "Short List" of causes of death).

Cause of Death	Number
Enteric Fever	—
Smallpox	—
Measles	5
Scarlet Fever	2
Whooping Cough	3
Diphtheria	13
Influenza	47
Encephalitis Lethargica	3
Cerebro Spinal Fever	3
Tuberculosis of respiratory system	56
Other Tuberculous Diseases	15
Cancer, Malignant Disease	158
Rheumatic Fever	—
Diabetes	27
Cerebral Hæmorrhage, etc.	87
Heart Disease	418
Other Circulatory Diseases	130
Bronchitis	44
Pneumonia (all forms)	87
Other Respiratory Diseases	9
Ulcer of Stomach or Duodenum	12
Diarrhœa, etc.	18
Appendicitis and Typhlitis	9
Cirrhosis of Liver	—
Acute and Chronic Nephritis	44
Puerperal Sepsis	6
Other Accidents and Diseases of Pregnancy and Parturition	6
Congenital Debility and Malformation, Premature Birth	48
Suicide	17
Other deaths from violence	49
Other defined Diseases	184
Causes ill-defined or unknown	1
Total	1,501

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 ...	14.4	12.3	0.01	0.00	0.05	0.02	0.05	0.06	0.57	7.1	64
118 County Boroughs and Great Towns including London ...	14.4	12.2	0.00	0.00	0.06	0.02	0.06	0.08	0.55	9.4	67
HALIFAX ...	14.5	15.9	0.04	0.00	0.18	0.01	0.10	0.09	0.40	4.2	93
...	14.5	14.3	0.01	0.00	0.02	0.01	0.10	0.09	0.14	7.8	79
...	13.8	15.4	0.00	0.00	.20	0.02	0.06	0.08	0.67	6.7	90
...	12.9	12.3	0.02	0.00	.00	0.02	0.00	0.16	0.10	3.9	67
...	13.4	14.7	0.01	0.01	0.03	0.03	0.14	0.09	0.59	6.0	76
...	13.3	13.4	0.01	0.00	0.06	0.01	0.02	0.07	0.12	4.6	66
...	12.6	14.9	0.02	0.00	0.09	0.03	0.04	0.17	0.38	4.8	96
...	12.1	14.8	0.00	0.00	0.05	0.01	0.08	0.10	0.18	4.2	80
...	11.2	15.4	0.00	0.00	0.05	0.02	0.03	0.13	0.48	12.7	92

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—By arrangement with the Education Committee operations for Tonsils and Adenoids are carried out at St. Luke's Hospital.

There is a ward at St. Luke's Hospital for the treatment of sick or crippled children sent there by the Maternity and Child Welfare Committee, also an arrangement by that Committee with the Royal Halifax Infirmary for the treatment of cases of Ophthalmia Neonatorum.

An Orthopaedic Service has been set up at St. Luke's Hospital for the treatment of cases sent by the Maternity and Child Welfare and Education Committees.

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 46.

Hospital Facilities.

Hospital and Situation	Purpose	Total Beds	Authority	Medical Staff	Consultants
Borough Fever Hospital, Stoney Royd	Fevers	46	Halifax Health Committee	1 Res. Medical Officer	As required
Halifax Sanatorium, Shelf	Tuberculosis	62	Do	1 Res. Medical Officer The Sen. Asst. M.O.H. and Tuberculosis Officer	As required
Royal Halifax Infirmary	General Surgical Medical and Maternity	230	Voluntary Committee		
St. Luke's Hospital	General Surgical Medical Children and Maternity	394	Halifax Health Committee	1 Medical Superintendent (Resident) 3 Asst. Medical Officers (Res.)	1 Physician 1 Orthopædic Surgeon 1 Radiologist 1 Bacteriologist 1 Surgeon
Smallpox Hospital, Harewood Well	Smallpox	26	Do	Medical Officer of Health or Asst. M.O.H. (Non Resident)	As required

General Nursing—Under the Local Government Act, 1929. St. Luke's Hospital, containing 394 beds was, on April 1st, 1931, transferred to the Local Authority and is administered by the Health Committee.

Mental Deficiency—The Craigie Lea Certified Institution, which is operated under licence of the Board of Control, has accommodation for 28 low grade cases of both sexes (excluding cot or chair cases).

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.

(Excluding school clinics which appear in the Annual Report of the School Medical Service).

Name of Clinic	Purpose	Where held	Times	
			Days	Hours
Tuberculosis	Tuberculosis	8, Clare Road	Monday Thursday	5 p.m. to 7 p.m. 5 p.m. to 7 p.m.
Maternity and Child Welfare	Ultra Violet Light and Massage	66, 68, Northgate	Monday	Morning
	Children under 5	Do	Do	Afternoon
	Babies	Queen's Road	Tuesday	Morning & Afternoon
	Ultra Violet Light and Massage	66, 68, Northgate	Wednesday	Do
	Ante-Natal Babies	Do	Thursday	Do
*Halifax District Nursing Association	Ultra Violet Light and Massage	Do	Friday	Afternoon
	Ante-Natal	Do	Saturday	All day
	Ante-Natal	Do	Monday	Morning
*Royal Halifax Infirmary	Ante-Natal	Kirby Leas, Savile Road	First Thursday in each month	Evening
St. Luke's Hospital	Ante-Natal	Royal Halifax Infirmary	Wednesday Thursday	Afternoon & Evening Afternoon
Royal Halifax Infirmary	Venereal Diseases	St. Luke's Hospital	Tuesday	Morning & Afternoon
			Tuesdays (Women and Children) Thursdays (Men) Auxiliary Centre for Men :	3-30 p.m. to 4-30 p.m. and 6 p.m. to 8 p.m. 6 p.m. to 8 p.m.
			Daily Sunday	10 a.m. to 12 noon and 6 p.m. to 8 p.m. 10 a.m. to 12 noon

*Subsidised by the Corporation.

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 47.

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 112), 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.

Bacteriological Examinations.

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.

St. Luke's Hospital.

The Bacteriological and Analytical work of the Hospital is now carried out at the laboratory in the Hospital which was thoroughly equipped during the year. Dr. Phelon, together with an assistant is in charge of this work.

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 1933.

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	...	...	...	611
Diphtheria Swabs	...	...	...	1728
Hair for Ringworm	...	...	...	1
Agglutination Test (Widal) T.A.B.	...	...	...	22
Others (Fluids, etc.)	...	...	...	27
				2389
			Total ...	...

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.

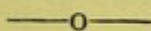
Diphtheria Antitoxin.

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.

SECTION 3.



Cancer.

Cancer.

A Radium Clinic, in charge of Dr. Chester Williams, has now been established at the Royal Halifax Infirmary, towards the cost of which the Health Committee of the Halifax Corporation pay the sum of £50 per annum. Patients from Halifax are now admitted through this clinic for radium treatment at the Royal Infirmary, Bradford.

Table showing Deaths at Age Periods during 1933:—

Age Period	Males	Females	Total
Under 25	1	1	2
25—35	2	—	2
35—45	2	9	11
45—65	37	44	81
65 and over... ..	30	32	62
	72	86	158

Deathrate per 1000 population during the past 10 years:—

Year	Deathrate	Year	Deathrate
1924	1·5	1929	1·7
1925	1·6	1930	1·7
1926	1·6	1931	1·9
1927	1·6	1932	1·7
1928	1·7	1933	1·6

Table showing the organs or parts affected :—

Site	Males	Females	Total
Stomach	6	16	22
Caecum	1	1	2
Intestines	9	10	19
Heart	1	—	1
Liver	3	1	4
Rectum	6	1	7
Oesophagus... ..	8	—	8
Bladder	4	5	9
Prostate	2	—	2
Scrotum	2	—	2
Tongue and Mouth...	4	1	5
Neck	2	2	4
Uterus	—	9	9
Breast	1	17	18
Ovary	—	7	7
Urethra	—	1	1
Pancreas	2	1	3
Lungs	5	—	5
Cheek	1	—	1
Bone	2	1	3
Spleen	—	1	1
Hand	1	—	1
Retro-peritoneal ...	—	1	1
Not stated	3	2	5
Other causes	9	9	18
	72	86	158

General Notes.

I would draw particular attention to the following points brought out by the above tables:—

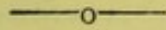
- (1) Cancer is almost exclusively a disease of adult life.
- (2) Cancer appears in many forms.
- (3) Cancer in men chiefly attacks the food tract and in women the breasts and special organs of generation.

Prevention.

Statistics prove that the average cancer patient obtains medical advice too late. One should learn how to recognise its principal danger signals, and immediately seek medical advice upon the first suspicion that the disease may be present. The following preventive points are of general interest :—

- (1) If you see or feel a small lump on 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 high temperatures. The hot stem of a pipe may cause irritation of tongue or/and lip.
- (4) Consult your doctor re Chronic Indigestion.
- (5) Remember the importance of the time factor (early treatment) in cancer.
- (6) Remember there may be no pain in the early stages. If the early stages of cancer were as painful as toothache many lives would be saved.
- (7) Cancer frequently develops in the region of a chronic ulcer (e.g., on lip or tongue), and it is important to see that such ulcers are properly cured.

So far as we know Cancer is neither infectious, contagious, a germ disease, nor hereditary; but it would be unwise to be dogmatic about any of these points. We must look to research for the conquest of Cancer.

SECTION 4.**Infectious Disease.**

(a) Fever Hospital.

(b) St. Luke's Hospital.

Borough Fever Hospital.

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.

The allocation of beds for the various diseases is now as follows :—Diphtheria 12 beds, Scarlet Fever 28, other diseases 6 beds.

As the accommodation is entirely inadequate during an epidemic of one disease, the beds for the other diseases are utilised for the epidemic disease.

A new Isolation Hospital is in the process of construction, and it is hoped that it will be ready for occupation at an early date.

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 the General Nursing Council, and during the year 6 Probationer Nurses received training.

Routine Bacteriological work is carried out at the Hospital.

During the year 397 patients were admitted to the Hospital, of whom 389 were Borough cases and 8 were from areas outside the Borough. Of the 397 patients admitted, 200 were admitted as Scarlet Fever, 166 as Diphtheria, and 31 as other diseases.

Scarlet Fever.

The number of cases admitted as Scarlet Fever was 200, of whom 197 were Inside the Borough cases and 3 outside the Borough cases. 189 were true cases. 11 of the admissions were not true cases—8 were German Measles, 1 Measles, and 2 were Diphtheria. The length of stay in Hospital was 34.1 days.

The following complications and sequelæ occurred :—

	Present on admission	Onset after admission	Total
Cervical Adenitis	46	17	63
Rhinorrhoea	22	12	34
Impetigo	16	3	19
Rheumatism	1	2	3
Otitis Media	5	14	19
Mastoiditis	—	—	—
Heart Disease	8	1	9
Bronchitis Broncho or Lobar Pneumonia	9	—	9
Albuminuria	4	15	19
Septic Sores, Boils, etc, ...	10	5	15
Abscesses of Glands	—	3	3
Conjunctivitis and Blepharitis	2	—	2
Meningitis'... ..	—	2	2

There were two deaths from Scarlet Fever, both from Meningitis.

The type of Scarlet Fever was, in the main, of a mild nature.

Diphtheria.

During the year 166 cases were admitted as Diphtheria and 1 case for observation (which turned out to be Tonsillitis). 164 were true cases, 1 was Tonsillitis and 1 German Measles. The average length of stay was 55.5 days.

The following complications were present :—

Complication	Before admission	After admission	Total
Cervical Adenitis	68	2	70
Palatal Paresis	3	36	39
Ocular Paresis... ..	—	14	14
Other Pareses (facial, etc.) ...	—	10	10
Albuminuria	4	48	52
Otorrhoea	15	11	26
Myocarditis	35	45	80
Rhinorrhoea	17	7	24
Quinsy	2	—	2
Abscesses	2	4	6
Impetigo	2	3	5

There were 15 deaths from Diphtheria during the year.

The "bull-neck" type of Diphtheria—characterised by intense swelling of the glands of the neck and oedema of the soft tissues around, was very prevalent during the year.

It is a very severe type and gives rise to a greater number of complications necessitating a longer stay in Hospital.

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 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.

Enteric Fever and Paratyphoid Fever.

During the year 3 cases were admitted as Enteric and 1 for observation. None was a true case. 1 case of Paratyphoid B. was admitted.

Erysipelas.

12 patients were admitted suffering from Erysipelas, one of whom died.

The following Table shows the number and disease for which cases were admitted from other Institutions :—

	Royal Halifax Infirmary	St. Luke's Hospital	Gibbet Street	Craigie Lea	Westfield House
Scarlatina ...	1	—	—	2	1
Diphtheria ...	15	6	1	—	—
Erysipelas ...	2	—	—	—	—
Chicken-Pox ...	2	—	—	—	2

The following Surgical Operations were performed during the year :—

Mastoidectomy ...	4
Incision and drainage of abscesses ...	10
Tracheotomy ...	1
Lumbar Puncture ...	2
Chest Aspiration... ..	1

Laboratory Report.—The following examinations were carried out :—

	Positive	Negative	Total
Swabs for K.L.B. ...	188	558	746
Sputa for T.B....	—	2	2
Cerebro-Spinal Fluid ...	—	—	2

The following Table shows the number of cases admitted each month for the various diseases :—

Month	Scarlatina	Diphtheria and Obs. Diphth.	Typhoid and Obs. Typhoid	Paratyphoid	Erysipelas	Chicken-Pox	Measles and Broncho-Pneumonia	Whoop'g Cough and Broncho-Pneumonia	Anterior Polio-Myelitis	Total
January ...	20	26	—	—	2	—	—	—	—	48
February ...	12	18	1	—	3	3	—	—	—	37
March ...	21	17	—	—	—	1	—	—	—	39
April ...	20	14	2	—	—	—	—	—	—	36
May ...	18	14	—	1	1	—	—	—	—	34
June ...	7	4	—	—	1	—	—	—	—	12
July ...	22	8	—	—	2	—	1	—	—	33
August ...	8	3	—	—	—	—	1	1	1	14
September ...	15	17	1	—	—	—	2	—	—	35
October ...	27	7	—	—	1	—	2	—	—	37
November ...	15	16	—	—	2	—	1	—	—	34
December ...	15	23	—	—	—	—	—	—	—	38
Total ...	200	167	4	1	12	4	7	1	1	397

The following Table shows the distribution of cases from 'Outside the Borough' :—

Area	Scarlet Fever	Diphtheria	Typhoid	Erysipelas	Total
Sowerby Bridge ...	1	—	—	1	2
Luddenden Foot ...	1	1	1	—	3
Shelf ...	1	—	—	—	1
Hebden Bridge ...	—	1	—	—	1
Huddersfield ...	—	1	—	—	1
Total ...	3	3	1	1	8

Cerebro-Spinal Fever.

There were no cases admitted during the year.

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.

The Borough remained free from this disease during the year.

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.

The Hospital is staffed (in addition to the resident caretaker and his wife) by nurses from Stoney Royd Fever Hospital, and the victualling and nursing is supervised by Miss Wilson, Matron, Stoney Royd. The Medical Officer of Health and the Assistant Medical Officer of Health, provide 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.

Disinfection.

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

During the year the following have been disinfected :—

Beds and Bedding ...	...	...	...	...	520
Bundles of Bedclothes ...	...	...	...	...	480
Bundles of sundry articles ...	...	...	...	...	31

164 cases of Scabies were treated and their clothes disinfected.

Prevalence of, and Control over, Infectious Diseases.

Enteric Fever.

No case of this disease was notified during the year. Three patients admitted to Hospital for observation were found not to be suffering from the disease.

Small-Pox.

No case of this disease occurred during the year.

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 256, and the total number of cases admitted to Hospital was 200. 197 cases were from within the Borough, and 3 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.

Two deaths occurred.

Diphtheria.

There were 173 notifications received and 166 cases were admitted to the Fever Hospital as suffering from Diphtheria.

There were 13 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 toxaemia 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.

Puerperal Fever—the most potent cause of death in childbirth—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 midwifery practice.

Four cases of Puerperal Fever were notified during the year (1 non-resident). There were five deaths during the year; one case of Puerperal Pyrexia being diagnosed at a later date as Puerperal Fever.

25 cases of Puerperal Pyrexia were notified during the year.

Cerebro-Spinal Fever.

Three cases of this disease were notified 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 30 notifications of Influenzal Pneumonia and 75 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 not heavy ; 54 cases were visited, 18 being removed to Hospital. Five 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 at any time.

Similar measures to those outlined above are adopted for controlling the spread of this disease, and 47 cases were visited by the Health Visitors, 12 being admitted to Hospital. The disease caused 3 deaths.

Notification.

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

Disease					Number
Smallpox	...	...	...	...	—
Typhoid Fever	...	...	...	...	—
Scarlet Fever	...	...	...	...	256
Diphtheria	...	...	...	...	173
Puerperal Fever	...	...	...	...	5
Puerperal Pyrexia	...	...	...	...	25
Erysipelas	...	...	...	...	63
Ophthalmia Neonatorum	...	...	...	...	3
Encephalitis Lethargica	...	...	...	...	1
Acute Polio Encephalitis	...	...	...	...	—
Acute Polio Myelitis	...	...	...	...	4
Cerebro-spinal Fever	...	...	...	...	3
Pneumonia :—					
Influenzal	...	...	...	...	30
Primary	...	...	...	...	75
Tuberculosis :—					
Respiratory	...	...	...	...	99
Other Forms	...	...	...	...	26
Total					763

St. Luke's Hospital.

This Institution which was appropriated under the Public Health Act is administered by the Health Committee. It is situate at Salterhebble on a site of 10.305 acres, at an altitude of 216 feet above sea level, and serves an area originally bounded by the Halifax Poor Law Union, with a population of approximately 190,000.

I am indebted to Mr. J. Dawson, F.R.C.S. (Eng.), Medical Superintendent, for the following notes :—

X-Ray Department.

The X-Ray Department has proved a valuable asset to the work of the Hospital, and a considerable income has been derived from Out-patient examinations and Ultra Violet Ray treatments. A new Ultra Violet Ray Lamp for general treatments has been added.

Massage Department.

The Massage Department is essential for the treatment of many cases admitted to the Hospital in addition to a rapidly expanding Out-patient Department. The number of treatments given per month now exceeds 1,000, and it has been necessary to employ an additional Masseuse, whose salary will soon be covered by Out-patient treatment fees. In my opinion the time has come when the Sewing Room should be added to the department to relieve the congestion which exists. There is a very suitable room over the Receiving Ward which could be used for a Sewing Room and Matron's Drapery Store.

Dispensary.

A whole-time Dispenser has been employed, who holds the major qualification of the British Pharmaceutical Society, in place of the part-time Dispenser previously employed. The work has materially increased, and the Committee will probably have to consider additional staff. In my opinion this would best be met by the employment of a student-apprentice.

Heating and Hot Water Service.

The new centralised Heating and Hot Water Service is now in use and appears satisfactory, apart from minor defects. There has not yet been time to test its efficiency under extreme weather conditions.

Private Wards.

A number of the day-rooms, for which there is now little need as such, have been converted into Side Wards, and most of the Side Wards are now furnished in a suitable and attractive manner, with wardrobes, dressing tables, bed tables, Lloyd loom chairs and rugs. There have been times during the year when the whole of the Side Wards were occupied.

Decorations.

During the year, 11 of the Hospital Wards have been painted and decorated in a restful shade of green, and in the Children's Ward there is a pleasing frieze of pictures, which adds brightness and interest.

Accommodation for Nurses.

The accommodation for Nurses is taxed to the uttermost, and at times it has not been possible to employ the requisite number of Nurses to adequately carry out the work. The Committee has this matter under consideration.

General Observations.

The increase of work in all departments of the Hospital has been most marked in the Surgical Department, with a consequent increase of the number of operations performed.

Medical Staff. The resident medical staff comprises the following :—

- (a) Medical Superintendent, who being an F.R.C.S. of England, does the major portion of the operative surgery, in addition to his administrative duties.
- (b) Senior A.M.O., also with considerable operative experience who can deputise when necessary.
- (c) Junior A.M.O.

The visiting medical staff is as follows :—

- (a) Consulting Physician.
- (b) Consulting Surgeon.
- (c) Consulting Orthopædic Surgeon.
- (d) Consulting Ophthalmologist.
- (e) Radiologist.
- (f) Pathologist.

- (a) Attends weekly.
 (e) and (f) twice weekly.
 (b), (c) and (d) when required.

General Observations. The work of the Hospital is increasing in importance and quality, and the income from private patients, including maternity cases, is steadily increasing.

Regarded from the aspect of preventive medicine appropriation has :—

- (1) Ensured the co-ordination and unification of the Council's Hospital Services.
- (2) Expanded and brought up-to-date the existing Services, and
- (3) Extended the availability of the Hospital in that Hospital treatment can be given as a Health measure dissociated from relief.

The following Table classifies the accommodation and shows the number of beds occupied at the end of the year.

Classification of Ward	No. of Wards	BEDS							
		Men		Women		Children under 16		Total	
		Pro-vided	Occu-pied	Pro-vided	Occu-pied	Pro-vided	Occu-pied	Pro-vided	Occu-pied
Medical ...	4	64	54	66	53	—	—	130	107
Surgical ...	2	24	19	24	20	—	—	48	39
Chronic Sick	5	46	39	80	60	—	—	126	99
Children ...	2	—	—	—	—	64	60	64	60
Isolation ...	—	Side Wards used when necessary						—	—
Maternity ...	3	—	—	37	21	—	—	37	21
Total ...	16	134	112	207	154	64	60	405	326

In-Patients.

1. Total number of admissions (including infants born in Hospital) 2,377
2. No. of Women confined in Hospital 333
3. No. of Live Births 314

4. No. of Stillbirths	...	...	...	...	25
5. No. of Deaths among the newly born (i.e., under 4 weeks of age)	...	...	...	...	11
6. Total No. of Deaths among children under 1 year of age (including above)	...	...	...	...	34
7. No. of Maternal Deaths among women confined in Hospital	...	...	...	...	6
8. Total No. of deaths	...	...	...	...	382
9. Total No. of discharges (including infants born in Hospital)	...	...	...	...	1,940
10. Duration of stay of patients included in 8 and 9 above :					
No. of cases whose total stay was for the following periods :—					
(a) Four weeks or less	...	...	...	...	1,747
(b) Exceeding 4 weeks but under 13 weeks	...	...	...	...	427
(c) Thirteen weeks or more	...	...	...	...	148
11. No. of beds occupied :					
(a) Average during the year...	...	...	...	...	318
(b) Highest 359 on 14/2/33.					
(c) Lowest 261 on 19/9/33.					
12. No. of surgical operations under general anæsthetic (excluding dental operations)	...	...	...	...	557
13. No. of Abdominal sections	...	...	...	...	112

Out-Patients.

There is no out-patient or casualty departments but many cases (chiefly surgical) attend for re-examination after discharge. Cases are also seen in consultation with reference to admission, and some out-patient work is done in the massage and X-ray departments.

Ante-natal Clinic : No. of women seen 304.

Attendances 1,482.

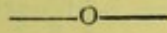
Classification of In-Patients who were discharged from or who died in the Institution during the year.

Disease Groups	Children under 16 years of age		Men and Women	
	Dis-charged	Died	Dis-charged	Died
Acute Infectious Disease	39	11	10	5
Influenza	8	—	25	4
Tuberculosis—				
Pulmonary	—	—	15	7
Non-Pulmonary	4	1	13	5
Malignant Disease	—	—	12	32
Rheumatism—				
(1) Acute Rheumatism (rheumatic fever) together with sub-acute rheumatism and chorea	2	—	11	—
(2) Non-articular manifestations of so-called rheumatism (muscular rheumatism, fibrositis, lumbago and sciatica)... ..	—	—	14	—
(3) Chronic Arthritis	—	—	31	—
Venereal Disease... ..	—	—	5	2
Puerperal Pyrexia	—	—	6	—
Puerperal Fever—				
Confined in Hospital	—	—	1	—
Admitted from outside	—	—	6	1
Other diseases and accidents connected with pregnancy and childbirth	—	—	39	—
Mental Diseases—				
(a) Senile Dementia	—	—	3	—
(b) Other	—	—	40	4
Senile Decay	—	—	11	9
Accidental Injury and Violence	7	1	65	12
<i>In respect of Cases not included above.</i>				
Disease of Nervous System and Sense Organs	23	1	78	6
Disease of Respiratory System... ..	57	10	168	66
" Circulatory System... ..	6	—	138	124
" Digestive System	26	7	152	21
" Genito-Urinary System	10	—	98	20
" Skin	15	—	49	—
Other Diseases	43	17	80	16
Mothers and Infants discharged from Maternity Wards and not included in above figures	303	—	327	—

Date	Description	Amount	Balance
1890	Jan 1		
	Jan 15	100	100
	Feb 1	50	50
	Mar 1	20	30
	Apr 1	10	20
	May 1	15	5
	Jun 1	25	20
	Jul 1	30	10
	Aug 1	40	30
	Sep 1	50	20
	Oct 1	60	10
	Nov 1	70	0
	Dec 1	80	10
	1891		
	Jan 1		10
	Jan 15	90	0
	Feb 1	40	40
	Mar 1	30	10
	Apr 1	20	10
	May 1	15	25
	Jun 1	25	10
	Jul 1	30	20
	Aug 1	40	10
	Sep 1	50	0
	Oct 1	60	10
	Nov 1	70	20
	Dec 1	80	30
	1892		
	Jan 1		30
	Jan 15	70	0
	Feb 1	30	30
	Mar 1	20	10
	Apr 1	10	0
	May 1	15	15
	Jun 1	25	0
	Jul 1	30	30
	Aug 1	40	0
	Sep 1	50	50
	Oct 1	60	0
	Nov 1	70	70
	Dec 1	80	0

The above is a true and correct copy of the original account as shown to me by the person who has the custody of the same.

SECTION 5.



Tuberculosis.

TUBERCULOSIS - DEATH RATE	
Year	Rate
1917	10.2
1918	10.2
1919	10.2
1920	10.2
1921	10.2
1922	10.2
1923	10.2
1924	10.2
1925	10.2
1926	10.2
1927	10.2
1928	10.2
1929	10.2
1930	10.2
1931	10.2
1932	10.2
1933	10.2
1934	10.2
1935	10.2
1936	10.2
1937	10.2
1938	10.2
1939	10.2
1940	10.2
1941	10.2
1942	10.2
1943	10.2
1944	10.2
1945	10.2
1946	10.2
1947	10.2
1948	10.2
1949	10.2
1950	10.2

Tuberculosis.

As regards the prevention of Tuberculosis, patients should observe the following precautions :—

1. Don't spit in the street, trams, busses, or homes. Spitting scatters the germs of the disease. Spit into a special bottle.
2. Don't cough into other people's faces.
3. Don't swallow your phlegm.
4. Don't sleep in the same bed with anyone else. If possible, sleep in a separate room.
5. Don't kiss anyone on the lips.
6. Keep your windows open.
7. Attend your doctor regularly.

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

TUBERCULOSIS DEATH-RATE.		
PERIOD	Respiratory only	All Forms
10 years average 1923-32 ...	'64	'83
1933	'57	'72

The following Table shows the number of formal notifications received during the year classified for age, sex, and localisation of the disease.

FORMAL NOTIFICATIONS.

AGE PERIODS	Number of Primary Notifications of new cases of Tuberculosis											Total Notifications	
	0-	1-	5-	10-	15-	20-	25-	35-	45-	55-	65-		TOTAL (all ages)
Pulmonary Males ...	—	—	11	2	5	5	9	3	14	5	1	55	55
Females ...	—	—	5	3	5	10	10	7	2	1	1	44	44
Non-Pulmonary Males	—	3	7	4	1	—	—	—	—	—	—	15	15
Females	—	—	4	2	—	1	3	1	—	—	—	11	12

In the following Tables, new cases coming to the knowledge of the Medical Officer of Health otherwise than by formal notification, together with the sources of such information we set out.

AGE PERIODS	0-	1-	5-	10-	15-	20-	25-	35-	45-	55-	65-	TOTAL
	Pulmonary Males ...	—	—	2	—	—	—	3	2	2	3	—	12
Females ...	1	—	—	—	1	2	—	3	3	1	—	11
Non-Pulmonary Males	—	—	—	—	—	1	1	—	—	3	—	7
Females	—	—	1	1	—	—	—	2	—	1	—	5

	No. of Cases.	
	Pulmonary	Non-Pulmonary
Death Returns { from local Registrars ...	11	10
transferable deaths from Registrar General ...	12	2
Posthumous notifications ...	—	—
"Transfers" from other areas (other than transferable deaths) ...	—	—
Other Sources if any (specify) ...	—	—

SOURCE OF INFORMATION.

The following Table shows the number of notified cases of Tuberculosis remaining in the Borough on December 31st, 1933 :—

Total Cases	Pulmonary			Non-Pulmonary		
	Males	Females	Total	Males	Females	Total
812	332	284	616	109	87	196

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 ...	95	23	118
(b) Diagnosis not completed ...	—	—	8
(c) Non-tuberculous ...	—	—	67
B—Contacts :			
(a) Definitely tuberculous ...	6	8	14
(b) Diagnosis not completed ...	—	—	4
(c) Non-tuberculous ...	—	—	47
C—Cases written off Clinic Register as :			
(a) Recovered ...	18	14	32
(b) Non-tubercular (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous ...	—	—	126
D—Number of cases on Dispensary Register on December 31st :—			
(a) Definitely tuberculous ...	586	145	731
(b) Diagnosis not completed...	—	—	12

Number of cases on Dispensary Register on Jan. 1st...	711
Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years	3
Number of cases transferred to other areas, cases not desiring further assistance under the scheme and cases "lost sight of"	7
Cases written off during the year as dead (all causes)	64
Number of attendances at the Dispensary (including contacts)	1,679
Number of insured persons under Domiciliary Treatment on the 31st December	21
Number of consultations with medical practitioners :—	
(a) Personal	27
(b) Other	209
Number of visits by Tuberculosis Officers to homes (including personal consultations)	103
Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	2,417
Number of	
(a) Specimens of sputum, etc., examined	601
(b) X Ray examinations made in connection with Dispensary work	98
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	269

Halifax Sanatorium.

Admissions and Discharges during the year :—

	Halifax cases	Other Cases	Total
Remaining in on December 31st, 1932 ...	38	16	54
Admitted during the year... ..	118	52	170
Discharged during the year	109	50	} 174
Died	9	6	
Remaining in on December 31st, 1933 ...	38	12	50

Grouping of cases admitted during the year :—

A. Non-Pulmonary—7.

B. Pulmonary :—	Male.	Female.	Total.
Observation	1	1	2
Group 1. Early cases	21	24	45
Group 2. Intermediate cases	43	25	68
Group 3. Advanced cases	29	26	55

The average length of stay was 145 days, as compared with 139, 129, 125 and 133 days in the preceding four years respectively.

The condition of the patients discharged was as follows :—

Improved.	No Change.	Worse.	Dead.	Total.
113	22	24	15	174

The deaths were pulmonary cases.

Tuberculosis After-Care Committee.

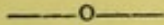
This Committee, which works in close co-operation with the Medical Officer in charge of the Halifax Sanatorium undertakes, where necessary, the after-care of patients discharged from the Sanatorium.

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.

Veneral Diseases.

SECTION 6.



Veneral 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.

Co-ordination between this and the Maternity and Child Welfare Service has been secured by the attendance of one of the Health Visitors at the Tuesday afternoon and evening sessions.

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

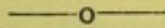
Number of persons dealt with for the first time during the year, and found to be suffering from :—

	Local Clinic	Other Clinics
Syphilis	38	1
Soft Chancre	—	—
Gonorrhoea	74	2
Conditions other than Venereal ...	142	1
Total ...	254	4
Total attendances at the out-patient clinic...	8719	76
Aggregate number of in-patient days...	82	23
Number of doses of Salvarsan Substitutes given	618	16
Specimens sent to an approved Laboratory for :		
Detection of Spirochaetes	—	—
Detection of Gonococci	—	—
Detection of other organisms	—	—
Wassermann Reaction	287	—
Total ...	287	—

1,111 examinations for detection of Gonococci and 11 for Spirochaetes 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.

During the past year the film "Damaged Lives," produced and distributed under the auspices of the British Social Hygiene Council, was exhibited in a local cinema to crowded audiences during one week. Members of the Health Department were in attendance at each session of the film to answer any enquiries regarding the facilities offered for treatment.

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 (including Midwives working in Institutions) ...	32
Number holding the Central Midwives Board Certificate	31
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 an examination)	1
Number of cases in which Medical aid was summoned by Midwives	127
Medical aid notices sent on behalf of the child... ..	22
Of these, 4 were for "inflammation of the eyes."	
4 for dangerous feebleness.	
4 for unsatisfactory condition of baby.	
5 for prematurity.	
1 for Spina Bifida and Hydrocephalus.	
1 for Spina Bifida and deformity of legs and feet.	
1 for unsatisfactory condition of baby's skin.	
1 for convulsions (16th day).	
1 for "dead baby" (born before arrival of midwife).	

Notifications received in accordance with C.M.B. Rules from Midwives.

Intention to resort to artificial feeding	6
Liability to be a source of infection	3
Notification of death of infant who survived 1½ hours...	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 398. Of these 37 were in the Bradshaw area. A doctor was also engaged in 74 out of the 398 cases (in 70 cases of the ordinary district Midwifery, and in 4 cases in the Bradshaw area).

The Bradshaw midwife lives in Nursery Lane, Ovenden, but works under the Halifax District Nursing Association.

Luddenden.

Nurse Kniveton attended 3 midwifery cases in the Halifax Borough during 1933. This, however, only represents a small portion of her work, as her duties under the West Riding Authority are usually heavier than for Halifax, and she is also engaged in nursing medical and surgical cases.

Nurse Kniveton works under the supervision of the Luddenden Committee, but is inspected by the Halifax Inspector of Midwives with regard to midwifery in Halifax Borough, for which the grant is made.

The number of midwifery cases attended for Halifax Borough in 1933, is smaller than usual.

Notification of Births Act 1907.

Number of births notified...	} including births transferred to other districts.	{	1,393
Number of births registered			1,449
Ratio of notified to registered	...	...	96·13
Number of stillbirths	...	...	87
Number of notified births attended by doctors with or without midwives	...	...	316
Number of notified births attended by midwives only	...	...	374
Number of births notified from St. Luke's Hospital...	...	...	337
Number of births notified from Royal Halifax Infirmary	...	...	366
Number of births transferred to other districts	...	...	306

Health Visiting Summary.

Primary visits	...	...	1,112
Visits 1-5 years	...	...	6,989
Repeat visits	...	...	3,543
Ante-natal visits	...	...	184

Infant Welfare Centres.

Northgate—

Number of Sessions...	...	...	228
New cases	...	...	708
Re-visits	...	...	8,211
Average attendance per Session	...	...	39·1

Queen's Road—

Number of Sessions...	...	...	90
New cases	...	...	267
Re-visits	...	...	3,249
Average attendance per Session	...	...	39

The number of new cases at the Northgate and Queen's Road Clinics shows a considerable increase over last year, the figures being 975 against 752.

Of the 975 cases, 59 were seeking Dental treatment, and came for admission cards to the School Dental Department.

The knowledge of the facilities for dental treatment at the School Dental Clinic is more widely spread, and the children under school age are referred back to M. & C.W.'s Centre for admission cards, so that M. & C.W. can be charged for treatment.

The number of visits paid by Health Visitors in 1933 has been slightly diminished owing to several causes. Amongst these may be mentioned :—

- (1) The demands of the Health Exhibition held March 1st to 10th, which required the attendance of two Health Visitors each afternoon and evening.
- (2) The heavy snowstorm in February which hampered the Health Visitors' work considerably, while the roads were blocked.
- (3) The special V.D. work at the Infirmary Clinic for women and children, with the follow-up visits in the homes, which Nurse Moore has been called upon to undertake.

We find that children who are attending the Sunlight Clinic at Northgate twice a week, rarely attend the ordinary Clinics.

Ante and Post-Natal Clinics—

Number of Sessions ...	...	...	45
Number of new cases ...	...	...	151
Total attendances ...	...	...	326
Average attendance per Session ...	...	...	7'24

The Medical Officer also holds an Evening Ante-Natal Clinic at the Halifax District Nursing Association premises, about once a month, and this is proving very useful. The numbers are as follows :—

Number of Ante-Natal Clinics held in			
1933 ...	...	...	11
New cases ...	...	...	58
Attendances ...	...	...	70

The Toddlers' Clinic at Northgate.

Number of Sessions ...	...	...	39
Total attendances ...	...	...	275

This Clinic is held on Friday afternoons and is in charge of Nurse Moore.

The time is spent in drilling, marching, and remedial exercises, e.g., exercises to promote nose breathing, chest expansion, development of plantar arches, etc. The results are gratifying and the children evidently enjoy the class.

Artificial Sunlight.

Number of Sessions...	...	...	132
Number of cases treated	...	...	242
Attendances	...	...	4,233
Average attendance per Session	...	...	32
Attendances of non-tuberculous children under School age	...	...	2,611
Attendances of non-tuberculous children of School age	...	...	1,346
Attendances of tuberculous children...	...	...	276

Infant Mortality.

Of the 102 deaths under one year, 51 were boys and 51 girls.

Of these, 65 deaths occurred during the first month, namely 36 boys and 29 girls.

On examination of the causes of death, it is again noticeable that a large majority of infants were lacking in vitality from birth, and actually had not much chance of surviving.

We wish again to stress the need of ante-natal care, and the necessity, especially in this industrial area, of the careful dieting of the mother before the baby is born.

Until proper attention is given to this, it will be impossible to improve much upon the present figures of infant mortality.

The Committee has not yet authorised the Medical Officer in charge of the Clinic to give such things as Codliver Oil and Malt Extract and Lime Tablets, to necessitous expectant mothers, in addition to Dried Milk, for the last three months of pregnancy.

Maternal Mortality.

There have been eleven maternal deaths during the year.

The following Table gives an analysis of these deaths :—

Maternal Mortality 1933.

Ages	No. of Deaths	Primips	Nuitips	Midwives' Cases	Hospital Cases	Doctors' Cases	Others	Deaths in Institutions	Number who had Ante-Natal care at a Clinic	Not had Ante-Natal care at a Clinic	Connected with Abortion
20-30	5	5	3		6	1	2	7	3	2	
30-40	5		2		1		1	2	1	4	
40-50	1		1							1	
	11	11		11					11		

Ages	Forceps Applied	Ceasarian Section	Induction	Perineum Injured	P.V. Exam.	Admitted to Hospital before Labour	To Hospital during Labour	To Hospital after Labour	Not sent to Hospital	Handy-woman Attended
20-30	2	1	1	3	8	3	2		1	
30-40	1		1			3		1		1
40-50									1	
						11				

1 died during pregnancy.

1 died four weeks after confinement.

GENERAL NOTE.

Every case is investigated and Form 97/M.C.W. completed. I would point out that many deaths are now classified as maternal deaths which in pre-war years would not in the certified cause of death have been bound up with childbirth. As regards environment and childbirth I would submit that childbirth today takes place under better conditions as regards environment than it did 20 years ago.

	Sepsis	Others	Total
No. of Deaths	5	6	11
Rate per 1,000 live births...	4.5	5.4	10
„ „ total „	4.2	5.3	9.4

The following Table serves to show the fluctuations in this rate during recent years :—

	1925	1926	1927	1928	1929	1930	1931	1932	1933
Sepsis ...	1	1	1	5	3	4	—	7	5
Other causes	7	7	9	8	6	8	4	4	6
Per 1,000 births	5·6	5·7	7·4	10·2	6·8	9·2	3·2	8·7	9·4

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, (premises now in Savile 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, in necessitous cases.
- (f) A service of "Home Helps."
- (g) The supply of dried milk, free, to expectant mothers, during the last three months of pregnancy (to necessitous cases).

The financial help in prospect to independent midwives who suffer bad debts at present, should conduce to greater alacrity in booking very poor patients.

Up-to-date experts stress the point that the underfed mother "is capable of supplying for her child from her own body a certain amount of the necessary food elements ; but this means that she is sacrificing very useful stores of material that she cannot afford to lose at this time."

The subsidising of midwives in necessitous cases is still under consideration. When this is achieved, the poor mother will be able to spend more on food than at present.

Legal Proceedings.

In connection with the Council's scheme for the supply of free milk in necessitous cases, it was noted during the year that in many instances, statements of income were being grossly understated. Legal proceedings were instituted in two cases, and convictions ensued. It very quickly became evident that much greater care was being exercised in the filling up of application forms.

Midwives' Inspection.

The midwives have been regularly inspected during the year, and I am glad to report that they have discharged their duties satisfactorily.

The need for special care in dealing with the eyes of the newly born has again been impressed on the midwives, and there have not been any cases during the year where damage to the sight has occurred.

Three cases of Ophthalmia Neonatorum were reported. All made a good recovery.

Home Helps.

Thirteen cases have benefited by the service of these women during the year.

These Home Helps are increasingly appreciated by the mothers, and they have been in greater demand than in 1932.

Mrs. Mount has attended 9 and Mrs. Lumb 4 cases.

Inspection of Maternity Homes.

There is only one Maternity Home in Halifax, subject to inspection (those at the Royal Halifax Infirmary and St. Luke's Hospital not being subject to registration by the Corporation), and this has been inspected in accordance with the Act, and has been found satisfactory.

Mrs. Schofield, the proprietress, is removing from the Skircoat district to Waterloo Crescent, Savile Park Road, early in January 1934.

Staff.

There has not been any serious illness amongst members of the staff during the year. The personnel remains unchanged.

Nurse Moore has attended the V.D. Clinic for Women and Children held at the Royal Halifax Infirmary, and has also paid 21 visits to these cases.

All the staff, from the Superintendent Health Visitor, Sister Oram, downwards, have given splendid service during the year.

Voluntary Helpers.

We must again thank our devoted Voluntary Workers. It is encouraging to find that when for some reason, a Voluntary Helper has to withdraw from the Clinic, another willing and enthusiastic worker is quickly found to fill the vacancy.

Newcomers bring a fresh outlook on the work, and prevent monotony, and our stalwarts never seem to lose interest in the human contacts, and see the infants grow to school age.

Occasionally three generations are represented, the infant, the mother, and the grandmother, all having attended the Clinic in the memory of some of our faithful voluntary workers.

I also wish to thank the Inspector of the National Society for the Prevention of Cruelty to Children for his courteous and helpful co-operation during the year.

... ..
... ..
... ..

... ..
... ..
... ..

... ..
... ..
... ..

... ..
... ..
... ..

... ..
... ..
... ..

... ..
... ..
... ..

... ..
... ..
... ..

... ..
... ..
... ..

... ..
... ..
... ..

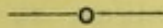
... ..
... ..
... ..

Mr. Goyder's Report

Orthopædic Clinic

The Orthopædic Clinic, founded in 1884, was the first of its kind in the United Kingdom. It was established by the late Mr. Goyder, who was a pioneer in the treatment of orthopædic cases. The clinic was situated in the old St. George's Hospital, and was one of the most successful of its kind in the world.

SECTION 8.



Orthopædic Service.

The Orthopædic Service, which was established in 1884, was one of the most successful of its kind in the world. It was founded by the late Mr. Goyder, who was a pioneer in the treatment of orthopædic cases. The service was situated in the old St. George's Hospital, and was one of the most successful of its kind in the world.

The Orthopædic Service, which was established in 1884, was one of the most successful of its kind in the world. It was founded by the late Mr. Goyder, who was a pioneer in the treatment of orthopædic cases. The service was situated in the old St. George's Hospital, and was one of the most successful of its kind in the world.

The Orthopædic Service, which was established in 1884, was one of the most successful of its kind in the world. It was founded by the late Mr. Goyder, who was a pioneer in the treatment of orthopædic cases. The service was situated in the old St. George's Hospital, and was one of the most successful of its kind in the world.

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 are now sent to St. Luke's Hospital, Halifax, so as to be treated by the Orthopædic Surgeon of the Clinic, Mr. F. W. Goyder, F.R.C.S., who has been added to the visiting staff of the Hospital.

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

The Orthopædic Surgeon has attended on 6 occasions. He has examined 37 new cases and made 91 re-examinations.

27 children were on treatment at the end of 1932.

41 were admitted for treatment during 1933.

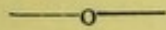
13 were discharged and 11 ceased attendance.

44 remaining under treatment in 1934.

128 examinations were made by the Orthopædic Surgeon ; there were 1,591 attendances for remedial exercises, 35 more than last year and 615 for sunlight treatment, the popularity of which slowly diminishes though it has a definite and important place in children's therapy. The work of the Clinic shows a slight increase during the year but it has not been possible to expand it further owing to the necessary diminution in the Remedial Staff.

Operative work in connection with the Clinic is now carried out by the Orthopædic Surgeon at St. Luke's Hospital, Halifax, instead of Bradford—a great convenience for the parents. 7 children had manipulative or operative procedure.

SECTION 9.



Mental Deficiency.

Mental Deficiency Acts, 1913-1927.

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.

Intellectual processes depend upon the elaboration of the supra-granular layer of the cortex, its inadequacy is the proximate cause of mental defect.

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	—	*23	All Grades	Idiots
		Under 16 years	—	4	Low Grade	
Gibbet Street, Institution, Halifax	Males and Females	Over 16 years	16	20	Active Medium to Low Grade	
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

*Six of these beds are occupied by cases from other Authorities.

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.
- Girls' Village Home, Barkingside, Ilford.
- Dovenby Hall, Cockermouth.
- Stoke Park Colony, near Bristol.

The following Table shows the position on December 31st, 1933 :—

Cases " Subject to be dealt with " :—

Under " Order "

	M.	F.	Total
In Institutions (excluding cases on licence)			
Under 16	15	6	21
Over 16	39	34	73
On Licence from Institutions			
Under 16	—	1	1
Over 16	1	1	2
Under Statutory Supervision	31	35	66
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	—	1	1

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

Method of Disposal :—

Sent to Institutions by " Order "	1	—	1
Placed under Guardianship by " Order "	—	—	—
Placed under Statutory Supervision	—	—	—
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 1933 :
- | | |
|----------------------------|-----|
| (1) After marriage | Nil |
| (2) While unmarried | Nil |
- (b) Number who have married during 1933... .. 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.

CRAIGIE LEA CERTIFIED INSTITUTION.

This Institution is operated under Licence from the Board of Control, the licence being for a period of 3 years from Dec. 16th, 1931, and is in respect of 28 low grade patients under 16 years of age (16 males, 12 females), excluding cot or chair cases.

SECTION 10.

—o—

Vaccination.

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

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. H. W. Morck, Orrell House, Sowerby Bridge.
No. 2. Central, Pellon, Southowram, East, South, Kingston, West and Skircoat Wards.	Dr. P. Milnes, Arden Lodge, 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 :—

Number of births returned in the "Birth List Sheets" 1,437
 No. of these births duly entered by 31st January, 1934,
 in Cols. I., II., IV. and V. of the Vaccination Register, viz. :—

Successfully vaccinated	...	...	...	186
Insusceptible of vaccination	...	...	...	4

Had Smallpox	...	...	...	...	Nil
No. of Statutory declarations of conscientious objection	...	...	...	...	1,068
Died unvaccinated	...	...	...	...	111
No. of these births which on 31st January, 1933, remained unentered in the Vaccination Register on account of :—					
Postponement by Medical Certificate	...	...	...	...	6
Removed to other Districts (V.O.'s duly apprised)	...	...	...	...	8
Removed to places unknown, cannot be reached or unfound	...	...	...	...	18
No. of these births remaining on 31st January, 1934, neither duly entered on Vaccination Register nor temporarily accounted for in Report Book					
	...	...	...	...	36
Total number of Certificates of successful primary vaccination of children under 14 received during the Calendar Year, 1933					
	...	...	...	...	207
No. of Statutory Declarations of Conscientious Objection, irrespective of the dates of birth of the children to which they relate, during the Calendar Year, 1933...					
	...	...	...	...	1,060
No. of children successfully vaccinated after declaration of Conscientious Objection had been made					
	...	...	...	...	1
No. of Certificates of successful primary vaccination of children under 14 sent to other Vaccination Officers					
	...	...	...	...	5

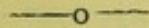
The following Table shows the number of persons successfully vaccinated and re-vaccinated at the cost of the rates, by the Public Vaccinators during the year ended 30th September, 1933 :—

No. of successful primary vaccinations of persons :—					
Under 1 year of age	...	...	...	...	118
One year and upwards	...	...	...	...	29
Total					147

No. of successful re-vaccinations of persons who have been successfully vaccinated at some previous time	7
--	---

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 no instance was it found necessary to resort to summary proceedings during the year.

SECTION 11.**Transferred Poor Law
Services :**

- (a) Children Act 1908. Part I.
Children and Young Persons
Act 1932. Part V.
- (b) Boarding Out
(Children under 5 years of age).

Children Act, 1908. Part I.

Children and Young Persons Act 1932. Part V.

The duties and powers under Part I. of the Children Act, 1908, as amended by Part V. of the Children and Young Persons Act, 1932, are administered by this department.

The principal alterations are that notice must now be given at least seven days before receiving the child instead of 48 hours following the reception of such child.

The age of the child in respect of whom notice must be given is raised from 7 to 9 years.

Provision is made for the re-notification of children who are between the ages of 7 and 9 years.

In the case of a child being received in an emergency, which makes it impossible for the statutory notice to be given, the Authority must be notified at the earliest possible moment, not later than 12 hours after the emergency.

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	17
(b) at the end of the year	13

(ii) Number of children on the Register :—

(a) at the beginning of the year... ..	19
(b) at the end of the year	14
(c) who died during the year	—
(d) on whom inquests were held during the year	—

II. Visiting :—

(i) Number of Visitors at the end of the year who were :				
(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) of the Act of 1908				—

III. Number of cases (if any) in which proceedings were taken during the year None

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 under Sec. 67 of the Act of 1932 :—

(i) From a Court of Summary Jurisdiction	...	...	...	—
(ii) From a single Justice	...	...	...	—
				—
Total	...	...	...	—

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 5 years of age were imposed upon the department.

The following statement shows the position at the end of the year :—

	Males	Females
Number on Register, Jan. 1st, 1933	...	1
Added during the year	...	2
Transferred to the care of the Education Committee on attaining the age of 5 years	...	1
Remaining on Register, Dec. 31st, 1933...	...	2

In addition to the above, one case which had been placed by your Committee at the Northumberland Village Homes, Whitley Bay, attained the age of 5 years on December 8th, and was transferred to the care of the Education Committee.

Two children were sent to the Moorfield Convent, Preston.

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.

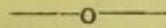
The number of visits paid by the official visitor was 41.

The health of the children at the Northumberland Village Homes, Whitley Bay, and at the Moorfield Convent, Preston, remained good throughout the year.

Health Education & Propaganda

Health Education & Propaganda is a branch of public health which aims at the improvement of the health of the community by the dissemination of knowledge and the adoption of measures for the prevention of disease and the promotion of health.

SECTION 12.



Public Health Propaganda.

1. The importance of public health propaganda	1
2. The scope of public health propaganda	2
3. The methods of public health propaganda	3
4. The personnel of public health propaganda	4
5. The organization of public health propaganda	5
6. The results of public health propaganda	6
7. The future of public health propaganda	7
8. The public health propaganda of the United States	8
9. The public health propaganda of the United Kingdom	9
10. The public health propaganda of the United States of America	10
11. The public health propaganda of the United States of America	11
12. The public health propaganda of the United States of America	12
13. The public health propaganda of the United States of America	13
14. The public health propaganda of the United States of America	14
15. The public health propaganda of the United States of America	15
16. The public health propaganda of the United States of America	16
17. The public health propaganda of the United States of America	17
18. The public health propaganda of the United States of America	18
19. The public health propaganda of the United States of America	19
20. The public health propaganda of the United States of America	20

Public health propaganda is a branch of public health which aims at the improvement of the health of the community by the dissemination of knowledge and the adoption of measures for the prevention of disease and the promotion of health.

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 1933, and the following Table briefly sets out some of the more important lectures delivered to the Public.

Date 1933	TO	TITLE	BY	No. of Audience (Approx.)
Jan. 8	King Cross Meth. Young Men's Class	A Glimpse into the Administration of a modern Public Health Department	Mr. Beaumont, C.S.I.	35
Feb. 21	Halifax Labour Party (Women's Section)	Housing the People	Mr. Beaumont, C.S.I.	40
„ 21	Workers' Educational Assoc. Luddenden Foot	Microbes and Men (illus.)	Dr. Roe	50
„ 28	Ind. Labour Party	Cancer	Dr. Roe	60
Mar. 12	Adult Class, Northgate End Chapel	Public Health Measures to safeguard food supplies	Mr. Beaumont, C.S.I.	20
„ 15	Park Church Literary Soc.	Fighting Infection (with Film)	Dr. Roe	60
„ 31	Hx. District Nursing Assoc.	Dreams	Dr. Roe	40
„ 31	Parents, Sunnyside School	Hygiene	Dr. Heynemann	65
July 21	Modern Girls' School	Hygiene	Dr. Heynemann	196
Oct. 8	Adult Class, Northgate End Chapel	Heredity (illustrated)	Dr. Roe	40
„ 19	Greetland Methodist Wesley Guild	Dreams	Dr. Roe	45
„ 25	Park Church Literary Soc.	Sterilisation of Mental Defectives, Pros. and Cons. (illustrated)	Dr. Roe	70
„ 26	Northowram Village Guild	Random Excursions into Public Health	Dr. Roe	60
„ 29	Adult Class, Northgate End Chapel	Atmospheric Pollution	Mr. Beaumont, C.S.I.	15
„ 31	Wesley Guild, Illingworth	The War Against Infection (with Film)	Dr. Roe	50
Nov. 14	St. John's Wesley Guild	Longevity	Dr. Roe	40
„ 16	Halifax Dyers' Association	Dermatitis	Dr. Roe	60
„ 16	National Union of Life Assurance Workers	Slum Clearance	Mr. Beaumont, C.S.I.	25
„ 21	Institute, Luddenden Foot	Cancer	Dr. Roe	60
„ 23	Belle Vue Park Parliament	Heart Disease (illustrated)	Dr. Roe	55
„ 26	Y.M.C.A. (Fireside Circle)	Why Bad Housing Conditions should be Abolished	Mr. Beaumont, C.S.I.	15
„ 29	West View Park Parliament	Heart Disease	Dr. Roe	50
„ 29	Parents, Caddy Field Schl.	Hygiene	Dr. Heynemann	20
Dec. 5	St. John Ambulance Brigade Nursing Division	Sanitation (illustrated)	Mr. Beaumont, C.S.I.	55
„ 5	Micklefield Wesley Guild	Cancer (illustrated)	Dr. Roe	45
„ 6	Cong. Church, Lightcliffe	Cancer (illustrated)	Dr. Roe	55
„ 12	St. Thomas's Church	Fighting Infectious Diseases (with Film)	Dr. Roe	100
„ 12	Hx. Federated Trades and Industrial Council	Slum Clearance	Mr. Beaumont, C.S.I.	35

GENERAL NOTE.—M O.H. possesses a lantern and cinema which he uses in connection with this work. A large number of health leaflets, brochures, posters and pictures are used. 1,000 copies of Better Health are issued monthly. There are two Wayside Health Pulpits in the town; one in George Square and one in Northgate.

Health Week and Exhibition.

Health Week was held from February 26th to March 10th, and proved most successful. The main features of the week may be summarised as follows :—

1. Film address to school children.
2. Distribution of thousands of health booklets and leaflets.
3. Daily lectures on health subjects to factories, clubs, and welfare associations.
4. A Health Exhibition. (Attendance about 2,000).

Most of the lectures were given by Mr. Bowen Partington. Sir William Arbuthnot Lane addressed a mass meeting at the Exhibition on Wednesday, 1st March.

The object of a Health Week is to focus public attention on health matters. A distinguished statesman of Victorian days enunciated the truism that, "The Health of a Nation is its wealth." This to-day is not disputed. That is why health education is of vital importance. The feeling that education in health matters does not matter is an illusory cushion against the realities of disease.

Health Education in Florida

The health education program in Florida is a comprehensive one, covering a wide range of subjects from basic health care to specialized areas such as mental health and substance abuse. The program is designed to provide the public with the knowledge and skills necessary to lead a healthy and productive life.

The program is implemented through a variety of channels, including schools, community centers, and health care facilities. The goal is to reach as many people as possible and to ensure that the information is presented in a clear and understandable manner.

One of the key components of the program is the development of health education materials. These materials are designed to be culturally sensitive and to address the specific needs of different populations.

The program also includes a variety of activities, such as health fairs, seminars, and group discussions. These activities provide an opportunity for individuals to interact with health professionals and to ask questions.

Overall, the health education program in Florida is a vital part of the state's public health efforts. It plays a crucial role in promoting health and preventing disease.

The program is supported by a variety of resources, including state and federal funding. It is also supported by the expertise of health educators and other professionals.

The program is constantly evaluated to ensure that it is effective and that it is meeting the needs of the community. This evaluation process involves collecting data and analyzing it to identify areas for improvement.

The program is also subject to ongoing research and development. This research helps to identify new and innovative ways to deliver health education and to address emerging health issues.

The program is a testament to the commitment of Florida's health care professionals and the state government to the well-being of its citizens. It is a program that is constantly evolving and that is dedicated to making a positive impact on the lives of all Floridians.

The program is a key component of the state's public health infrastructure. It is a program that is essential for the health and well-being of the state's population.

The program is a source of pride for the state of Florida. It is a program that is dedicated to the health and well-being of all its citizens.

SECTION 13.

—o—

Milk Production.**Food Inspection.****Farms.****Offensive Trades.**

Inspection and Supervision of Food.

Milk Supply.

I am indebted to Mr. J. Pollard, the Veterinary Inspector, for the following report :—

In reviewing conditions during the past year one cannot disassociate economic matters with public health as they reflect on the spirit which governs the way duties are carried out. Until October, the prices for milk locally in wholesale quantity were satisfactory, so that improvements could be urged and demanded. Since October, there has been a flat rate for the wholesale price of milk throughout England, except one small area. If conditions were uniform throughout the country one could understand uniformity in price, but such is not the case whether in regard to rent, wages of employees, age of cows, feeding or conditions of production.

In some parts of the country the Milk and Dairies Regulations do not appear to have been heard of, and cows are retained until a ripe old age with consequent increase of liability to tuberculosis, **and the final advantage of less financial loss in frequent replacements. I submit that it would be a catastrophe if our efforts for improvements in the past have to be governed by a levelling down process to the majority.** There must be some incentive for improvement and that must be some satisfactory financial reward. Unless there is some scheme for rationalisation of distributors, there is little hope for improvement in distribution. Until at such times other vessels, such as cartons, become of general use in distribution, more attention must be paid to the condition of the churns—large and small. The past summer has been exceptionally hot with consequent worry and trouble in the milk industry. Steam sterilisation plays a great part in the reduction of bacteria, but with the scarcity of water, coupled with the high temperature the town's supply reached at times, it was impossible to do the complementary and essential part of cooling the milk.

While clean milk may keep sweet 3 or 4 days at a temperature of 60°F., it has been found that it will only keep sweet for $\frac{3}{4}$ of a day at a temperature of 85°F.

According to the investigations of the Economic Research Institute of the University of Oxford, 20,000 gallons of milk are produced weekly within the Borough, and an average of $\frac{1}{4}$ -pint of milk is consumed by each person (including children) per day.

Clean Milk Competition.

There were two entrants in a class in which there had not been any local competitors previously, namely, Class II. for owners of over 16 cows. One was successful in being awarded the second place as well as my Cup, the other competitor being awarded a diploma.

Particular attention has been given to try to reduce the number of cases of diseased udders due to tuberculosis, and some of the owners who were affected have acted on the advice with benefit to themselves. A few, in spite of prosecutions, keep speculative cows, and these persons are a source of danger to the public health. One complaint was received from the Medical Officer of Health regarding a high bacterial count of one milk supply. I knew conditions were bad, accentuated by carelessness. I decided to report the case to the Committee and the dairyman was invited to appear before them. A second sample was taken in the meantime and reported to be satisfactory. A third sample was taken by myself and this was reported to be unsatisfactory. Although some improvement had been made in cleanliness, it was more than countered by the discovery of one cow with tuberculosis of the udder, and a second tuberculous cow out of a small herd.

Halifax has several dealers in cattle which affects the cattle population, on account of frequent changes.

Milk (Special Designations) Order 1923.

There is one producer retailer of Certified Milk.

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

Cowkeeper only	...	...	...	...	...	1
Cowkeepers and Dairymen (Wholesale only)	...	...	...	...	...	47
Cowkeepers and Dairymen (Wholesale and Retail)	...	...	...	...	...	26
Cowkeepers and Retail Purveyors	...	...	...	...	...	95
Retail Purveyors only...	...	...	...	...	...	23

Tuberculosis Order—Diseases of Animals Acts.

Number of reports	...	...	...	...	...	15
Number of reports confirmed...	...	...	...	...	...	13
Tuberculosis of the udder	...	...	...	...	...	9
Bacteriological examinations of milk...	...	...	...	...	...	14
Number reported cytological suggestive of T.B.	...	...	...	...	...	3

The following prosecutions were taken during the year :—

- (a) A conviction was obtained for failing to report a tuberculous cow. Penalty £5.
- (b) The same owner for failing to keep a Register of Records. £1.

- (c) Failing to report a tuberculous cow. The Bench stated it was not brought out that it had not been reported. Dismissed.
- (d) The same owner (c) for failing to keep a Register of Records and obstruction. £14.

Milk and Dairies (Amendment) Act 1922.

Under Section 2 of the above named Order, 8 retailers were invited to appear before the Health Committee to show cause why their names should not be removed from the Register.

- (a) 4 on account of lack of storage—1 removed.
- (b) 5 on account of high bacterial count.

Milk and Dairies Order 1926.

Statutory notices were served on occupiers of cowsheds for the following improvements :—

- (a) Article 12(1) more window space—one.
- (b) Article 25 impervious floor—two.

The following alterations were carried out :—

Alterations to cowsheds for light and ventilation	...	...	...	...	3
Alterations to cowshed floors	...	...	...	...	3
Steam Sterilisers installed	...	...	...	...	9
Visits to farms	...	...	...	...	886
Cows examined	...	...	...	...	3,295

Bacteriological Examination of Samples.

Total number of samples taken for bacteriological examinations as an index of general cleanliness	...	...	...	...	86
Number of Ordinary Milk samples	...	...	...	...	48
Number of Graded Milk samples	...	...	...	...	38

Four samples of Graded Milk were reported as not complying with the prescribed conditions.

Meat.

Private Slaughterhouses (Registered)	...	...	...	...	5
Do (Licensed)	...	...	...	...	0
					—
					5

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

Cattle.	Calves.	Sheep and Lambs.	Pigs.
200	30	700	330

Meat Inspection.

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

Description of Premises	Number of Visits
Public Slaughterhouse	799
Private Slaughterhouses	200
Borough Market	500
Wholesale Market	250
Lairages	166
Potted Meat Houses	380
Tripe Boiling Houses	140
Butchers' Shops	2000
Auction Mart	53
Other Visits	223
Total	4,711

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

	Cattle.	Calves.	Sheep and Lambs.	Pigs.	Total.
Number of Animals slaughtered at the public slaughterhouse	7801	1653	26487	6757	42698
Do. condemned...	73	2	10	31	116

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. 55988
Total Amount of Offals Destroyed	10654
Total Amount of Meat Destroyed on account of Tuberculosis	51124
Total Amount of Offals Destroyed on account of Tuberculosis	7748
Total Amount of Meat Destroyed from other causes	4864
Total Amount of Offals Destroyed from other causes	2906
Total Meat and Offals Destroyed ...	66642

Kinds of Food Destroyed	Quantity in lbs.
73 Carcases of Beef... ..	40720
Beef not in Carcase	10837
2 Carcases of Veal	80
10 Carcases of Mutton and Lamb	344
Mutton not in Carcase	23
31 Carcases of Pork	3364
Pork not in Carcase	612
Rabbits	69
Fish	1338
Fruit and Vegetables	2547
Canned Provisions	280
Hams	33
Total Weight	60255

It was found necessary to obtain 6 Justices' Orders.

Prosecutions.

Public Health (Meat) Regulations 1924. Failing to give notice of disease. Dismissed.

P.H.A. 1875. Exposure for sale of unwholesome meat. £2.

P.H.A. (Amendment) 1890. Sale of unsound meat. £5.

P.H. (Meat) Regulations 1924. Failing to give notice of slaughter of animal. £1.

P.H.A. 1875. Exposure for sale of unsound meat. £5.

Sale of Food Order 1921 (Part 3).

This Section requires that all imported meat exposed for sale by retail must be labelled with the word "Imported."

Prosecution. A conviction was obtained for non-compliance with this Order, and a penalty of £1 and 10/- costs was imposed.

Merchandise Marks Act 1926.

This Order requires that certain specified foodstuffs shall bear an indication of origin.

A prosecution was taken and a conviction obtained for failing to label some foreign tomatoes. Penalty 10/- each defendant.

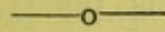
I think the Merchandise Marks Act might be applied with advantage to dressing mutton as lamb.

Offensive Trades.

These places have been visited regularly during the year. There has been no complaint to record.

Other Duties have included the Diseases of Animals Acts, and prosecutions in these cases have been taken by the Police.

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	118
Other Inspections and visits under Housing Acts	1829
Complaints	437
Infectious Disease	440
Dirty and/or Verminous	33
Overcrowding	20
Cellar Dwellings and Underground Rooms	13
Tents, Vans, Sheds, etc.	4
Water Supply	186
Common Lodging Houses	34
Houses let in Lodgings	182
Other Inspections	834

Drainage :—

Drains inspected, etc.	1535
Drains tested	435
Sewers, etc., inspected	45

Factory and Workshop Act :—

Factories	56
Workshops	38
Workplaces	1
Bakehouses	197
Outworker's Premises	5

Food Inspection :—

Dairies and Milkshops	71
Ice Cream Premises	186
Fried Fish Shops	196
Other Food Premises	33

Smoke Abatement :—

Smoke Observations	239
Visits to Works re Smoke	96

Sampling :—

Food and Drugs (Adulteration) Act, 1928	...	...	351
Fertilisers and Feeding Stuffs Act, 1926	...	...	21
Bacteriological Examination	...	...	316
Water Analysis and Bacteriological Examination	...	...	23

General :—

Complaints (Rats)	...	...	...	18
Nuisance from Stables	...	...	...	27
Accumulations of Manure, Refuse, etc.	...	...	...	50
Swine, Fowls and other Animals	...	...	...	16
Schools	...	...	...	12
Places of Public Amusement	...	...	...	86
Public Sanitary Conveniences	...	...	...	34
Miscellaneous Visits	...	...	...	1167
Total number of Inspections and Visits	...	...	...	9384
Total number of re-Inspections	...	...	...	1585

Sanitary Improvements Effected.**Dwellinghouses :—**

			By Notice	Without Notice
Dampness remedied	...	...	268	45
Lighting improved	...	...	57	7
Ventilation improved	...	...	185	14
Food storage provided or improved	...	...	36	—
Cooking accommodation provided or improved	...	...	106	13
Washing accommodation provided or improved	...	...	39	2
Sinks provided or renewed	...	...	123	42
Floors relaid or repaired	...	...	190	14
Eaves, gutters or fallpipes provided or improved	...	...	153	54
Additional water closets provided	...	...	3	—
Sanitary accommodation improved	...	...	28	6
Yards and/or Passages paved or repaired	...	...	40	3
Water supply provided or improved...	...	...	66	45
Cleansed and/or Vermin disinfested...	...	...	7	17
Overcrowding abated	...	...	6	3
Cellar dwellings closed	...	...	—	3
Underground sleeping places closed...	...	...	1	—
Tents, Vans, Sheds, closed...	...	...	—	1
Other sanitary defects remedied	...	...	631	96

Drainage :—

New drains constructed	...	...	28	35
Drains re-constructed	...	...	58	79
Drains repaired or cleansed...	...	...	59	252
Drains under house abolished	...	...	13	10

Factories and Workshops (including Bakehouses) :—

			By Notice	Without Notice
Cleansed and limewashed	...	...	1	8
Ventilation improved	...	...	—	1
Floors drained	...	...	1	—
Additional sanitary accommodation provided	...	...	—	2
Sanitary accommodation improved	...	...	3	5
Other sanitary defects remedied	...	...	4	13

Smoke Abatement :—

Improvements effected	—	5
-----------------------	-----	-----	---	---

Houses Let in Lodgings :—

Cleansed and limewashed	...	...	26	10
Sanitary condition improved	...	...	35	10

Dairies and Milkshops :—

New Premises provided	—	1
-----------------------	-----	-----	---	---

Ice Cream Premises :—

Cleansed and limewashed	...	...	—	2
Provision made for sterilising utensils	...	...	—	1
New Premises provided	...	...	—	19

Fried Fish Shops :—

Cleansed and limewashed	...	...	2	4
Sanitary condition improved	...	...	1	4
New Premises provided	...	...	—	1

Other Food Premises :—

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

General :—

Sanitary condition of stables improved	...	...	6	4
Manure and/or Refuse accumulations removed	...	...	9	34
Swine, Fowls, and other animals—Nuisance abated	...	...	3	2
Places of Public Amusement—Sanitary condition improved	...	...	3	4
Public Sanitary Conveniences improved	...	...	1	1
Miscellaneous (not included above)	...	...	3	15

Statutory Action.

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

Housing Act, 1930.

Sanitary Defects (Section 17)	...	...	21 houses
Sanitary Defects (Section 19)	...	...	41 houses

Public Health Act, 1875.

Lack of water supply to water closets (Sec. 36)	12 houses
Cellar Dwellings (Secs. 72 and 73)	... 4 houses
Defective drainage (Secs. 91 and 94)	... 4 houses
Overflowing conduit (Secs. 91 and 94)	... 2 works
Lack of eaves, gutters, etc. (Secs. 91 & 94)	... 1 house
Premises in such a state, etc. (Secs. 91 & 94)	3 houses
Premises in such a state, etc. (Secs. 91 & 94)	1 bakehouse
Nuisance from fumes (Sec. 114)	... Potato Crisp Works

Public Health Act, 1875. Section 41.

Public Health Acts Amendment Act, 1890. Section 19.

Halifax Corporation Act, 1905. Section 43.

Defective drainage	22 houses
--------------------	-----	-----	-----------

Halifax Corporation Act, 1900. Section 122.

Lack of proper and sufficient water supply	...	9 houses
--	-----	----------

Food and Drugs (Adulteration) Act, 1928. Section 2.

Sale of Milk Regulations, 1901.

Milk deficient in fatty solids	...	5 producer-retailers
Milk deficient in fatty solids	...	1 retailer
Milk deficient in fatty solids	...	1 producer

Food and Drugs (Adulteration) Act, 1928. Section 2.

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

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

Excess of preservative in Strawberry Jam	...	1 retailer
No notice displayed re preservatives in Sausages	...	2 retailers

Food and Drugs (Adulteration) Act, 1928. Section 16.

Milk and Dairies (Consolidation) Act, 1915. Section 6.

Milk and Dairies Order, 1926.

(a) Refusal to sell to Sampling Officer	...	} 1 retailer
(b) Selling milk when unregistered	...	
(c) Selling milk from can without name and address inscribed thereon	...	

Milk and Dairies (Amendment) Act, 1922. Section 2.

High bacterial count and B. Coli content	...	1 retailer
--	-----	------------

Fertilisers and Feeding Stuffs Act, 1926.

Feeding Meat and Bone Meal	} Exceeded limits of variation	1 manufacturer and purveyor
White Fish Meal		
Special Compound Fertiliser		

Prosecutions during 1933.

Date	Act	Offence	Penalty
14/3/33	Food and Drugs (Adulteration) Act, 1928 Public Health (Regulations as to Food) Act, 1907	Excess preservative in Strawberry Jam	Case dismissed, Bench accepting defendant's warranty
23/3/33	Halifax Corporation Act, 1900	Failure to provide a proper and sufficient supply of water	Case adjourned 3 months to give defendant time to provide necessary supply. Re-hearing on 13/7/33 when summons was withdrawn defendant having complied with requirements.
23/5/33	Housing Act, 1930	Refusal to vacate house subject to Demolition Order	Order was made for possession within 28 days
1/6/33	Food and Drugs (Adulteration) Act, 1928 Milk and Dairies (Consolidation) Act, 1915 Milk and Dairies Order, 1926	(a) Refusal to sell to sampling officer (b) Selling milk when unregistered (c) Selling milk from can without name and address inscribed thereon	Conviction upon all three charges and defendant fined a total of £4/10/-
18/7/33	Housing Act, 1930	Refusal to vacate house subject to Demolition Order	Order was made for possession within 21 days
20/7/33	Public Health Act, 1875	Nuisance from overflowing conduit	After adjournment until 24/7/33 for production of deeds of property, case was dismissed
19/12/33	Food and Drugs (Adulteration) Act, 1928	Sale of milk deficient in non - fatty solids	Convicted and fined £5

Factories and Workshops.

Factory and Workshop Act, 1901.

Public Health Acts Amendment Act, 1890. Section 22.

Halifax Corporation Act, 1900. Section 130.

The number of workshops on the register at the end of 1933 was 487.

Inspections made during the year were as follows :—
Factories 56; Workshops 235 (including 197 visits to Bake-houses); Workplaces 1; Outworkers' premises 5; Total 297.

H.M. Factory Inspector sent 7 notices under Section 5 of the Factory and Workshop Act, 1901, all of which referred to factories (including one factory-bakehouse), whilst the following complaints were dealt with during the year :—
Factories 9 (including one factory-bakehouse).

Table 1.

Inspection of Factories, Workshops and Workplaces.

Premises (1)	Number of		
	Inspections (2)	Written Notices. (3)	Occupiers Prosecuted (4)
Factories (including Factory Laundries)	56	3	—
Workshops (including Workshop Laundries)	235	2	—
Workplaces (Other than Outworkers Premises)	1	—	—
Total ...	292	5	—

Table 2.

Defects found in Factories, Workshops and Workplaces.

Particulars (1)	Number of Defects			Number of offences in respect to which Prosecutions were instituted (5)
	Found (2)	Remedied (3)	Referred to H.M. Inspector (4)	
Nuisances under the Public Health Acts—*				
Want of cleanliness ...	9	9	...	...
Want of ventilation ...	1	1	...	...
Overcrowding ...	...	...	...	...
Want of drainage of floors ...	1	1	...	...
Other nuisances ...	17	17	...	...
Sanitary Accommodation:				
Insufficient ...	2	2	...	...
Unsuitable or defective	8	8	...	...
Not separate for sexes...	1	1	...	...
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.	...	...	...	...
Total ...	39	39	...	...

*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 1933 was 111, which includes 33 factory bakehouses.

197 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 during the year of other than domestic chimneys was 239, details of which are given in the following table. 96 visits were made to works re smoke emission, although the black smoke byelaw was transgressed upon only one occasion. Notice was served upon the offending firm.

Despite attempts made by the West Riding of Yorkshire Regional Smoke Abatement Committee to get constituent local authorities to declare themselves in favour of an uniform black smoke byelaw which would make it an offence to discharge black smoke for two minutes during any consecutive period of thirty minutes, we are still in the position of having one local authority with a two-minute byelaw whilst an adjoining local authority has a three-minute byelaw. It is very noticeable that respecting those local authorities which expressed their opinion upon the matter, the greatest opposition was provided by those which have comparatively few chimneys in their area and do not take the most active part in the matter of smoke abatement.

It will be seen that in Halifax, 239 half-hour smoke observations have been taken during the year under review, and that the emission of black smoke averaged 0.43 minutes per observation. Surely this may be taken as an indication that our black smoke byelaw which allows up to three minutes emission per thirty minutes could be made more stringent without inflicting any hardship upon industry.

It is a pleasure to record that during the winter session 1933-1934, the local Technical College has been able to hold a class for stokers and boiler attendants in connection with the examination scheme inaugurated by the West Riding of Yorkshire Regional Smoke Abatement Committee five years ago, although it is regretted that more students did not enrol.

Five candidates sat for examination, of whom two were successful, and will be awarded the certificate granted by the Regional Committee.

The domestic smoke problem remains unsolved despite the extended use of electricity, gas, and solid smokeless fuels. Progress towards the desired goal of smokelessness will continue slow until there is an adequate supply of smokeless fuels available at a price which compares favourably with that of bituminous coal.

Despite increasing sales, full advantage is not yet taken of the excellent solid smokeless fuel produced at our local gasworks, namely, gas coke. This is rather surprising in view of its cheapness and high radiant efficiency as compared with coal. It can be burned successfully in almost any type of grate other than the open kitchener type, providing a normally good draught is obtainable.

Smoke Observations, 1933.

CHIMNEY (1)	No. of Observa- tions (30 minutes each) (2)	Average minutes of black smoke per Observation (3)
Adelaide Street Mill	2	1'0
Albion Mills	1	Nil.
Atlas Dyeworks	5	1'2
Bankfield Mills	1	Nil
Battinson Road Mills	1	"
Beechwood Mills	2	"
Billinghay Mills	1	"
Binner's Boiler Works	1	"
Blackwood Mills	1	"
Bottoms Mill	1	"
Bowling Dyke Dyeworks	3	0'5
Bowling Dyke Mills	2	Nil.
Brierley Hill Works	3	1'0
Brunswick Mills	3	0'83
Calder & Hebble Navigation Co.	2	Nil
Canal Works	1	"
Cinder Hill Fireclay Works	2	1'5
Clarence Mill	4	0'87
Clark Bridge Mills	1	Nil.
Clay Pits Mill	1	"
Craven Edge Mill	1	0'5
Crossland's Works	1	Nil.
Crossley & Porter School	4	"
Dapper Dyeworks	1	1'0
Dean Clough Mills (Brick)	1	Nil.
Dean Clough Mills (Stone)	1	"
Dunkirk Mills	3	"
Eagle Mills	1	1'0
Economic Laundry	1	Nil
Falcon Laundry	4	0'25
Fenton Estate Dyeworks	1	Nil
Forest Mills	1	"
Globe Mills	4	0'25
Goodall's, Salterhebble	3	Nil.
Grove Mills	2	"
Halifax Corporation—		
Battinson Road School	1	Nil
Electricity Works (Stone)	13	0'7
Electricity Works (Brick)	13	0'7
Electricity Works (Steel chimney No. 1)	2	Nil.
Electricity Works (Steel chimney No. 2)	2	"
Gibbet Street Institution	1	"
St. Luke's Hospital	3	"
Woodside Baths	1	"

CHIMNEY (1)	No. of Observa- tions (30 minutes each) (2)	Average minutes of black smoke per Observation (3)
Halifax Ice and Cold Storage Co. ...	1	Nil
Halifax Steam Laundry	2	..
Hanson Lane Mills	2	..
Holmfield Brickworks	1	2'0
Holmfield Mills (Brick)	1	Nil
Holmfield Mills (Stone)	1	..
Horley Green Brickworks	3	0'33
Illingworth Mills	2	0'5
Keighley Mills	1	Nil.
Kingston Mills	4	..
Kingston Works	2	0'5
Ladyship Mills	3	Nil.
Law & Crossley's Stores	1	..
Lee Bank Mill	4	..
Miall Street Mills (North)	5	..
Miall Street Mills (South)	6	5'0
Mile Thorn Works	2	Nil.
Mixenden Carbonising Company	1	..
Old Lane Dyeworks	4	..
Ovenden Wood Brewery	2	..
Park Print Works	1	..
Pellon Lane Mills	1	1'0
Perseverance Mills	1	Nil
Providence Soap Works	1	..
Queen's Road Mill	6	0'75
Raglan Street Dyeworks (Brick)	1	Nil.
Raglan Street Dyeworks (Stone)	1	Nil.
Raglan Street Works	1	1'5
Rawson's Mill	2	Nil.
Regent Works	1	2'5
Royal Halifax Infirmary	2	Nil.
Royal Mills	1	..
Ryburne Mills	2	..
Salterhebble Mill	2	..
Saville Mills	3	0'83
Sedburgh Mills	4	1'5
Shaw Lodge Mills	4	Nil
Shay Lane Dyeworks	2	..
Shroggs Mill	1	2'0
Smith Messrs. T. & W., Dyers	3	1'0
Spring Edge Works	4	Nil.
Spring Hall Mill	1	..
Sun Works	6	0'58
The Brewery	2	0'5
Trafalgar Mills	4	0'5
Union Mills	1	Nil
Victoria Mills	6	0'83
Warley Spring Dyeworks	12	0'2
Waterside Works (Steel)	1	Nil
Waterside Works (Stone)	1	..
Wellington Mills	4	0'5
West Croft Mills	1	Nil
West End Cabinet Works	1	..
West Grove Mills	1	..
Wheatley Dyeworks	3	0'5
Total	239	'433

Atmospheric Pollution Records.

Throughout the year we have continued to obtain monthly records of deposited atmospheric pollution at each of our five stations where standard deposit gauges are installed.

At the Wade Street and West View Park stations we have also obtained records of daylight measurement and sulphur pollution by methods described in the previous Annual Report.

Details of these observations may be obtained by consulting the following Tables and Diagrams, which show a continued diminution of atmospheric pollution since we first commenced obtaining these records three years ago. Without attempting to explain the reason for this, it is very probable that a lesser rainfall has been a contributory factor. It should also be remembered however, that 1933 has witnessed an increase in industrial activity, despite which our atmospheric deposit has decreased by 0.74 tons per square mile as compared with the deposit of 1932.

The difference in deposit at Wade Street—22.99 tons per square mile per month—from that at West View Park—9.31 tons per square mile per month—is very remarkable when one considers that there is only $1\frac{1}{2}$ miles between the two places. This is reflected in the increased amount of daylight obtainable at the latter station which during 1933 amounted to 16 per cent. on the daily average.

We commenced obtaining records re atmospheric sulphur pollution on May 1st, 1933, therefore particulars are only available for eight months of the year. As would be expected we again find that there is much more sulphur in the atmosphere at Wade Street than at West View Park, the difference amounting to no less than 58 per cent.

TABLE 1.—DEPOSITED ATMOSPHERIC POLLUTION.

Month	WADE STREET (Central)				BELLE VUE PARK (½ mile West)				AKROYD PARK (¼ mile North)				INFIRMARY (1 mile South)				WEST VIEW PARK (1½ 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 ...	2.79	17.85	5.86	23.71	2.81	6.52	4.76	11.28	2.89	7.31	4.19	11.50	3.19	5.80	6.51	12.31	2.49	5.63	3.49	9.12
February ...	4.72	14.67	13.17	27.84	2.45	5.14	4.93	10.07	5.15	5.43	6.94	12.37	2.83	5.01	4.09	9.10	2.62	4.10	4.45	8.55
March ...	2.29	17.48	6.40	23.88	2.14	8.65	3.65	12.30	2.23	8.25	4.24	12.49	2.20	9.08	5.17	14.25	2.25	6.17	3.72	9.89
April ...	1.42	14.62	7.51	22.13	1.37	6.72	3.09	9.81	1.51	7.11	4.01	11.12	1.20	6.07	3.68	9.75	1.32	4.79	2.76	7.55
May ...	2.21	19.32	7.77	27.09	2.18	8.83	4.77	13.60	2.19	7.39	4.21	11.60	2.15	6.85	5.02	11.87	2.16	6.60	4.12	10.72
June ...	1.64	17.54	4.87	22.41	1.75	8.41	3.39	11.49	1.57	7.19	4.14	11.33	1.88	6.90	4.71	11.61	2.01	7.24	3.27	10.51
July ...	3.37	16.81	5.15	21.96	2.77	8.10	4.70	13.11	2.93	9.32	5.45	14.77	2.35	7.38	4.28	11.66	2.37	6.57	3.13	9.70
August ...	1.38	13.98	3.65	17.63	1.31	7.95	2.88	10.83	1.56	9.45	7.51	16.96	1.20	6.62	2.85	9.47	1.29	5.94	2.26	8.20
September ...	1.83	22.69	7.49	30.18	1.84	8.20	3.50	11.70	1.88	6.16	2.88	9.04	1.55	6.78	3.43	10.21	1.77	8.55	3.58	12.13
October ...	4.27	12.66	8.39	21.05	4.25	5.54	7.56	13.10	4.16	4.24	5.75	9.99	4.12	4.11	4.59	8.70	4.44	3.73	4.45	8.18
November ...	2.02	10.84	7.08	17.92	2.11	6.27	5.46	11.73	2.05	3.58	4.27	7.85	1.73	4.06	4.17	8.23	1.60	3.16	3.27	6.43
December ...	0.49	14.50	5.61	20.11	0.49	7.57	5.98	13.55	0.49	5.60	4.52	10.12	0.43	5.70	3.59	9.29	0.45	6.33	4.40	10.73
AGGREGATES	28.43	192.96	82.95	275.91	25.47	87.90	54.67	142.57	28.61	81.03	58.11	139.14	24.83	74.36	52.09	126.45	24.77	68.81	42.90	111.71
MONTHLY AVERAGES...	2.37	16.08	6.91	22.99	2.12	7.32	4.56	11.88	2.38	6.75	4.84	11.59	2.07	6.20	4.34	10.54	2.06	5.73	3.58	9.31

Monthly Average for whole Borough :— Rainfall in inches ...

Insoluble Solids ...

Soluble Solids ...

Total Solids ...

... 2.20

... 8.42

... 4.85

... 13.26

tons per square mile.

” ”

” ”

Total Annual Deposit for whole Borough = 159.12 tons per square mile.

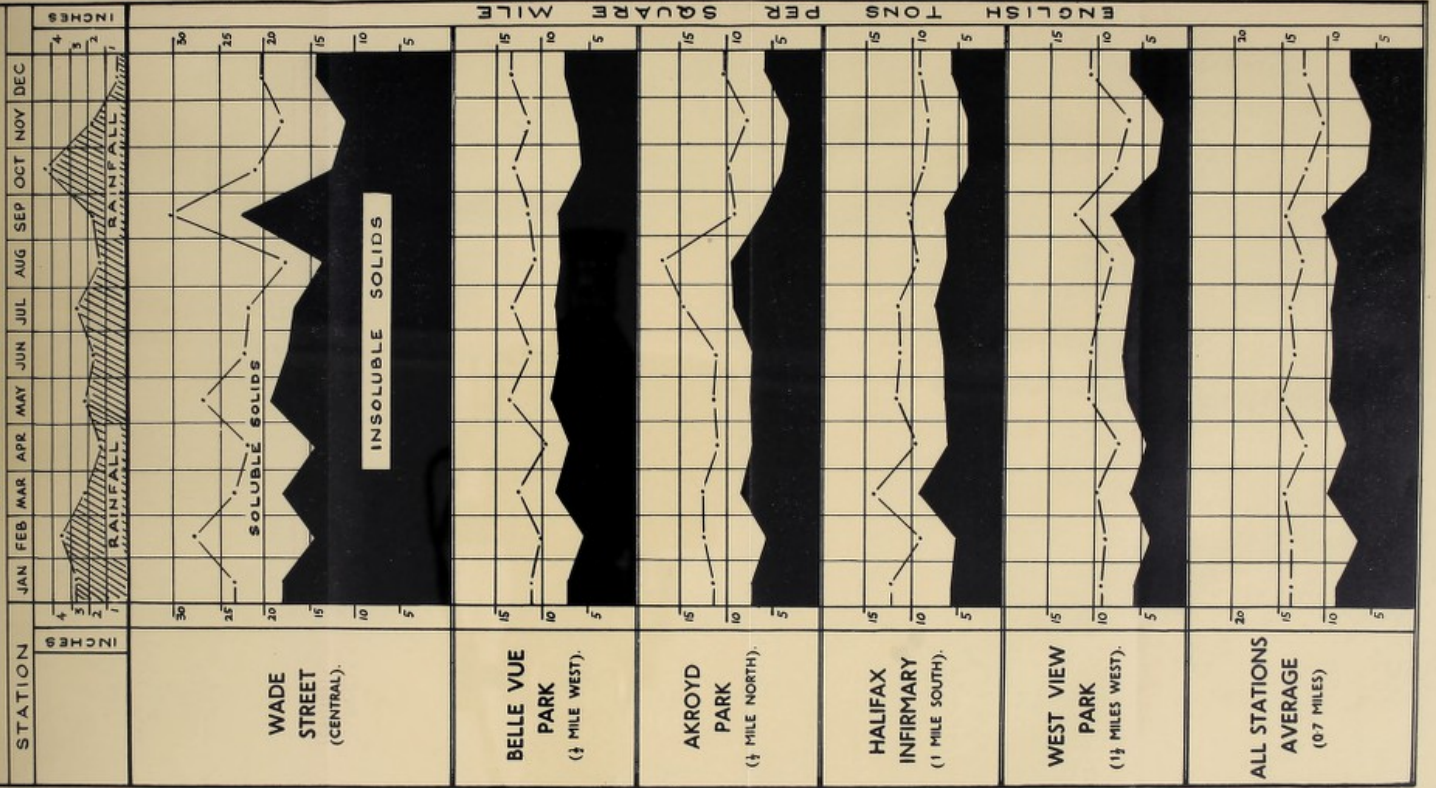
TABLE 3.
MEASUREMENT OF DAYLIGHT.
Potassium Iodide Method.

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)	1'88	4'07	6'94	7'10	8'74	9'38	9'64	8'62	6'80	4'40	2'19	1'33	5'92
WEST VIEW PARK (1½ miles West)	2'89	4'60	8'20	8'27	9'59	10'56	10'53	9'73	7'76	5'20	2'98	2'21	6'88
Total Daily Average ...	2'385	4'335	7'57	7'685	9'165	9'97	10'085	9'175	7'28	4'80	2'585	1'77	6'40

2. MONTHLY · ATMOSPHERIC DEPOSIT

1933

FIVE HALIFAX STATIONS.



30000
10000

WALLS VUR

PARK

10000

100000

10000

10000

100000
100000
100000

100000
100000
100000

10000
10000
10000

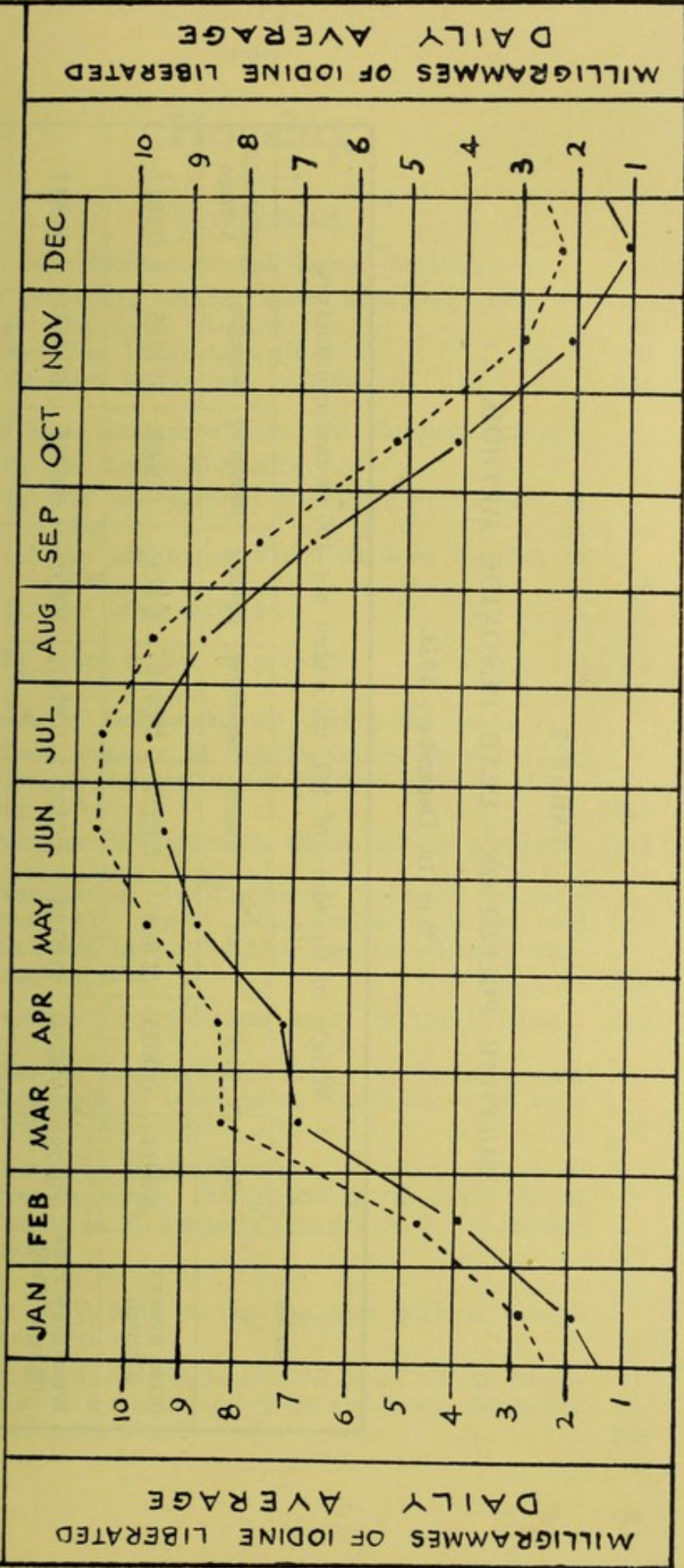
100000
100000
100000

10000

MEASUREMENT OF DAYLIGHT 1933

WEST VIEW PARK -----

WADE STREET _____



MILLIGRAMMES OF IODINE LIBERATED
DAILY AVERAGE

MILLIGRAMMES OF IODINE LIBERATED
DAILY AVERAGE

4.

TABLE 5.
SULPHUR POLLUTION — LEAD PEROXIDE METHOD.
May to December, 1933.

Station	Weight in Grammes of SO ₂ , calculated per 100 square centimetres.										Total Monthly Average
	May	June	July	August	September	October	November	December	Total Monthly Average		
WADE STREET (Central)	0.0911	0.0635	0.0634	0.0557	0.0941	0.1136	0.1608	0.1715	0.1017		
WEST VIEW PARK (1½ miles West)	0.0678	0.0336	0.0328	0.0360	0.0707	0.0575	0.0798	0.1364	0.0643		
Total Monthly Average ...	0.0764	0.0485	0.0480	0.0458	0.0824	0.0855	0.1203	0.1539	0.0830		

Housing.

(a) Statistics.

Number of New Houses erected during the year :—

(a) Total (including numbers given separately under (b))	406
(1) By the Local Authority	68
(2) By other Local Authorities	Nil
(3) By other bodies and persons... ..	338

(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	10
(b) For the purpose of Part 3 of the Act of 1925	58
(c) For other purposes	1
(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)	1246
(b) Number of inspections made for the purpose... ..	2301
(2) (a) Number of dwellinghouses (included in sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	118
(b) Number of inspections made for the purpose... ..	118
(3) Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	58
(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	971

2. Remedy of Defects during the year without service of formal notices :—

Number of dwellinghouses rendered fit in consequence of informal action by the Local Authority or their officers	828
---	-----

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 ...	27
(2) Number of dwellinghouses which were rendered fit after service of formal notices :—	
(a) By owners	30
(b) By Local Authority in default of owners	14
(b) Proceedings under Public Health Acts :—	
(1) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied	55
(2) Number of dwellinghouses in which defects were remedied after service of formal notices :—	
(a) By owners	30
(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	19
(2) Number of dwellinghouses demolished in pursuance of Demolition Orders	27
(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

General Observations as to Housing Conditions.

In response to Circular 1331 issued by the Minister of Health in April, 1933, the Corporation submitted in October a Programme and Time Table of action proposed to be taken during the five years—1934-1938—to deal with insanitary housing conditions existing within the Borough.

This Programme provides for the demolition of 1,727 houses in 33 Clearance Areas involving the rehousing of 6,091 persons in 1,836 new houses or flats. In addition, not less than 50 houses per annum are to be dealt with under Section 19 of the Housing Act, 1930.

Halifax (Hardcastle's Buildings) Clearance Area.

On May 24th, 1933, the Medical Officer of Health made a representation to the Health Committee re the above area comprising 0.339 acres, containing a total of 36 buildings all of which were houses, 28 of which were occupied. The total number of persons to be rehoused was 96, and it was resolved to erect 14 houses of two bedrooms and 12 houses of three bedrooms to accommodate these. The houses are being built at Ovenden Hall, within two miles of the centre of the town.

The Public Inquiry was held by the Minister of Health on November 24th, and on January 26th, 1934 he confirmed the application of the Corporation for a Clearance Order.

It was hoped that the new houses referred to would be ready for occupation by June 30th, 1934. Unfortunately, however, our hopes were not realised, although it is expected that they will be completed very shortly, after which the demolition of the buildings in the area will be carried out.

Individual Houses.

Under Section 19 of the Housing Act, 1930, 41 houses were represented during the year as being unfit for human habitation, and not capable at a reasonable expense of being rendered so fit. The Health Committee accepted the written undertaking accompanied by a full specification of works to be carried out to make the houses fit in 8 cases, whilst Demolition Orders were made respecting 19 houses. During the year 27 houses were demolished.

Slum Clearance and Rehousing.

It is, of course, recognised that the satisfactory rehousing of persons displaced from what are commonly termed "slums," is a problem which presents many difficulties.

In considering rehousing proposals it is apparent that the ideal should be to regard the family as the unit basis. In doing so, however, a local authority is often called upon to provide more houses than may be necessary to accommodate the number of persons to be displaced from any given area.

There is also an increasing difficulty in large towns to provide new houses on new sites within reasonable distance of the centre of the town. Thus transport charges of the occupants of many houses provided as alternative accommodation are very materially increased, and there is a natural reluctance

on the part of many people to accept the tenancy of these houses. In such circumstances it would appear that local authorities will have to give more consideration to the possibilities of rehousing on the sites dealt with under their area schemes. This inevitably raises the question of the desirability or otherwise of building flats, as this is the only means by which large numbers of people can be rehoused satisfactorily upon comparatively small areas.

Another difficulty which has presented itself is the rehousing of the occupants of Houses-let-in-Lodgings, often referred to as "Furnished Rooms." Here we are dealing with a section of the community which has never had any experience of living in a self-contained house, and has never possessed the usual house furniture. For such cases rehousing in flats seems to be definitely indicated, and some local authorities have in addition, decided that it is advisable to furnish these before letting, afterwards recovering from the tenants the cost of furniture provided. Whatever the method adopted however, it is very desirable that such people should be adequately rehoused and not left to drift into other houses which may be, and often are, quite unsuitable for their occupation.

Another matter which is of vital importance to all local authorities engaged in the rehousing of persons from unhealthy areas, is the danger of the transference of vermin—especially bugs—from the old to the new houses along with the furniture and effects of the tenants. To guard against this, verminous houses should be specially noted, and before the tenants are allowed to remove into the new houses, adequate steps should be taken to ensure the disinfestation of their household goods.

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

Common Lodging Houses.

As previously stated, the duties in connection with the registration and supervision of these premises are divided between the Watch and the Health Committees.

There are now 9 Common Lodging Houses registered to accommodate 488 lodgers. During the year the Sanitary Inspectors have made 34 inspections of these.

Houses-let-in-Lodgings.

There are 68 Houses-let-in-Lodgings which contain about 207 separate families. The number of inspections made was 182. Although many improvements have been effected and the Byelaws governing these premises are rigidly enforced, we

are greatly handicapped by the fact that we possess no powers requiring that application be made for registration of the premises before using them as houses-let-in-lodgings.

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

In connection with applications for stage play licences or renewal of same, we are requested by the licensing authority to submit a sanitary report upon the premises. During the year 86 inspections have been made, and in two cases sanitary improvements have been carried out.

Rats and Mice (Destruction) Act, 1919.

Under this heading 18 inspections of premises have been carried out. Remedial measures adopted include the repair or reconstruction of defective drains and the general rat-proofing of premises.

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, duties in connection with the above are divided between the Veterinary Inspector and the Chief Sanitary Inspector.

The following information refers to retailers under the supervision of the Chief Sanitary Inspector :—

Registered Retail Purveyors (within the Borough)	...	58
Registered Retail Purveyors (outside the Borough)	...	78
Registered Retail Purveyors (in Sealed Bottles only)	...	195
Registered Dairy Premises	... ..	41

A total of 71 inspections have been made of the dairy premises referred to, which include one new dairy.

Under Section 2 (1) of the Milk and Dairies (Amendment) Act, 1922, one retailer of milk was invited to appear before the Health Committee to show cause why his name should not be removed from our register of milk purveyors, by reason of the fact that the public health was endangered because of the consistently high bacterial content of his milk.

This was a case of a producer-retailer of milk with premises outside the Borough. Samples taken had a bacterial count progressing from 760,000 to 1,530,000 per cubic centimetre, whilst coliform bacillus were persistently present in 1/1000th of a cubic centimetre.

On appearing before the Health Committee the man was informed that unless he effected the necessary improvement in the bacteriological condition of his milk, his name would be crossed off our register of retailers.

The next sample was obtained within three weeks when it was found that the general bacteria count had dropped to 46,800 per c.c., whilst bacillus coli was absent in 1/10th c.c.

Bacteriological Examination of Milk.

During the year 215 samples of ungraded milk were obtained. 127 of these samples were of milk produced inside the Borough and 88 of milk produced outside our district.

It will be seen in the following Table that of the samples of milk produced within the Borough, 49 or 38.6 per cent. complied with the bacteriological standard laid down for Certified Milk, whilst not less than 88 or 69.3 per cent. were of Grade A standard respecting bacterial count and coliform bacillus content. Of milk produced outside the Borough 31 or 35.2 per cent. of the samples taken were of Certified Milk standard, whilst 60 or 68.2 per cent. were of Grade A standard so far as bacterial count and bacillus coli content are concerned. The third part of the Table referred to gives particulars of the samples taken as a whole where it will be seen that not less than 68.8 per cent. are of Grade A quality.

The following additional samples have also been obtained : Certified Milk 3 samples (one unsatisfactory) ; Grade A (Tuberculin Tested) Milk 10 samples (two unsatisfactory) ; Pasteurised milk 4 samples (one unsatisfactory) ; Sterilised milk 5 samples (all satisfactory). Unsatisfactory samples were followed up and later samples taken were found to be very satisfactory.

Ungraded Milk. Bacteriological condition.

MILK PRODUCED IN BOROUGH.		
Not more than 30,000 bacteria per c.c. and no coliform bacillus in 1/10th c.c.	Not more than 200,000 bacteria per c.c. and no coliform bacillus in 1/100th c.c.	More than 200,000 bacteria per c.c. and/or coliform bacillus in 1/100th c.c.
49 = 38.6%	88 = 69.3%	39 = 30.7%
MILK PRODUCED OUTSIDE BOROUGH.		
31 = 35.2%	60 = 68.2%	28 = 31.8%
TOTAL.		
80 = 37.2%	148 = 68.8%	67 = 31.2%

Food and Drugs (Adulteration) Act, 1928.

A total of 351 samples of Food and Drugs have been taken during the year and submitted to the Public Analyst for chemical analysis.

These included 207 samples of milk and 144 samples of other foods and drugs.

Samples not genuine according to the Sale of Milk Regulations 1901, numbered 12, although 4 of these were "Appeal to Cow" samples. Excluding these four samples the percentage of adulterated milk samples is 4.04. There were also four samples of other foods and drugs—including one prescription—which were not genuine, giving a percentage of 2.78.

The total percentage of adulterated samples is 3.42.

TABLE 1.

Nature of Sample	Number of Samples taken			Number not Genuine		
	Formal	Informal	Total	Formal	Informal	Total
Milk	198	9	207*	8	—	8
Cream	—	13	13	—	—	—
Baking Powder	—	8	8	—	—	—
Butter	—	5	5	—	—	—
Cream of Tartar	—	4	4	—	—	—
Dripping	—	7	7	—	—	—
Epsom Salts	—	4	4	—	—	—
Fruits Dried (Apricots)	—	1	1	—	—	—
" (Cherries)	—	3	3	—	—	—
" (Peaches)	—	1	1	—	—	—
Gin	—	3	3	—	—	—
Gregory Powder	—	2	2	—	—	—
Jams (Various)	1	11	12	1	1	2
Lemonade Crystals	—	1	1	—	—	—
Lemon Peel	—	4	4	—	—	—
Mincemeat	—	7	7	—	—	—
Mustard	—	1	1	—	—	—
Orange Quinine Wine	—	1	1	—	—	—
Pearl Barley	—	4	4	—	—	—
Peas Tinned	—	3	3	—	—	—
Potted Meat	—	4	4	—	—	—
Prescriptions... ..	—	8	8	—	1	1
Puddings (Xmas)	—	4	4	—	—	—
Rum	—	7	7	—	—	—
Salmon Paste	—	1	1	—	—	—
Sausages	10	10	20	1	—	1
Shredded Suet	—	4	4	—	—	—
Sultanas	—	4	4	—	—	—
Vinegar	—	8	8	—	—	—
Total	209	142	351	10	2	12

*Included in the 207 samples of milk are 10 "Appeal to Cow" samples, four of which were not up to the standard laid down by the Sale of Milk Regulations, 1901.

TABLE 2.

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

No. of Sample	Nature of Sample and Result of Analysis, etc.	Administrative Action Taken
10	Strawberry Jam—Excess of Preservative	No. 10 was an informal sample purchased from a retailer followed up by the formal sample No. 23. The informal sample contained 88 parts per million of Sulphur Dioxide whilst the formal sample contained 80 parts per million. Vendor was prosecuted in the Halifax Borough Police Court on 14th March, 1934, when case was dismissed, the Bench accepting warranty produced.
23	ditto	
58	Milk—2% deficient in Fat	Sample from producer-retailer, followed two days later by "appeal to cow" sample which contained 3.4% of Fat. Warning letter sent by Town Clerk.
80	Milk—8% deficient in Fat	Sample from producer-retailer followed two days later by "appeal to cow" samples (2) which each contained only 2.80% of Fat, showing a deficiency of 6.0%. Vendor appeared before Health Committee and requested to take steps to ensure that a better quality milk be produced.
105	Milk—8% deficient in Fat	Sample from producer-retailer followed two days later by "appeal to cow" samples (2) which each contained only 2.98% of Fat showing a deficiency of 0.6%. Vendor appeared before Health Committee and requested to take steps to ensure that a better quality milk be produced.
154	Sausage—Excess of Preservative	This was a formal sample found to contain 480 parts per million of Sulphites, being an excess of 30 parts per million. Warning letter sent by Chief Sanitary Inspector and matter later reported to Health Committee.
156	Sausage—No declaration of presence of Preservative	This was a formal sample found to contain 237 parts per million of Sulphites. At time of purchase no notice was displayed in shop declaring that the sausages contained preservative. As this was a first offence a warning letter was sent by the Chief Sanitary Inspector and matter later reported to Health Committee.
160	Milk—2% deficient in Fat	Sample from producer-retailer followed three days later by "appeal to cow" sample which contained 3.10% of Fat. Vendor appeared before Health Committee and was warned that if offence occurred again he would be prosecuted.
188	Milk—1% added water	Sample from retailer followed three days later by "on delivery" samples (2) from wholesaler who was also producer. These samples contained 8.83 and 9.0% Non-Fatty Solids. Further samples from retailer were found to be genuine milk.
280	Prescription—Excess of Magnesium Sulphate over that prescribed, in a less volume	This was an informal sample found to contain an excess of Magnesium Sulphate of 13.3% over that prescribed in a less volume of other constituents amounting to 2.5%. Warning letter sent by Medical Officer of Health.
282	Milk—6% added water	Sample from producer-retailer, followed two days later by "appeal to cow" sample which contained 8.72% Non-Fatty Solids. Vendor was prosecuted in the Halifax Borough Police Court, 19th Dec., 1933, and fined £5.
336	Milk—6% deficient in Fat	Sample from retailer followed two days later by "on delivery" samples (2) from wholesaler who was also producer. These samples contained 2.38% and 3.30% Fat. Next day "appeal to cow" samples (3) were obtained and found to contain 3.30%, 3.20%, and 3.40% of Fat. Producer and retailer were prosecuted in the Halifax Borough Police Court, 23rd Jan., 1934. The former was fined £5 and the latter £1.
338	Milk—20% deficient in Fat	

TABLE 3.
Monthly Average Composition of Milk Samples.

Month	No. of Samples	Analytical Data	
		Milk Fat per cent	Non-fatty Solids per cent.
January	—	—	—
February	23	3'72	8'96
March	31	3'62	8'96
April	10	3'48	9'01
May	30	3'80	9'06
June	21	3'76	9'05
July	26	3'66	8'87
August	19	3'63	8'91
September	10	3'68	8'96
October	14	3'88	9'08
November	13	3'99	9'01
December	10	3'44	9'15
Average for the year 1933 ... ..	...	3'71	8'99
" " 1932 ... ..	...	3'78	9'04
" " 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, 1925/6/7.

Food	No. of Samples examin'd	Nature of Preservative	Amount		Remarks
			Allowed	Found	
Milk	207	Nil	Nil	Nil	
Cream	8	Nil	Nil	Nil	
Butter	5	Nil	Nil	Nil	
Fruits Dried: Apricots	1	Sulphur Dioxide	2000 ppm.	1722 ppm.	
Peaches	1	Do.	2000 ppm.	1062 ppm.	
Cherries	3	Do.	3000 ppm.	6, 8 and 9 ppm.	
Jams	12	Do.	40 ppm.	10-Nil 1-88 ppm. 1-80 ppm.	Informal sample contained 88 ppm. of Sulphur Dioxide and formal sample contained 80 ppm. Proceedings taken and case dismissed. Bench accepted warranty produced.
Lemon Peel ..	4	Do	100 ppm.	2-8 ppm. 2-10 ppm.	
Mincemeat ...	7	Do	350 ppm.	5-8 ppm. 2-10 ppm.	
Orange Quinine Wine	1	Do Benzoic Acid	350 ppm. 600 ppm.	Nil Nil	
Peas Tinned ...	3	Nil	Nil	Nil	
Potted Meat ...	4	Sulphur Dioxide	450 ppm.	Nil	
Puddings Xmas	4	Do	—	1-8 ppm. 3-13 ppm.	
Salmon Paste ...	1	Nil	—	Nil	
Sausages	20	Sulphur Dioxide	450 ppm.	10-Nil 1- 23ppm. 1- 96 .. 1-117 .. 1-233 .. 1-237 .. 1-242 .. 1-314 .. 1-317 .. 1-355 .. 1-480 ..	In case where sample contained 480 ppm. of Sulphur Dioxide vendor was warned by Chief Sanitary Inspector. In case where 237ppm. were found no notice was exhibited and vendor was warned by Chief Sanitary Inspector.
Sultanas	4	Do	750 ppm.	1-8 ppm. 1- 51 .. 1- 82 .. 1-282 ..	

Manufacture and/or Sale of Ice Cream.

During the year 186 inspections were made of 177 registered premises. 19 new premises were provided. Improvements were carried out at three of the premises.

Seventy-nine samples of ice cream were submitted to bacteriological examination, particulars of which are given in the following Table :—

Ice Cream. Bacteriological Condition.

PRODUCED IN BOROUGH.	
Not more than 100,000 bacteria per c.c. and no coliform bacillus in 1/100th c.c. or less.	More than 100,000 bacteria per c.c. and coliform bacillus in 1/100th c.c.
25 = 37·31%	42 = 62·69%
PRODUCED OUTSIDE BOROUGH.	
5 = 41·66%	7 = 58·33%
TOTAL.	
30 = 37·97%	49 = 62·03%

We have adopted a local bacteriological standard which we are endeavouring to apply, namely, that the number of bacteria do not exceed 100,000 per c.c., and that there be no coliform bacillus in 1/100th of a c.c.

It will be seen in the above Table that only 37.97 per cent. of the samples taken comply with this standard, a most disappointing result. It is, however, hoped that as a result of the close co-operation between the Department and the manufacturers and the vendors of this commodity, the bacteriological standard will improve considerably.

Fried Fish Shops.

During the year 196 inspections were made of 156 registered premises. In the case of 11 premises sanitary improvements were effected, and on the whole the premises may be said to be kept in very satisfactory condition.

Fertilisers and Feeding Stuffs Act, 1926.

There were 21 informal samples taken under the above Act during the year, 6 of which were of Fertilisers and 15 of Feeding Stuffs.

Samples 1, 2 and 3, of Feeding Meat and Bone Meal, White Fish Meal, and Special Compound Fertiliser respectively, were unsatisfactory, the limits of variation laid down under the Act having been exceeded in each case. Following a report to the Health Committee, representatives of the vendors appeared and gave an undertaking that they would endeavour to comply with the requirements of the Act. Further samples taken were found to be quite satisfactory.

NOTE.—This matter is referred to in the Annual Report for 1932.

Samples 5 and 6 were of Feeding Meat and Bone Meal, and were also unsatisfactory for the same reason as stated above. As these were first offences a warning letter was sent by the Chief Sanitary Inspector to the two retailers concerned.

Sample No. 7 was of White Fish Meal stated to be unsatisfactory in that the amount of Phosphoric Acid was not declared on the mark accompanying the packet or invoice. Warning letter was sent by the Chief Sanitary Inspector.

Sample No. 14, White Fish Meal, was stated to be unsatisfactory in that the range of percentages had been used in stating the amount of Albuminoids present. Warning letter was sent by the Chief Sanitary Inspector.

Sample No. 21, Wheat Offals, was stated to be unsatisfactory in that the amount of Fibre present was less than that declared by more than is allowed by the limits of variation under the Act. Warning letter was sent by the Chief Sanitary Inspector.

All other samples were satisfactory.

Rag Flock Acts, 1911 and 1928.

Rag flock is not manufactured in the Borough and there are very few upholsterers who use same.

No samples have been taken during the year.

SECTION 15.

— 0 —

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 :

During the year 1933, 351 samples were submitted for analysis under the Food and Drugs (Adulteration) Act, of which 14 or 3.98% were found to be adulterated or unsatisfactory. There has been a reduction in the proportion of samples returned as adulterated as compared with last year, when out of 322 samples examined 22 or 6.83% were reported unsatisfactory.

The average composition of the milk was similar to that of samples taken in 1932, as the following figures show :—

	No. examined.	% Fat.	% Non Fatty Solids.
1st Quarter, 1932	... 63	... 3.65	... 9.04
1st Quarter, 1933	... 54	... 3.66	... 8.96
2nd Quarter, 1932	... 30	... 3.74	... 9.04
2nd Quarter, 1933	... 61	... 3.73	... 9.05
3rd Quarter, 1932	... 77	... 3.79	... 9.01
3rd Quarter, 1933	... 55	... 3.65	... 8.89
4th Quarter, 1932	... 18	... 4.23	... 9.14
4th Quarter, 1933	... 37	... 3.79	... 9.07
Average, 1932	... 188	... 3.78	... 9.04
Average, 1933	... 207	... 3.71	... 8.99

All milks, both formal and informal, sampled under the Sale of Food and Drugs Act are included in the above figures, which show that not only is the standard of quality of the milk sold in Halifax high but that the standard laid down by the Sale of Milk Regulations, 1901, of 3% Fat and 8.5% of Non Fatty Solids is low, and that it is reasonable to require the producer or vendor of milk, which does not comply with the standard, to prove that the milk was in the same condition as it came from the cow.

The bacteriological examination of milks sampled on delivery to consumers were highly satisfactory, and show that the producers and retailers in Halifax and district supply milk which is equal to any milk sold.

Thirteen samples of cream were examined and all were free from preservative. Before the Preservative Regulations came into force, very little unpreserved cream was sold and the dairymen were convinced that the bulk of the trade in

cream would be ruined by the Regulations. Such was not the case and the dairy industry has, by the organisation of transport and refrigeration, been able to offer the public an adequate supply of unpreserved cream. There is no legal standard for the amount of fat in cream, which normally contains approximately 50%. One of the thirteen samples of cream analysed contained only 30.7% of fat, and in the absence of any standard had to be reported as satisfactory.

Two of the twelve samples of Jam submitted were returned as unsatisfactory, in that the amount of Sulphur Dioxide Preservative found to be present was greater than the 40 parts per million limit, allowed by the Preservative Regulations. Proceedings were instituted in respect of the formal sample and the case was dismissed against the vendor as the manufacturers accepted the responsibility and were prepared to alter the method or preparation.

Of the eight samples of dispensed Medicines examined, one had a slight excess of the chief ingredient present. The dispensing on the whole, was very accurate, and the results of the examinations satisfactory.

Miscellaneous

The first part of the paper discusses the general principles of the method of moments, which is a powerful tool for estimating the parameters of a distribution. It is particularly useful when the likelihood function is difficult to maximize. The method involves equating the sample moments to the theoretical moments of the distribution and solving for the parameters.

In this paper, we apply the method of moments to estimate the parameters of a specific distribution. We first derive the first two moments of the distribution in terms of the parameters. Then, we equate these to the corresponding sample moments and solve the resulting system of equations. This provides a simple and efficient way to estimate the parameters.

The second part of the paper presents simulation results to evaluate the performance of the method of moments estimator. We compare its performance with that of the maximum likelihood estimator. The results show that the method of moments estimator is generally more robust and easier to compute than the maximum likelihood estimator, especially in small samples.

Finally, we conclude by discussing some potential extensions of the method of moments. For example, it can be applied to multivariate distributions and to distributions with unknown support. These extensions would be valuable for a wide range of applications in statistics and econometrics.

The authors would like to thank the anonymous referees for their helpful comments and suggestions. This work was supported by the National Science Foundation under grant number XXX-XXXX-XXXX.

References
[1] Anderson, D. R., and Darling, D. A. (1952). Asymptotically efficient solution of the problem of testing for equality of distributions. *Annals of Mathematical Statistics*, 23, 109-115.

[2] Bhattacharyya, R. N. (1967). *Statistical Theory*. New York: McGraw-Hill.

[3] Casella, G., and Berger, R. L. (2002). *Statistical Inference*. Boston: Duxbury Press.

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 six valleys, viz. :—The Hebble, the Luddenden, the Widdop, the Greave, the Walshaw Dene, and the Gorple.

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

The new Filtration Plant at Ogden is in course of erection and when completed the water for the whole of the Borough will be efficiently treated.

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.

The long continued drought of last summer necessitated the imposing of restrictive measures for conserving the water supply, and the following is a summary of the measures taken to that end.

30th August.	Warning notices issued by poster and through the press.				
11th September.	Supply cut off	between	8 p.m.	and	6 a.m.
23rd September.	"	"	6 p.m.	and	6 a.m.
7th October	"	"	5 p.m.	and	7 a.m.
19th October	"	"	8 p.m.	and	6 a.m.
18th November.	Restrictions removed.				

In common with other Authorities throughout the country, the question of water supply is engaging the serious consideration of the Council.

I am indebted to Mr. D. T. Lloyd Jones, the Borough Engineer, for the following observations :—

Rivers and Streams.

Apart from the districts of Northowram, where the sewerage falls to Brighouse, part of Warley which drains to Luddenden, and certain smaller areas which drain into the sewers of the Sowerby and Southowram Authorities, 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.

Whilst the main sewerage of the Borough has for many years been considered adequate to deal with the maximum normal flow, a recent survey has disclosed conditions which show the necessity for the construction of certain relief sewers to mitigate surcharge problems in various urbanised sections of

the town. It is proposed to commence these works as soon as the sanction of the Ministry of Health has been obtained, and to spread the operations over a period coinciding with works of Highway re-construction along the respective routes.

Building development and conversion of closets in various districts will call for extensions of branch sewers and replacements of sewers of obsolete construction.

It is anticipated that the Sewage Disposal Works will be adequate to deal with the whole of the effluent of the Borough for some time to come, but in the light of recent research, the most modern methods in the various stages of treatment are being adopted.

With the completion of the Second Section of the Bradshaw Sewerage Scheme, the main drainage of this area is now carried out.

Disposal of Refuse and Street Cleansing.

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

Refuse Collection.

The total weight of refuse collected during the year was 21,740 tons, equivalent to 12 cwts. per 1,000 of our population per day.

In last year's Report it was mentioned that one of the greatest needs of the cleansing service was a vehicle into which dustbins could be emptied without emission of dust. It is pleasing to state that this is now an accomplished fact, and a vehicle has been designed whereby all types and sizes of dustbins and other receptacles can be dustlessly emptied, whilst the operation is also quicker and easier than the old fashioned methods. A new vehicle (the first of its kind) is now operating in Halifax and is giving very satisfactory results, not only from a hygienic standpoint, but also in regard to the financial side of the question.

Refuse Disposal.

The quantity of refuse dealt with as stated above was 21,740 tons and of this quantity, 16,061 of house and trade refuse was dealt with at our Refuse Disposal Works, and the balance was disposed of at various tips. As a matter of interest, the analysis of refuse during the twelve months is given herewith :—

	T.	C.	Q.	%
Dust	8276	11	0	51.53
Cinders	1174	3	0	7.31
Pots and Bricks	270	11	0	1.69
Tins	390	10	2	2.43
Iron	127	5	1	0.79
Glass	73	2	2	0.46
Tailings to Incinerator	4834	0	3	30.09
Garbage to Incinerator	915	10	1	5.70
	16,061	14	1	100.00

In addition, 361 tons of Fish, 270 tons of Blood, 29 tons of Condemned Meat, 167 tons of Offals, 815 Dogs and 452 Cats were also disposed of. These were utilised in the production of White Fish Meal, Blood Meal, Meat and Bone Meal, Fertiliser, etc.

Street Cleansing.

The following is a summary of streets cleansed during the year :—

Approximate mileage cleansed daily	8
" " " three times weekly	15
" " " twice weekly	20
" " " once weekly	52
" " " less than once weekly	125

and the number of square yards cleansed was 212,115,000.

One of the greatest difficulties in regard to street cleansing was the shortage of water owing to drought. No swilling or watering was permissible and where streets had become greasy, especially on steep gradients, our resources were taxed to an unusual extent to keep the streets reasonably safe.

The number of gullies emptied was 254,895.

Snow Removal.

In comparison with last year we have experienced little difficulty in dealing with the requirements under this section. Actually we have had practically no snow to remove and more trouble has been caused by short periods of sharp frost, which necessitates constant application of sand and salt.

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 (Destruction) Act

1919, and the Hairdressers and Barbers Shops (Sunday Closing) Act 1930, for the particulars given below :—

Half-holiday Closing Visits	...	...	...	914
Assistants' Half-holiday Visits	...	...	...	574
Registration and Administrative Visits...	...	...	...	632
Special	„	...	...	344
Early Closing	„	...	...	529
Children's Bye-Law	„	...	...	660
Fabrics (Misdescription) Act	„	...	...	153
Hairdressers (Sunday Closing)	„	...	...	142
Rats and Mice (Destruction) Act	„	...	...	688
Shops without Assistants' Half-holiday Notice (Sec. 1)				29
Do Young Persons	„	(Sec. 2)		9
Do Mixed Business	„	(Sec. 10)		139
Do Half-holiday Closing	„	(Sec. 4)		64
Do Seats for Female Assistants		(Sec. 3)		—
Contravention of Mealtimes		(Sec. 1, Sub. 5)		3
Do Assistants' Half-holiday		(Sec. 1, Sub. 1)		37
Do Half-holiday Closing		(Sec. 4)		342
Do Early Closing		(Closing Orders and 1928 Act)		171
Do Young Persons' Hours		(Sec. 2)		2
Do Children's Bye-Laws	...	...	...	11
Do Hairdressers' Sunday Closing	...	...	...	—
Warning Notices sent	...	...	...	14
Prosecutions	...	...	...	—

Rats and Mice (Destruction) Act, 1919.

Number of premises that are or have been rat-infested during the year	...	...	...	...	121
Premises temporarily clear after Rat Week	...	...	...	...	34
Premises where numbers were reduced...	...	...	...	...	61
Premises at present rat-infested	...	...	...	...	81
Visits paid for National Rat Week purposes	...	...	...	...	182
Visits paid to rat-infested premises during the year	...	...	...	...	688
Number of rat tails brought to the Health Dept. during the year (excluding Rat Week)	...	...	...	...	3195
Number of rat tails brought to the Health Dept. during Rat Week	...	...	...	...	821
Number of rats killed in addition	...	...	...	...	376

Local rat catchers (professional and amateur) have had a very busy and successful time during the year. As a result of their efforts, 1,791 more rat tails were brought to the Health Department during the year. Of this number, 300 extra tails were brought in during the National Rat Week. The "Clear out the Rat" spirit has been to the fore during the year, and has no doubt helped to increase the slaughter, not only by ferrets and dogs, but also by poisons, virus, traps, and other means available.

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
18	21	115	154

(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
38	8	46	Dr. Roe.

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.

THE UNIVERSITY OF CHICAGO
LIBRARY

PHYSICS DEPARTMENT
530 SOUTH EAST ASIAN DRIVE
CHICAGO, ILLINOIS 60607

NO.	DATE	DESCRIPTION	AMOUNT
10	10/18	...	...
11	10/19	...	...
12	10/20	...	...
13	10/21	...	...
14	10/22	...	...
15	10/23	...	...
16	10/24	...	...
17	10/25	...	...
18	10/26	...	...
19	10/27	...	...
20	10/28	...	...

...

...

General Summary of Meteorological Observations taken at the Public Library, Belle Vue, from January 1st, 1933, to December 31st, 1933.

By E. GREEN, LIBRARIAN.

LATITUDE OF STATION = 53° 43' N.

LONGITUDE = 1° 52' W.

HEIGHT ABOVE SEA LEVEL = 625 FEET.

1933.	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.									Rain.		REMARKS	
	Mean at 37° F. and Sea Level.	Range.	Highest.	Mean.			(Adapted.)	Dew Point.	Elastic Force.	Max.	Min.	Max.			Min.	Maximum Days of Sun.	Minimum on Grass.	Estimated Strength.	Relative proportion of									Mean amount of Cloud.	No. of Days of fall.		Amount Collected.
Month.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calms.	in.	in.	in.				
January	30.173	1.386	54.0	22.0	34.0	39.1	30.9	8.2	35.0	31.9	180	2.1	0.3	88	543.5	51.2	27.6	2.0	6	1	7	0	1	4	6	10	10	7.8	14	2.57	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	29.947	1.376	52.2	23.0	29.2	42.2	33.1	9.3	37.3	32.2	182	2.1	0.5	83	541.2	65.5	29.6	3.0	10	6	1	2	1	5	5	7	7	7.5	16	3.08	
March	29.881	1.526	61.2	28.6	32.6	50.0	34.6	15.4	42.3	37.5	225	2.6	0.5	85	535.5	81.1	30.3	3.0	2	1	0	7	1	13	7	3	15	6.3	14	2.16	
April	30.530	0.912	63.9	30.2	33.7	52.7	33.5	19.2	44.1	42.8	275	3.1	0.3	92	532.1	88.7	33.4	3.0	1	6	0	0	5	8	1	12	6	7.0	10	1.38	
May	29.376	0.706	71.2	39.1	32.1	57.8	43.6	14.2	50.5	43.8	286	3.3	0.8	80	526.7	95.5	41.3	3.0	6	5	4	0	3	3	2	17	8	7.4	16	2.13	
June	29.853	1.110	82.0	40.6	41.1	66.9	48.2	18.1	56.6	48.2	340	3.8	1.2	75	520.3	108.6	45.1	2.0	8	2	3	3	3	2	7	10	6	6.7	14	1.69	
July	29.937	1.124	85.0	49.4	35.6	69.5	52.4	17.1	60.3	56.2	453	5.1	0.7	88	515.5	112.4	49.5	3.0	0	1	0	4	2	9	15	12	5	6.9	15	2.43	
August	30.007	0.760	80.5	47.3	33.2	68.7	52.5	16.2	60.5	54.4	423	5.1	0.7	88	515.5	111.9	48.4	2.5	0	0	1	0	1	7	10	11	15	6.0	12	1.15	
September	30.049	0.958	76.5	40.4	36.1	64.9	48.2	15.5	56.3	46.3	317	3.5	1.5	70	520.5	99.5	43.2	2.0	3	11	9	1	3	1	2	3	14	5.9	11	1.85	
October	29.847	1.422	69.4	32.0	37.4	53.6	43.3	10.3	48.6	43.8	285	3.3	0.5	86	528.8	80.3	38.1	2.5	7	5	0	3	2	4	7	6	14	6.9	17	4.22	
November	29.928	0.744	53.6	28.0	25.6	44.9	37.6	7.3	41.4	37.5	225	2.6	0.5	85	535.5	58.5	32.5	2.0	5	7	0	4	0	1	0	7	23	6.4	15	1.99	
December	30.144	1.486	48.1	24.0	24.1	39.6	31.5	8.1	35.8	31.0	175	2.0	0.5	82	542.4	44.1	26.6	2.0	2	2	6	7	0	3	3	2	17	9.5	10	.51	
Annual Means	29.937	1.126	66.5	33.7	32.9	54.2	40.8	13.2	47.4	42.1	0.281	3.4	0.7	84	529.8	83.1	37.1	2.5	4	4	3	3	2	5	5	8	12	7.0	14	2.10	

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

January, 44° February, 42° March, 41° April, 44° May, 47° June, 53°
 July, 55° August, 57° September, 57° October, 54° November, 49° December, 46°

Highest Readings = 58° on Aug. 16th to 21st.

Lowest Readings = 41° from Feb. 28th to March 17th.

Rain fell on 164 days, and measured 25.16 inches.

17. 25. 21
18. 26. 21
19. 27. 21
20. 28. 21
21. 29. 21
22. 30. 21
23. 31. 21
24. 1. 22
25. 2. 22
26. 3. 22
27. 4. 22
28. 5. 22
29. 6. 22
30. 7. 22
31. 8. 22
32. 9. 22
33. 10. 22
34. 11. 22
35. 12. 22
36. 1. 23
37. 2. 23
38. 3. 23
39. 4. 23
40. 5. 23
41. 6. 23
42. 7. 23
43. 8. 23
44. 9. 23
45. 10. 23
46. 11. 23
47. 12. 23
48. 1. 24
49. 2. 24
50. 3. 24
51. 4. 24
52. 5. 24
53. 6. 24
54. 7. 24
55. 8. 24
56. 9. 24
57. 10. 24
58. 11. 24
59. 12. 24
60. 1. 25
61. 2. 25
62. 3. 25
63. 4. 25
64. 5. 25
65. 6. 25
66. 7. 25
67. 8. 25
68. 9. 25
69. 10. 25
70. 11. 25
71. 12. 25
72. 1. 26
73. 2. 26
74. 3. 26
75. 4. 26
76. 5. 26
77. 6. 26
78. 7. 26
79. 8. 26
80. 9. 26
81. 10. 26
82. 11. 26
83. 12. 26
84. 1. 27
85. 2. 27
86. 3. 27
87. 4. 27
88. 5. 27
89. 6. 27
90. 7. 27
91. 8. 27
92. 9. 27
93. 10. 27
94. 11. 27
95. 12. 27
96. 1. 28
97. 2. 28
98. 3. 28
99. 4. 28
100. 5. 28

1. 1. 28
2. 2. 28
3. 3. 28
4. 4. 28
5. 5. 28
6. 6. 28
7. 7. 28
8. 8. 28
9. 9. 28
10. 10. 28
11. 11. 28
12. 12. 28
13. 1. 29
14. 2. 29
15. 3. 29
16. 4. 29
17. 5. 29
18. 6. 29
19. 7. 29
20. 8. 29
21. 9. 29
22. 10. 29
23. 11. 29
24. 12. 29
25. 1. 30
26. 2. 30
27. 3. 30
28. 4. 30
29. 5. 30
30. 6. 30
31. 7. 30
32. 8. 30
33. 9. 30
34. 10. 30
35. 11. 30
36. 12. 30
37. 1. 31
38. 2. 31
39. 3. 31
40. 4. 31
41. 5. 31
42. 6. 31
43. 7. 31
44. 8. 31
45. 9. 31
46. 10. 31
47. 11. 31
48. 12. 31
49. 1. 32
50. 2. 32
51. 3. 32
52. 4. 32
53. 5. 32
54. 6. 32
55. 7. 32
56. 8. 32
57. 9. 32
58. 10. 32
59. 11. 32
60. 12. 32
61. 1. 33
62. 2. 33
63. 3. 33
64. 4. 33
65. 5. 33
66. 6. 33
67. 7. 33
68. 8. 33
69. 9. 33
70. 10. 33
71. 11. 33
72. 12. 33
73. 1. 34
74. 2. 34
75. 3. 34
76. 4. 34
77. 5. 34
78. 6. 34
79. 7. 34
80. 8. 34
81. 9. 34
82. 10. 34
83. 11. 34
84. 12. 34
85. 1. 35
86. 2. 35
87. 3. 35
88. 4. 35
89. 5. 35
90. 6. 35
91. 7. 35
92. 8. 35
93. 9. 35
94. 10. 35
95. 11. 35
96. 12. 35
97. 1. 36
98. 2. 36
99. 3. 36
100. 4. 36

M
O
N
A

INDEX.

Acts, Housing, Public Health, etc.	122	Maternal Mortality ...	51, 52, 53
After-Care, Tuberculosis ...	44	Measles	31
Ambulance Facilities	15	Measurement of Daylight	94, 97
Analytical Work	112	Meat Inspection	79
Artificial Sunlight Clinic	51	Medical Examination—	
Atmospheric Pollution Records	92, 93, 96	Corporation Employees ...	121
Bacteriological Examinations	17, 18, 27, 104	Medical Practitioners, Co-operation with	121
Bakehouses	88	Mental Deficiency	60
Birthrate	10	Merchandise Marks Act...	80
Births Notification of	49	Meteorology Observations	123
Boarding-out of Children ...	69	Midwifery	48, 54
Borough Fever Hospital ...	24	Milk Production, etc. ...	76, 103
Cancer	20, 21, 22	Milk Samples	107
Cerebro Spinal Fever	28	Miscellaneous	115
Children Act, 1908	68	Non-Notifiable Infectious Diseases	31
Children and Young Persons Act, 1932	68	Notification of Births	49
Clean Milk Competition ...	77	Notification of Infectious Diseases	32
Clearance Area	101	Offensive Trades	80
Clinics	16	Orthopædic Clinic	58
Common Lodging Houses	84, 102	Paratyphoid Fever	26
Craigie Lea Certified Institution	61	Places of Public Amusement	103
Dairies	84	Pneumonia	31
Deathrate	10, 12	Polioencephalitis, Acute	31
Deaths	11	Population	10
Diphtheria	25, 30	Preservatives, etc., in Food	108
Diseases of Animals Act ...	77	Private Slaughterhouses	78
Disinfection	28	Prosecutions	80, 86
Drainage	82, 83	Public Health Propaganda	72
Dwellinghouses	82, 83	Puerperal Fever and Pyrexia	31
Enteric Fever	26, 29	Rag Flock Acts	110
Erysipelas	26	Rats & Mice Destruction (Act)	103, 120
Farms	77	Refuse Collection	118
Factories & Workshops...	82, 84, 87	" Disposal	118
Fertiliser and Feeding Stuffs	109	Rivers and Streams	117
Fever Hospital	24	Sampling	83
Food and Drugs	105	Sanatorium, Halifax	43
Food Inspection	76, 82, 103	Sanitary	82
Fried Fish Shops	84, 109	Scarlet Fever	24, 29
General Provisions of Health Services	14	Sewerage	117
Health Committee	2	Shops Inspection, etc. ...	119
Health Education and Propaganda	72	Slum Clearance	101
Health Visiting	49	Smallpox	29
Health Week and Exhibition	73	" Hospital	28
Home Helps	54	Smoke Abatement	82, 84, 89
Hospital Facilities	15	Smoke Observations ...	90, 91
Houses let in Lodgings ...	84, 102	Social Conditions	10
Housing	99	St. Luke's Hospital	33
Ice-cream	84, 109	Staff	3, 4, 54
Infant Mortality	51	Statistics	10
Infant Welfare Centres ...	49	Statutory Action... ..	85
Infectious Diseases	23, 32	Street Cleansing	119
Influenza	31	Sub-Committees... ..	2
Immunisation	26	Summary of Deaths	11
Lectures, Public Health Education	72	Transferred Poor Law Services	67
Legislation in Force	121	Tuberculosis	40, 44
Maternity and Child Welfare	48	Vaccination	64
" Homes, Inspection of	54	Venereal Diseases	46
		Vital Statistics	10
		Voluntary Workers	55
		Water Supply	116
		Whooping Cough	32