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Contributors

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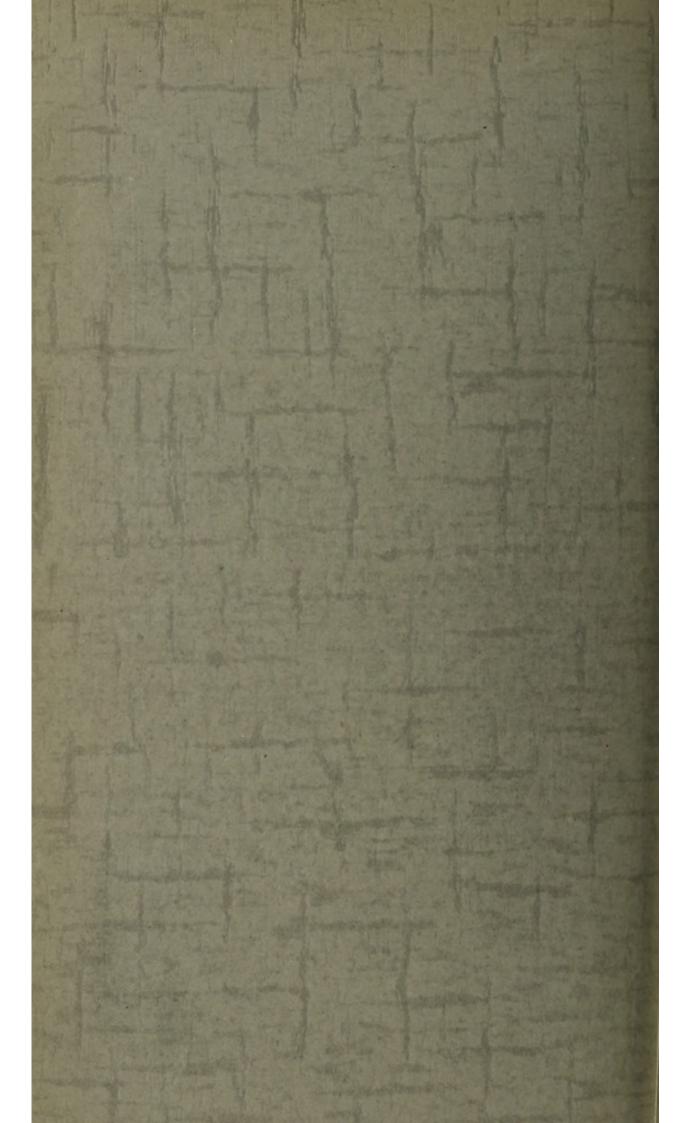


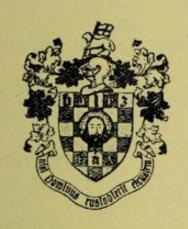


COUNTY BOROUGH OF HALIFAX HEALTH DEPARTMENT.

ANNUAL REPORT ON THE HEALTH OF THE BOROUGH For the Year 1929.

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



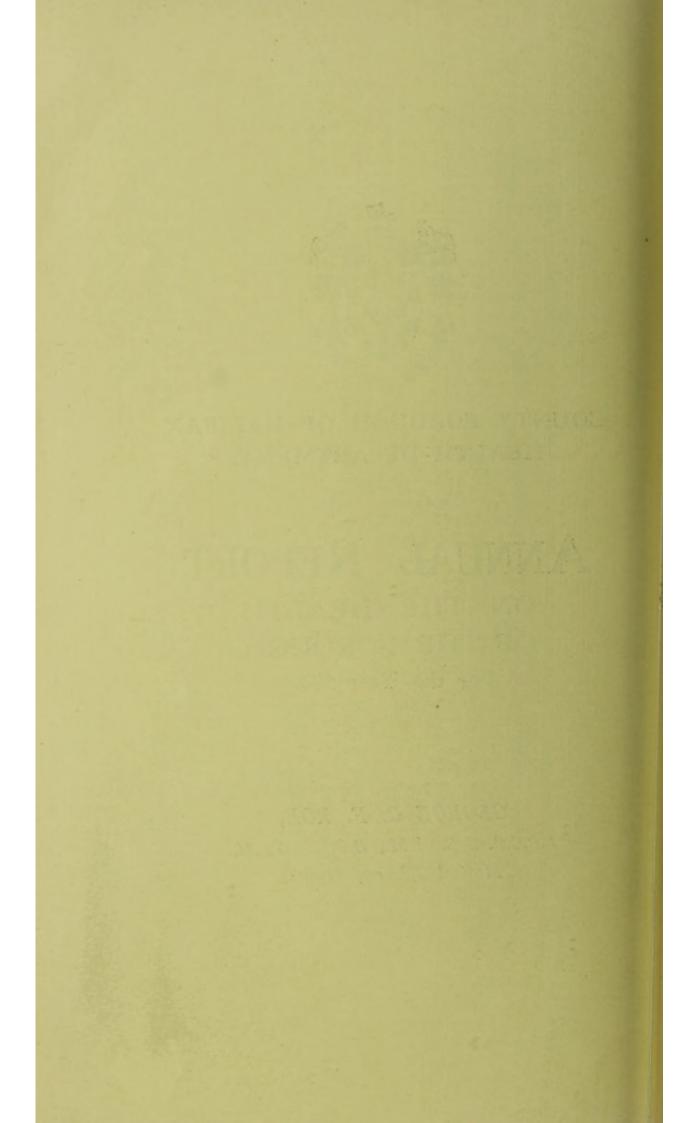


COUNTY BOROUGH OF HALIFAX HEALTH DEPARTMENT.

ANNUAL REPORT

ON THE HEALTH OF THE BOROUGH For the Year 1929.

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



bealth Committee

(as on Dec. 31st, 1929).

70

mayor.

ALDERMAN EDGAR SMITH, J.P.

ALDERMAN W. M. BRANSON, J.P., Chairman. COUNCILLOR JOHN FOSTER, Vice-Chairman.

Ald. T. HEY, J.P.

Coun. L. CHAMBERS.

" A. W. LONGBOTTOM, J.P.

" F. SHARP.

" A. WALTERS, J.P.

" H. THORP.

Coun. P. BARRETT.

L. SHEPHERD.

" J. BROADBENT.

" J. H. RILEY.

M. WILLIAMSON, J.P. " M. LIGHTOWLER, Coun. E. W. LYON.

I.P.

Sub=Committees

Appointed by the Health Committee.

Realth Services Sub-Committee.

THE CHAIRMAN.

COUNCILLOR LYON.

VICE-CHAIRMAN. ALDERMAN LONGBOTTOM. SHEPHERD. CHAMBERS. RILEY.

COUNCILLOR WILLIAMSON.

COUNCILLOR SLATER.

Fospital Committee.

THE CHAIRMAN.

COUNCILLOR LIGHTOWLER.

VICE-CHAIRMAN. ALDERMAN HEY.

" SHARP. THORP.

,, WALTERS.

BARRETT.

COUNCILLOR BROADBENT.

Accounts Sub-Committee.

THE CHAIRMAN. VICE-CHAIRMAN.

COUNCILLOR WILLIAMSON. " BARRETT.

ALDERMAN WALTERS. LYON.

COUNCILLOR SHEPHERD

Maternity and Child Welfare Committee.

The Health Committee with the following additional Members:—
MISS DOROTHY WRIGHT. MRS. LAVINIA LUMB.
MRS. E. WHITAKER. MISS FLORENCE WHITLEY.
MRS. M. A. TAYLOR, J.P. MRS. MARY E. WILLIAMSON. MRS. S. GLEDHILL.

Welfare of the Blind Sub-Committee.

ALDERMAN W. M. BRANSON. COUNCILLOR WILLIAMSON. COUNCILLOR SHARP.

LYON.

COUNCILLOR BROADBENT.

Staff of the Bealth Department

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

*WILFRID SMITH, M.Sc., M.B., B.Ch., B.A.O.

Assistant Medical Officer of Health, Clinical Tuberculosis Officer and
Resident Medical Officer, Sanatorium.

*A. LATCHMORE, M.D., ED.

Assistant Medical Officer of Health and Medical Officer to Maternity and Child Welfare Centre.

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

J. POLLARD, M.R.C.V.S., D.V.S.M., (Vict.) Veterinary and Meat Inspector.

> † J. W. BEAUMONT, M.R.S.I. Chief Sanitary Inspector.

†F. TEAL. †J. G. WALSHAW. †E. WILSON. †H. LEAPER. District Sanitary Inspectors.

† J. FLANNAGAN, Assistant Meat Inspector.

T. FEARNLEY, Shops Inspector.

#6*ELSIE R. ORAM, Senior Health Visitor.

*L. WOLSTENHOLME. *E. MARSHALL. (Vacant)

(Vacant)

*M. MOORE. *E. G. TINDLE.

Health Visitors.

tC. CARLTON, Chief Clerk.

H. WRIGHT. H. CARLTON. H. WARD. N. BRADLEY.
Miss M. FAWTHROP.
Assistant Clerks.

F. WILSON, Matron, Fever Hospital.

*W. DAVIDSON, Matron, Sanatorium.

P. SHARP, Removal Officer.

*Salary contributed to, under Public Health Acts or by Exchequer Grants. †Certificate Sanitary Inspector, Royal Sanitary Institute.

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

§Certificate Central Midwives Board. ||Health Visitor's Certificate.

> The Analyst for the Borough is Mr. H. T. LEA, B.Sc. (Hons.) M.Sc.; F.I.C.

COUNTY BOROUGH OF HALIFAX.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH, FOR THE YEAR 1929.

INTRODUCTION.

To the Chairman and Members of the Health Committee.

MR. CHAIRMAN, MADAM AND GENTLEMEN,

I have the honour to submit to you, in accordance with the Sanitary Officers' Order, 1922, my Second Annual Report, being the fifty-seventh of the series, for the year ended, December 31st, 1929.

* * * *

The Report is more than a collection of tabulated statistics. It is an endeavour to enlighten public opinion negarding conditions affecting the health of the people of Halifax. It contains reference to many Acts of Parliament, but the unltimate success or failure of a public health service depends not so much upon Acts of Parliament as upon the desire of the public to be healthy.

* * * *

The arrangement follows that of last year's Report. The births registered were 1,313. The birthrate consequently was 13.4. For England and Wales the rate was 16.3 and in the 107 Great Towns it was 16.6. The total male births numbered 675, the female births 638, being a proportion of 1,057 males to 1,000 females.

The deaths numbered 1,522 compared with 1,286 last year; 1,584 in 1927; 1,375 in 1926; 1,657 in 1925. For 1929 the deathrate was 14.7. The deathrate for England and Wales was 13.4.

The excess of deaths over births was 209 or 2.1 per 1,000 population.

* * * *

It is interesting to note that in the last twenty years the excess of births over deaths in England has declined from 11.6 to 4.3 per thousand, but the population has increased some three millions since 1910.

* * * *

During recent years there has been a steady diminution of the deathrate pari passu with the birthhrate, but not to so great an extent.

* * * *

For the past two years decrease in the birthrate and decrease in Infantile Mortality have been outstanding features of our vital statistics.

* * * * .

High birthrates are usually associated with high infant mortality rates, but recent measures for the prevention of infant mortality have reduced the latter.

* * * *

In 1871 the expectation of life of a male at birth was $41\frac{1}{2}$ years. It is now $55\frac{1}{2}$ years. A normal man of 35 to-day can expect to live $33\frac{1}{4}$ years longer, whereas in 1871 the figure was $28\frac{1}{2}$ years. Medical Science has effected a great diminution in the mortality of childhood. This is a tribute to our Infant Welfare work. But there has been no such diminution in the mortality of the mature.

* * * *

Respiratory diseases bulk largely in the Death Returns of the town. These diseases are predisposed to by impurities in the air inhaled coupled with severe climatic conditions. Vital statistics show a high respiratory death-rate in the industrial towns of the North as compared with agricultural areas in the South.

Organic Heart Disease was the greatest single cause of death. Rheumatism is the commonest cause of Organic Heart Disease. The foundation of Heart Disease is commonly laid in childhood or young adult life. In many cases few symptoms are minifested until middle age or

later. So called "growing pains" in children are usually due to Rheumatism. Approximately two-thirds of rheumatic heart diseases commence during school life. Damp and sunless houses predispose to rheumatic diseases. More people die of Heart Disease than are killed by motor cars, railways, fires, homicides, suicides and drowning all put together.

Arterio-Sclerosis (hardening of the coats of the arteries) was another common cause of premature senility and death. Syphilis, excessive alcohol, excessive meat indulgence, intestinal infections, worry and anxiety are usually cited as the chief agents in the causation of Arterio-Sclerosis. But in many cases none of these causes operated. The liability in certain families to early arterial degeneration is well known. It would appear that in some families inferior material is used in the tubing.

* * * |*

Maternal Mortality continues a problem. We are still trying to find an explanation of its stationary deathrate. The position now is little better than it was 20 years ago. Nevertheless the faith of all those who are concerned with maternal welfare is to reduce it considerably. Future method of fighting the condition will include increased institutional facilities, the prevention and treatment of sepsis, ante-natal supervision of the expectant mother, the provision of specialists and the raising of the status of the midwife. The field of maternal hygiene is varied in character and of far-reaching importance, and much of it still remains uncultivated.

* * * *

Cancer and Tuberculosis are dealt with at length in the body of the Report. Despite the continued existence of many incurable diseases the expectation of life is increasing. This means that preventable diseases are being prevented, and, as a necessary corollory, disease and ill-health are being diminished. The goal to be aimed at is a time when deaths from true old age will replace the unnatural deaths which the human organism now all too often experiences.

* * * *

Preventive medicine the world over has saved millions of lives, and it is saving them to-day. That prevention paid, and paid handsomely was beginning to be realised. A most important function of a Public Health Service should be to teach people not to die except from true old age.

The Maternity and Child Welfare Clinic continues to do excellent work. This is reflected in a decreasing infantile mortality rate, in a general improvement in the health of children under school age and in increasing attendances at the Clinics. I feel confident that soon the Psalmists span of three score years and ten will become the birthright of all children. Maternity and Child Welfare Clinics would probably repudiate the title of Child Benefactors but I am sure that they have earned it.

If some modern institutions discourage us, others are full of hope and promise. To-day the world is an infinitely healthier place for mankind than it was eighty or even forty years ago. The modern hospital has banished Mrs. Gamp, and with the widespread provision of Clinics we are beginning to recognise the nations right to health. Of course much remains to be done before every citizen enters into—the heritage nature has provided—a healthy mind in a healthy body. In all these things the Public Health Service has played—and is playing—a great part.

* * * *

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, Madam and Gentlemen, for the encouragement and support you have at all times given me since I commenced my duties in Halifax.

I am,

Your obedient Servant,

(Signed) G. C. F. ROE,

Medical Officer of Health.

Health Department, Powell Street, Halifax. July 1930.

REPORT.

Statistics.

ADEA (
AREA (acres)			13,984
POPULATION.			
	ccurred in the	population o	ver a period :-
1901 Census			104,944
1911 Census			101,553
1921 Census (ad			100,700
	General's Esti	mate	100,500
1923 "	,, ,,		99,840
1924 "	,, ,,		98,750
1925 "	" "	for Birth	
1925 "	" "	for Deathr	
1926 "	"	for Birthr	, , ,
1926 "	" "	for Deathr	,,,,
1927 "	" "	for Birth	
1927 "	" "	for Deathi	
1928 ,,	" "	for Birthr	2, 1, 1
1928 "	"	for Deathr	
1929 "	"		. 21.31
1929 "	" "	for Deathr	
		ice between the '	
civilians are no	ot included when	calculating the dea	thrate, but
	ded when calculati		
Standardising fig			
This is the figure multiplied in	order to correct	deathrate of Halifa for the peculiar a	ax must be
distribution of	the Halifax popu	lation. The resu	lting figure
	re accurate compa lalifax and that of	rison to be made l	between the
			Comous
Structurally sepa	SHALL		26 -26
Number of famil	ies or senarat	e occupiers (
1921)	separat	··· occupiers (26.830
Rateable Value	VO	3 501	£641,769
Sum represented	by a penny	rate	£2,440
Births.	and de la contraction de		
386600000000000000000000000000000000000	Malas 6 tai	Famalas '6a6	T-11 26
Legitimate	Wales 040	Temales 000	Total 1,240
Illegitimate T	viales 35	remaies 32	lotal 07
Total	1 D: 12	32	10141 07
	al Births	1,31	3.
Birthrate per 1,0	al Births	1,31	3.

Average 10	years,	1880-1889)	29.3	
,,	,,	1890-1899)	24.2	
,,	,,	1900-1909)	20.0	
,,	,,	1910-1919		15.9	
" 5	,,	1921-192	5	15.6	
		1000			
		14.			
		14.			
	-	13.			
		12.0			
19	29	13.	4		
Deaths.					
Males 691	Fem	ales 831		Total	1.52
Deathrate per 1,000		THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.			15.0
" " Ţ					14.
					100
Average 10	years,				
,,	"	1890-1899			
***************************************	"	1900-1900			
" -	"	1910-191			
" 5 19251	6.9 5	Standardised)
19261		standardised			
19271	6.4	Standardised	l	15.4	1
19281		Standardised			
19291	5.0	Standardise	1	1 497	7
Infant Mortality.					
Deaths of in	fants 11	nder I vea		100	
Rate per 1,	ooo bi	rths		76	
(Legitimate	69, III	legitimate of	94).		
Average 10			9	.159	
,,	"	1890-189			
,,	==	1900-190			
"	"	1910-191	100		
,,	"	1920-19.	-	. 09	
		9			
		9			
		9			
		9			
		9			
				2.50	
100 101	929	7	0		

Summary of Deaths.

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

Cause of I	Death			Numbe
Enteric Fever	-	***		1
Smallpox				1
Measles				3
Scarlet Fever				3
Whooping Cough				14
Diphtheria				9
Influenza				58
Encephalitis Lethargica				2
Meningococcal Meningitis				_
Tuberculosis of respiratory sys	tem			68
Other Tuberculous Diseases				15
Cancer, Malignant Disease				170
Rheumatic Fever				2
Diabetes				24
Cerebral Hæmorrhage, etc.				100
Heart Disease		***		308
Arterio-sclerosis	***			100
Bronchitis				91
Pneumonia (all forms)				88
Other Respiratory Diseases				15
Ulcer of Stomach or Duodenun	n			8
Diarrhœa, etc	1			19
Appendicitis and Typhlitis	***	***		3
Cirrhosis of Liver	***			5
Acute and Chronic Nephritis		***		49
Puerperal Sepsis	***			3
Other Accidents and Diseases urition		gnancy and	d Part-	6
Congenital Debility and Malfo		Premature	e Birth	53
Suicide				21
Other deaths from violence				54
Other defined Diseases				228
Causes ill-defined or unknown				1
		Total		1,522

\$ WHEN PERSON NAMED IN		_						_
r 1,000 ths	Toral Deaths	74	79	110	96	62	90	16
Rate per 1,000 Births	Diarrhosa and Enteritis (under two years)	8.1	10.9	3.7	6.7	8.4	2.0	0.9
100	Influenza	0.74	0.76	0.23	0.73	0.14	0.00	0.29
l oo	Diphtheria	80.0	60.0	0.05	0.00	60.0	0.08	60.0
1,000 Population	Whooping Cough	0.15	0.19	0.19	0.00	0.10	90.0	0.14
per 1,000	Scarlet Fever	0.05	0.02	0.01	0.01	0.01	0.05	0.03
thrate po	Measles	0.08	0.12	0.10	0.08	0.05	0.50	0.03
Annual Deathrate	xo4-llsm2	0.00	00.0	00.0	0.00	0.00	00.0	0.01
Anı	Enteric Fever	0.01	0.01	0.00	0.01	0.01	0.00	0.01
	ALL CAUSES	13.4	13.7	14.9	15.3	14.3	154	14.7
	Birthrate per 1,000 Total Population	16.3	16.6	15.9	14.9	14.5	13.8	
	Year	1929	1929	1922	1924	1926	1927	1929
	to dent in	England and Wales	107 County Boroughs and Great Towns including London	HALIFAX	The second second			The second secon

(Provisional figures. The rates have been calculated on a population estimated to the middle of 1929. 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).

Deaths from Vehicular Traffic.

Number of street accidents having fatal termination, 9; eight of which were due to motor vehicles.

Motor transport speed and noise have a more direct effect upon the public health than is generally supposed.

In addition to deaths, injuries and nervous disorders, there is an increasing number of complaints of headaches on the part of the people walking in crowded streets, prebably due to motor exhaust fumes which hang about the streets, and cause vasomotor disturbances when inhaled. Carbon monoxide is the poisonous component of exhaust gases. It is especially dangerous when discharged into closed cars or closed garages.

Methods for diluting or destroying the gas are not easy to imagine. It is rendered less dangerous by efficient engines and carburettors.

Cancer.

Cancer is the most dreaded of all diseases. The cause of Cancer is still very much in dispute. A great deal of research has been expended on Cancer, but so far neither the cause nor the cure have been discovered. The following preventive points in connection with Cancer are of general interest:—

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

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 25 early and 25 other cases. It is provided by the Halifax Corporation and receives cases from other districts, including Lancashire County and West Riding County.

The Health Committee has a call on 5 beds at the Bermerside Residential School for children in the pretubercular stage, or children suffering from 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, but the arrangements by which the Corporation assisted persons to enter these institutions were not greatly used, and were discontinued. The Corporation makes a grant of £300 per annum towards the Infirmary Maternity Home.
- Hospital for Children—The Education Committee has an arrangement with the Royal Halifax Infirmary with reference to operations on tonsils and adenoids, and the Maternity and Child Welfare Committee an arrangement with the same Institution for the treatment of Ophthalmia Neonatorum.
- Fever Hospital—The Corporation provides the Stoney Royd Fever Hospital which admits cases of Scarlet Fever, Diphtheria, Enteric and other fevers from Halifax, and from the areas of neighbouring Local Authorities. Accommodation for 52 cases.
- Small Pox—The Halifax Corporation maintains the Small Pox Hospital at Belle Vue, Mount Tabor, which has accommodation for 36 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 60.

AMBULANCE FACILITIES: -

(a) For Infectious Cases-

The Corporation's Motor Ambulance Service, 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).
 - (2) The Ambulance Service of the St. John Ambulance Brigade and British Red Cross Society.

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

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

CLINICS AND TREATMENT CENTRES-

The following are all provided by the Halifax Corporation: Maternity and Child Welfare Centres (2). See page 63.

School Clinic, Horton Street-

Medical Inspection-Two half-days per week.

Minor Ailments-Six half-days per week.

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

Ophthalmic-Two half-days per week.

Remedial Exercises—5 full days.

An Orthopaedic Clinic is now in operation.

Tuberculosis Clinic, 8, Clare Road. See page 56.

Venereal Diseases Clinic, Royal Halifax Infirmary. See page 60.

Public Health Officers of the Corporation:—

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

NURSING IN THE HOME—This is provided by:—
Halifax District Nursing Association.
Siddal Nursing Association.
Illingworth Nursing Association.
Luddenden Nursing Association.

General Nursing is not subsidised by the Local Authority.

MIDWIVES—See Maternity and Child Welfare Section, page

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 38), 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.

Legislation in Force.

List of Adoptive Acts, etc., Relating to Public Health in force in the District.

Public Health Acts Amendment Act, 1890.

Infectious Diseases (Prevention) Act, 1890.

A Local Act, 4 Geo. IV., cap XC.

Halifax Improvement Act, 1853.

Halifax Water and Gas Extension Act, 1876.

Halifax Corporation Acts, 1882, 1900, 1902, 1905, 1911, 1924, 1926.

Provisional Orders—Halifax Orders, 1851, 1881, 1924 and 1928.

Sanitary Circumstances

AND

Sanitary Inspection of the Area.

(including the Report of the Chief Sanitary Inspector).

I am indebted to Mr. Tipple, the Borough Engineer, for the particulars under these headings.

Rivers and Streams.

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

The few cesspools which exist in outlying districts are by systematic inspection and periodic cleansing maintained in a satisfactory condition. No overflow to watercourses is permitted. As building developments in the outer districts take place and sewers are extended, the few existing cesspools are likely to be done away with and drainage connected direct to sewers.

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

Sewerage.

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

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

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

I am indebted to Mr. J. W. Beaumont, Chief Sanitary Inspector, for particulars under the following headings:

Inspections made.

Dwellinghouses:-					
Recorded Inspections	-Hous	ing Act,	1925		329
Re Complaints					0
Re Infectious Disease				I	,178
					18
Re Cellar Dwellings	and U	ndergrou	nd Roc	oms	
Re Water Supply					326
Factories and Workshop	Acts:-				
Factories					77
					297
					335
Outworkers					5
Sampling:-					
Food and Drugs Act					274
Fertiliser and Feeding		Act			13
Bacteriological Exam	ination		115	107	57

Food Inspection:—	
Dairies and Milkshops	173
Ice Cream Premises	158
Fried Fish Shops	172
Other Food Premises	6
Smoke Abatement:-	
Smoke Observations	127
Visits to works re smoke	33
Drainage: -	
Drains Inspected	1,838
Duaina Tastad	256
Drains Tested	250
General:—	
Common Lodging Houses	46
Houses Let in Lodgings	298
Tents, Vans and Sheds	27
Stables	15
Accumulations of Manure	25
Swine, Fowls and other Animals	4
Places of Public Amusement-Theatres, Ci	nemas,
etc	24
Closet Conversion Scheme	1,780
Mental Defectives	76
Public Sanitary Conveniences	50
	1,411
Re-inspections and Miscellaneous Visits	1,411
Re-inspections and Miscellaneous Visits	
	10,324
Re-inspections and Miscellaneous Visits	-
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected.	-
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:—	10,324
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired	70
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired	70
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repair	10,324 70 29 red 63
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repaired Rainwater fallpipes renewed or repaired	70 70 29 red 63 44
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repaired Rainwater fallpipes renewed or repaired Rainwater fallpipes disconnected from descriptions.	10,324 70 29 red 63 44 drains 5
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repaired Rainwater fallpipes renewed or repaired Rainwater fallpipes disconnected from de Walls repaired and/or pointed	70 29 red 63 44 lrains 5
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repaired Rainwater fallpipes renewed or repaired Rainwater fallpipes disconnected from de Walls repaired and/or pointed Dampness remedied	70 70 29 red 63 44 lrains 5 31 21
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repaired Rainwater fallpipes renewed or repaired Rainwater fallpipes disconnected from de Walls repaired and/or pointed Dampness remedied Lighting improved	70 70 29 red 63 44 lrains 5 31 21 1
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repaired Rainwater fallpipes renewed or repaired Rainwater fallpipes disconnected from de Walls repaired and/or pointed Dampness remedied Lighting improved Ventilation improved	10,324 70 29 red 63 44 lrains 5 31 21 10
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repaired Rainwater fallpipes renewed or repaired Rainwater fallpipes disconnected from de Walls repaired and/or pointed Dampness remedied Lighting improved Ventilation improved Windows repaired—Cords, Fasteners, etc.	10,324 70 29 red 63 44 drains 5 31 21 10 103
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repaired Rainwater fallpipes renewed or repaired Rainwater fallpipes disconnected from de Walls repaired and/or pointed Dampness remedied Lighting improved Ventilation improved Windows repaired—Cords, Fasteners, etc. Firegrates renewed or repaired	10,324 70 29 red 63 44 drains 5 31 21 10 103 38
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repaired Rainwater fallpipes renewed or repaired Rainwater fallpipes disconnected from destroyed walls repaired and/or pointed Dampness remedied Lighting improved Ventilation improved Windows repaired—Cords, Fasteners, etc. Firegrates renewed or repaired Food stores provided or improved	10,324 70 29 red 63 44 lrains 5 31 21 10 103 38 35
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repaired Rainwater fallpipes renewed or repaired Rainwater fallpipes disconnected from de Walls repaired and/or pointed Dampness remedied Lighting improved Ventilation improved Ventilation improved Firegrates renewed or repaired Food stores provided or improved Food stores provided or improved Floors relaid or repaired	10,324 70 29 red 63 44 lrains 5 31 21 10 103 38 35 24
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired Chimney Stacks renewed or repaired Rainwater eaves, gutters renewed or repaired Rainwater fallpipes renewed or repaired Rainwater fallpipes disconnected from described walls repaired and/or pointed Dampness remedied Lighting improved Ventilation improved Windows repaired—Cords, Fasteners, etc. Firegrates renewed or repaired Food stores provided or improved Food stores provided or improved Wall and/or ceiling plaster renewed or re	10,324 70 29 red 63 44 lrains 5 31 21 10 103 38 35 24 epaired 66
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired	10,324 70 29 red 63 44 lrains 5 31 21 10 103 38 35 24 epaired 66 25
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired	10,324 70 29 red 63 44 lrains 5 31 21 10 103 38 35 24 epaired 66 25 104
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired	10,324 70 29 red 63 44 lrains 5 31 21 10 103 38 35 24 epaired 66 25 104 60
Re-inspections and Miscellaneous Visits Total No. of Inspections and Re-inspections Sanitary Improvements Effected. Houses:— Roofs renewed or repaired	10,324 70 29 red 63 44 lrains 5 31 21 10 103 38 35 24 epaired 66 25 104 60

Lavatory and/or bath waste pipes trapped and	or	
disconnected from drains		4
Washing boilers provided or repaired		12
Yard and/or passage surfaces relaid or repaired		24
Water supply provided or improved		104
Cleansed and/or vermin disinfested		14
Overcrowding abates		9
Closure of cellar dwellings or underground roo	ms	7
Other sanitary defects remedied		24
Closet Accommodation:—		
Privies converted into water closets		7
Privies converted into pail closets		II
Privies abolished		12
Pail closets converted into water closets		5
Pail closets abolished		5 8
Pail closets repaired		6
Water closets reconstructed or repaired		36
Water closets provided with sufficient supply	of	
water		13
Water closets (additional provided)		12
Water closets soil and/or vent pipes renew	ed	
or repaired		2
Ashpits: —		
Abolished		5
Ash tub places repaired		34
		34
Drainage: —		
Drains tested	•••	103
New drains constructed Drains reconstructed		
Drains repaired or classed		60
Drains disconnected from source		330
		24
Factories and Workshops:-		
Cleansed and limewashed		16
Sanitary accommodation improved		10
Additional sanitary accommodation provided		38
Ventilated intervening spaces provided		8
Separate sanitary accommodation for sexes pr	0-	
vided		4
Smoke Abatement:-		
Black smoke nuisances abated		9
Common Lodging Houses.		MIN
Common Lodging Houses:— Cleansed and limewashed		20
Sanitary condition improved		20
		I
Houses Let in Lodgings:-		
Cleansed and limewashed		89
Sanitary condition improved		17
Nuisances abated		9

General:
Sanitary condition of stables improved 4
Manure accumulations removed 24
Swine, Fowls and other animals—nuisances abated 11
Places of Public Amusement—sanitary condition
improved 2
Public sanitary conveniences improved 2 Miscellaneous 31
Statutory Action.
Matters reported to the Health Committee for Statutory action were as follows:—
Housing Act 1925.
Defective sanitary condition (Section 3) 19 houses Owner's name, etc., not in rent book (Sec-
Illegal occupation of dwellinghouse (Section
12) I house
Public Health Act 1875. Defective drainage (Sections 91 and 94) 3 houses
Insufficient sanitary accommodation (Sec-
tion 36) I house
Polluted well (Section 70) 4 houses
Cellar dwellings illegally occupied (Sections
72 and 73) 2 houses Overcrowded caravan (Sections 91 and 94) 1 house
No manure pit; defective yard surface (Sec-
tions 91 and 94) 4 stables
Public Health Act 1875 (Section 41).
Public Health Acts Amendment Act 1890 (Section 19).
Defective single private drain 6 houses Public Health Act 1875 (Section 41).
Public Health Acts Amendment Act 1890 (Section 19).
Halifax Corporation Act 1905 (Section 43).
Defective single private drain 4 houses
Public Health Acts Amendment Act 1890 (Section 22).
Halifax Coropration Act 1900 (Section 130).
Insufficient sanitary accommodation I bakehouse Halifax Corporation Act 1900 (Section 122).
No proper and sufficient water supply 2 houses
Public Health Act 1875 (Sections 116-117).
Public Health Acts Amendment Act 1890 (Section 28).
Public Health (Meat) Regulations 1924 (Art. 20).
Exposure of unsound food for sale, dirty
shop premises, etc 1 shop Milk and Dairies (Consolidation) Act 1915.
Milk and Dairies (Amendment) Act 1922.
Milk and Dairies Order 1926.
Milk retailers struck off Register or refused
Registration 3

21
Prosecutions during 1929.

Date	Act	Offence	Penalty
5/3/29	Milk and Dairies (Amendment) Act, 1922	Unlawfully carrying on the trade of retail purveyor of milk whilst unregistered	Fined £1
28/5/29	Milk and Dairies Order, 1926	Failure to remove dirt from cows before milking	Fined £2
2/7/29	Public Health Act, 1875; Public Health Acts (Amendment) Act, 1890; Public Health (Meat) Reg- ulations, 1924	(1) Exposure of unsound food for sale. (2) Failure to keep all trimmings, &c., in covered receptacles. (3) Failure to take reasonable steps to prevent contamination of meat by flies. (4) Accumulation of refuse and filth in room in which meat was exposed for sale. (5) Failure to cause walls and and ceilings to be whitewashed, &c., as often as necessary. (6) Failure to observe due cleanliness with regard to room of which he was occupier and in regard to apparatus and utensils therein	Fined £5 on each charge, total £30
5/7/29	Milk and Dairies Order, 1926	Milking cows whilst wear- ing unclean clothes Failure to remove milk from cowshed. Failure to keep milk uten- sils in clean condition	Fined £15
12/7/29	Food and Drugs (Adulteration) Act, 1928	Selling cream containing boric acid	Fined £1
12/7/29	Food and Drugs (Adulteration) Act, 1928	Selling milk deficient in fatty solids	Fined £1
12/7/29	Food and Drugs (Adulteration) Act, 1928	Selling milk deficient in fatty solids	Fined £1
3/12/29	Shops (Hours of Closing) Act, 1928	Selling fish after hours	Fined £1
31/12/29	Housing Act, 1925	Occupying and permitting to be occupied a dwelling- house upon which a Clos- ing Order was in force	Adjourned for 2 months, after which summons against occu- pier & owner was with- drawn follow- ing an order for possession granted to owner

Factories and Workshops.

Factory and Workshop Act 1901.

Public Health Acts (Amendment) Act 1890 (Section 22).

Halifax Corporation Act 1900 (Section 130).

Workshops.

The number of workshops on the register at the end of 1929 was 604.

632 visits were made to workshops and 77 to factories, and the various conditions necessitating action by the Department are set out in the following Table.

Eighteen Notices under Section 5 of the Factory and Workshops Act 1901, were received from H.M. Factory Inspector, eleven being in respect of factories and seven of workshops.

Of these the following were remedied during the year, including one factory and one workshop carried over from the end of 1928:—

Factories 10 Workshops 8
Notices outstanding at the end of the year 3

The administration of the Factory and Workshop Act 1901, in connection with

FACTORIES, WORKSHOPS AND WORKPLACES.

1. Inspection of Factories, Workshops and Workplaces.

	Number of				
Premises	Inspections	Written Notices. Informal	Occupiers Prosecuted		
(1)	(2)	(3)	(4)		
Factories (including Factory Laundries)	77	7	-		
Workshops (including Workshop Laundries)	632	1	-		
Workplaces (Other than Outworkers Premises)		-	-		
Total	709	8			

2. Defects found in Factories, Workshops and Workplaces.

Particulars	Num	ber of De	efects	Number of offences in respect of which
	Found	Remedied	Referred to H.M. Inspector	Prosecutions were instituted
(1)	(2)	(3)	(4)	(5)
Offences under the Public Health Acts— Want of cleanliness	6	6		
Want of ventilation	2	2		
	4			
Overcrowding				
Want of drainage of floors				
Other nuisances				
Sanitary Accommodation: Insufficient, unsuitable, or defective	10	10		
Not separate for sexes	2	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 Sec- tions mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers Order 1921.)				
Total	20	19		

Bakehouses.

Factory and Workshops Act 1901. Ministry of Health Act 1919. S.R.O. 958 of 1926.

Defective water closets		I
Used as sleeping room		I
Separate sanitary accommodation provided		2
Accumulation of rubbish removed		I
Smoke Abatement.		
Public Health Act 1875. Public Health (Smoke Abatement) Act 1926.		
		130
Number of Firms represented		133
Number of Offences against Black Smoke Byelaws		
Number of Informal Notices served		6
Number of Statutory Notices served		
Total minutes of dense black smoke emitted dur		
observations	6	7.5
Average minutes of dense black smoke emitted	per	

NOTE.—The Black Smoke Byelaw referred to states that the emission of black smoke for a period of two minutes in the aggregate within any continuous period of thirty minutes, be presumed to be a nuisance, and was made on the 26th day of April, 1928, in pursuance of Section 2 of the Public Health (Smoke Abatement) Act 1926. As a result of the Public Inquiry held at Bradford in July, 1928, the Minister of Health allowed the Byelaw but with the following reservations:—(1) That black smoke must be emitted for a period of not less than three minutes in the aggregate within any continuous period of thirty minutes before a nuisance may be presumed. (2) In calculating the said aggregate it includes the emission of smoke from more than one chimney of the same building.

hour of observation

It is very unfortunate that the Ministry of Health should have been prevailed upon to vary the original Byelaw which provided that the emission of black smoke for a period of two minutes in the aggregate within any continuous period of thirty minutes, from any building other than a private dwellinghouse, constituted a nuisance until the contrary was proved, since as a result the uniformity for which the West Riding of Yorkshire Regional Smoke Abatement Committee has been striving ever since its inception in 1925, has received a definite set-back. Under existing conditions it is possible—and in many cases is a fact—that a manufacturer situate on the outskirts of the district of one local authority may have to conform to a two-minute Byelaw, whilst his neighbour situate one

hundred yards away but in another district, may be allowed fifty per cent. more latitude as he is only required to conform to a three-minute Byelaw. This inconsistency is accentuated when it is considered that the chimney discharging the greater amount of smoke may, because of its position having regard to the direction of the prevailing winds, be a greater nuisance to residents over the border than to those within the same district.

The Regional Smoke Abatement Committee referred to has certainly justified its existence by the work accomplished in securing so far as it is possible, uniformity throughout the area in regard to the manner in which smoke observations should be taken, a definition of what shall be deemed to constitute black smoke, and the general administration of the Public Health (Smoke Abatement) Act of 1926. It has also endeavoured to educate the public in the use of smokeless fuels, solid and gaseous, and has taken steps to endeavour to get available supplies of solid smokeless fuels augmented by sending Resolutions upon the matter to the Ministry of Health.

Definite action has been taken to educate all stokers and boiler attendants in the area, in the proper use of coal for steam raising purposes which necessitates some knowledge of the principles of combustion. Arrangements are almost completed for the putting into operation of an Examination Scheme and a Board of Examiners is already formed. Under this Scheme it will be possible for any stoker or boiler attendants to attend an approved course of instruction at convenient centres, at the conclusion of which an examination will be held under the auspices of the Regional Smoke Abatement Committee and certificates will be awarded to all successful candidates. It is hoped that manufacturers generally will give all possible support to this project, the benefits of which must surely be reflected in the clearer skies, purer atmosphere, and increased health of all dwellers in industrial towns.

Local Authorities within the West Riding are now being requested to supply data respecting atmospheric pollution, daylight and actinic light records, to the Regional Committee for tabulation, information, and guidance to them in the formulating of further schemes for improving the atmosphere of our industrial area. In this connection, it is pleasing to note that the Halifax County Borough Council has decided to take an active part in this work, and we hope very shortly to have five Standard Deposit Gauges erected in suitable positions in different parts of the Borough. One of these will be situate in Wade Street about two hundred yards East of the Town

Hall, where atmospheric pollution is probably at its maximum in our area, and it is intended to erect others at Belle Vue Park (about half-a-mile West of the Town Hall and in an industrial area), Akroydon Park (about threequarters-of-a-mile North of the Town Hall), Royal Halifax Infirmary grounds (about one mile South of the Town Hall), and the last one in some position further in the suburbs, and where atmospheric pollution is considered to be at its maximum. At the two stations representing the maximum and minimum amount of atmospheric pollution it is intended to obtain actinic light and daylight records also. It will be interesting to note the variation between the records obtained at these stations, which will undoubtedly prove to be considerable.

Human beings, animals and plants, are not designed to breathe a polluted atmosphere, and cannot do so with impunity. A man breathes about 30 lbs. of air in 24 hours; eats about 2.7 lbs. of food, and drinks about 4.5 lbs. of water. He therefore consumes over four times more air than food and water combined, hence the vital importance of an unpolluted atmosphere.

It must be admitted that there is an enormous amount of impurity in the atmosphere of all industrial towns

especially, which is preventable.

The setting up of these Standard Deposit Gauges in Halifax will supply us with scientific data as to the nature and amount of this pollution locally, affording us means of comparison with other similar towns, and above all, should assist in determining what remedial measures should be adopted.

The following information will tend to show that Halifax does not lag behind other local authorities in its efforts to reduce to a minimum the amount of atmospheric pollution due to the burning of raw soft coal.

Solid Smokeless Fuel produced at Gasworks:—During the past five years an average of nearly 21,000 tons per annum has been sold. This is estimated to be roughly about one-third of the total weight of solid fuel burned in the domestic grates in Halifax.

Gas Appliances in use:—There are 57,397 of these in use within the Borough, made up as follows: Cookers, 15,196; Fires, 7,145; Washpans or Boilers, 15,224; Water Heaters, 460; Radiators, 742; Gas Engines, 138; Furnaces, 14; Other appliances, 18,478.

It is particularly interesting to observe that during the last twelve months the sales have increased by the following percentages: Cookers, 34 per cent.; Fires, 29 per

cent; Washpans or Boilers, 137 per cent.; Water Heaters, 91 per cent.; Radiators, 54 per cent.; other appliances, 84 per cent. These figures undoubtedly show that the public have a growing appreciation of the benefits to be derived from the use of gaseous fuel.

On the electricity side also great advances have been made. More than 700 Cookers and 300 Washpans or Boilers have been supplied, whilst during the past twelve months, Water Heaters and Tubular Heating has been installed in various buildings, accounting for an aggregate of 647,900 British Thermal Units. During the same period 76 Electric Motors have been fixed, totalling some 484 H.P. Other electrical appliances fixed during the year aggregated 3,410,000 British Thermal Units.

I am indebted to Mr. McLusky, Gas Engineer and Manager, and Mr. Rendell-Baker, Electrical Engineer and Manager, for the information and help I have received from them.

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, and the Rat's and Mice (Destruction) Act 1919, for the particulars given below:

Half holiday	Closing Visits			005
		•••	***	887
	Half-holiday Visits			613
THE RESIDENCE OF THE PARTY OF T	& Administrative Visi	ts		520
Special	"			274
Shops Early	Closing ,,			555
Children's I				730
	description) Act "			266
	ce (Destruction) Act V			515
			(0 "	
Shops withou	it Assistants Half-holid	ay Noti	ice (Sec. 1)	45
Do.	Young Persons'	,,	(Sec. 2)	27
Do.		,,	(Sec. 10)	140
Do.		Notice	(Sec. 4)	109
Do.	Seats for Female Ass	sistants	(Sec. 3)	8
Contraventio	n of Mealtimes	(Sec.	1, Sub. 5)	16
Do.	Assistants Half-holida			44
Do.	Half-holiday Closing		(Sec. 4)	326
Do	Early Closing Act or	Orders	(Sec. 5)	246
		(1	920 21 & 1928	(at)
Do.	Young Persons' Houn	S	(Sec. 2)	1
Do.	Children's Bye-Laws			42
Warning No				11
The state of	tices sent	***		11

Prosecutions.

At the Borough Court on Tuesday, 3rd of December, 1929, a local Greengrocer was fined £1 for selling Fish (Hallibut) at 9-38 p.m. on Saturday, the 19th October, 1929.

Rats and Mice (Destruction) Act, 1919.

Number of premises that are or have been rat-infestec	
during the year	112
Premises temporarily clear after Rat Week	38
Premises where numbers were reduced	42
Premises at present rat-infested	64
Visits paid to rat-infested premises in Rat Week	181
Visits paid to rat-infested premises during the year	515
Number of rat tails brought to the Health Department	
during Rat Week	202
Number of rat tails brought to the Health Department	
during the year	851
Number of rats killed in addition	348

The visitation of the Borough for the purposes of the National Rat Week, revealed clearly, that the rat population of the town and district has diminished considerably, particularly on the outskirts of the town. Premises formerly infested are now only occasionally visited by the rodents and farmers particularly ascribe the success achieved to keeping cats, others to giving the rats—(no rest). The policy of—no rest—is the only safe one, and whether cats or dogs, poison or trap is used, this policy must be persisted in, if the rodents are to be cleared from the premises.

Housing.

UNFIT DWELLING HOUSES.

.—Inspection.	
1. Total number of dwellinghouses in- spected for housing defects (under the Public Health or Housing Acts)	1,569
2. Number of dwellinghouses which were inspected and recorded under the Housing Consolidated Regulations 1925	329
3. Number of dwellinghouses found to be in a state so dangerous or injurious	329
to health as to be unfit for human habitation	Nil
4. Number of dwellinghouses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human hab-	
itation	871
.—Remedy of defects without service of formal notices.	
Number of defective dwellinghouses rendered fit in consequence of in- formal action by the Local Authority	
or their officers	846
A. Proceedings under Section 3 of the	
Housing Act 1925.	
of which notices were served requiring repairs	11
2. Number of dwellinghouses which were rendered fit after service of formal notices—	
(a) by owners (b) by Local Authority in de-	*8
fault of owners 3. Number of dwellinghouses in respect	*26
of which Closing Orders became operative in pursuance of declarations by owners of intention to close	None
B. Proceedings under Public Health Acts.	-,0110
of which notices were served requiring defects to be remedied	14

	2. Number of dwellinghouses in which defects were remedied after service of formal notices—	
	(a) by owners	9
	(b) by Local Authority in de- fault of owners	5
C.	Proceedings under Section 11, 14 and 15 of the Housing Act 1925.	
	I. Number of representations made with a view to the making of Closing	
	Orders	None
	2. Number of dwellinghouses in respect of which Closing Orders were made	None
	3. Number of dwellinghouses in respect of which Closing Orders were de- termined, the dwellinghouses hav-	
	ing been rendered fit	None
	4. Number of dwellinghouses in respect of which Demolition Orders were	
	made	None
	5. Number of dwellinghouses demolished in pursuance of Demolition Orders	None

*Twenty-three of these houses were rendered fit, after the service of formal notices, prior to 1929.

Houses Let in Lodgings (Furnished Rooms).

There are 89 houses let in lodgings, containing 227 furnished rooms of which 222 are let furnished, whilst five are let unfurnished. 298 visits have been paid and the following details are given of work carried out during the year:—

Cleansed and limewashed ... 89
Sanitary condition improved ... 17
Nuisances abated 9

As previously recorded, nearly all the houses let in lodgings were outside the scope of the Byelaws, which excluded those where the rent or charge payable by each lodger was at a rate of over five shillings a week exclusive of furniture, and six shillings a week inclusive of any charge for the use of furniture.

It is pleasing to record that Byelaws have now been made under Sub-Section (1) of Section 6 of the Housing Act 1925, and we are at present awaiting their confirmation by the Minister of Health.

Under the new Byelaws we shall be able to deal with all our present houses let in lodgings, and they will be of invaluable assistance to us in obtaining adequate sanitary requirements and maintenance of cleanliness, etc., so essential in regard to this class of property.

Common Lodging Houses.

There are ten Common Lodging Houses which are registered to accommodate 592 lodgers. These are mainly supervised by the Police, although 46 visits have been made by Sanitary Inspectors in the Department, mainly in connection with preventive measures respecting Small-pox.

Each of these has been limewashed and cleansed twice during the course of the year under review, and in one case sanitary improvements have been effected.

Here again, new Byelaws have been adopted which are now awaiting approval by the Minister of Health.

Tents, Van-Dwellings, etc.

A total of 27 visits have been made to these during the year. Generally speaking, the sanitary condition of these premises has been maintained at a fair standard. At the same time it must be admitted that we are handicapped in dealing with this class of dwelling in that we have adopted no Byelaws regulating same. Neither has any action been taken to adopt any part of the Public Health Act 1925.

Inspection and Supervision of Food.

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

Milk Supply.

At the end of	the year there were on the Register:	
		2
Cowkeepers and	Dairymen (Wholesale only)	49
Cowkeepers and	Dairymen (Wholesale and Retail)	16
		91
Dairymen		57
Retail Purveyors	(Premises outside the Borough)	70
Retail Purveyors	(Premises within the Borough) 2	59
(The latter figure	includes 202 who are registered for t	he
	l milk under seal only).	

Dairies.

There are 57 dairy premises registered within the Borough and 173 visits have been made to these.

In a few cases new dairies have been provided including steam sterilizers for milk utensils, and many existing dairies have been considerably improved.

Address by M.O.H.

In June a meeting was convened by the local Associations to give the newly appointed M.O.H. an opportunity of meeting the Farmers and Dairymen of the district, when he addressed them on the subject of Bacteria under the title of "Our Invisible Foes." The meeting was also addressed by Mr. Burndred, Veterinary Officer of Blackburn, on the importance of Sterilization of Dairy Utensils, and general discussion led to other subjects such as tuberculosis in cattle, etc.

Milk and Dairies (Amendment) Act, 1922.

Under Section 2 of the Milk and Dairies (Amendment) Act 1922, six retailers were invited to appear before the Health Committee to show cause

- (a) one why registration should not be refused.
- (b) five why their names should not be removed from the Register.

In the case of objection Registration was refused.

In the cases of revocation, the retailers complied with the reason for their objection, namely, lack of storage.

Bacteriological Examination of Samples.

Total number of samples taken for bacteriological	ex-	*
amination as an index of general cleanliness		57
Number of samples taken within the Borough		19
Number of samples taken from sources outside	the	
Borough		13
Number of Graded Milk Samples		25
Number of samples taken from sources outside	the	
Borough for the detection of tubercle bacilli		II
'A difficulty with regard to the bacteriological e	xami	na-

A difficulty with regard to the bacteriological examination of milk as an index for general cleanliness is due to there being no agreement of standard of the age of the milk sample for examination.

In clean milk competitions it is a condition that the sample must not be of less age than 24 hours.

A large number of samples are examined in towns within a few hours after milking, which makes all the difference in real conditions of collection and keeping qualities.

Clean Milk Competition.

It is pleasing to report one entrant in the Senior Class of the Competition, who was awarded second place as well as the trophy for local competitors.

The usual inspections of cowsheds and examinations of cows have been interrupted on account of changes of staff; continuity is an important factor for progress.

The Milk and Dairies Regulations bristle with anomalies which make it difficult for an official to interpret and explain, as people argue that if a Regulation applies to one it should apply to all, without qualification. It would have been less difficult to have required a cowkeeper selling milk in wholesale quantity to provide storage by means of a dairy as the Regulation requires a retailer to provide, than to have to prove definite contravention which the lack of suitable storage must entail.

It has been observed that the bottling of milk is on the increase. This might be considered a progressive step providing assurance was given of progressive care in the collection of the milk, also of the health of the cows, but I regret to have to state that these rarely go together.

Bottles are not always rinsed out by the householder before they are returned to the dairyman, consequently they require all the greater care in the process of cleansing. Sterilization by steam gives this assurance.

I consider that bottling of milk should not be allowed on premises unless there is satisfactory provision for the boiling of the bottles, or equipment for sterilization by steam, coupled with provision for cooling of the milk.

Steam sterilization of utensils and cooling the milk go hand in hand—are complementary to each other. The mere presence of steam will not kill bacteria—it must register 210°F with a certain amount of pressure, likewise it is no use passing water through a cooler unless it is cold.

The margin between the producer and retailer is generous, yet on account of the smallness of turnover in numerous instances, the return is insufficient, let alone allow the provision of equipment. Given more consolidated means of distribution it would be possible to encourage the producer—who takes the greater risk and

capital expenditure—with a fair return proportionate to the care exercised in its collection, at no extra cost to the consumer. Rationalization or organization would permit hygienic equipment of a standard which the distributor could not entertain. It would permit of suitable premises as a dairy where the milk could be received, instead of points on the roads, as at present, also proper delivery vehicles instead of motor cars without any name or indication of their business. What might be considered a luxury in the way of a Refrigerating Cooler would be a matter of ordinary equipment, yet what an advantage it would make in hot weather!

I would like to see greater control of supplies and would favour the Pasteurization of all supplies below the present bacteriological standard of Grade A.

Statutory Notices Article 12 (1).

Two notices were served on occupiers of cowsheds for the provision of more window space.

Article 25.

2 notices were served on occupiers of cowsheds to make the floor impervious. Of the outstanding notices 3 have discontinued, 2 complied, 5 remaining.

In one instance of the discontinued, another tenant took the farm which will require another Statutory Notice, with its period of grace.

In addition the following alterations were carried out:

Alterations to cowsheds for light ... 4
Alterations to cowsheds for floors ... 4
Dairies provided 8
Number of Dairy Cows examined... 2,112

Proceedings were instituted under the Milk and Dairies Order 1926, during the year as follows:—

- (1) A.G. Selling milk (unregistered), 20/-.
- (2) W. Contravention Article 23 (2), 40/- and costs.
- (3) S. Contravention Articles 1.5, 21 (1 and 3), 23 (5). £5 each offence. Total £15 and costs.

Milk (Special Designations) Order, 1923.

There are within the Borough two producer-retailers of graded milks, one producing Certified Milk and the other Grade A. In addition a producer of Certified Milk outside the Borough has several agents within the Borough.

Tuberculosis Order-Diseases of Animals Acts.

Number of Reports		 II
Number of Reports confirmed		 7
Tuberculosis of the Udder		 4
Bacteriological examinations of	Milk	 1.4
Number reported positive		 2
Number of cattle examined		 74

Proceedings taken for failing to report a (diseased) indurated udder. Withdrawn.

Failing to keep a Register of Record of Movement. £5 and costs.

Failing to isolate a cow under detention. 20/- and costs.

Public Abattoir.

This was formally opened in October, 1929, but was not equipped completely. Disadvantages have been experienced with regards to:—

- (a) The isolation slaughter hall being used for public slaughtering.
- (b) Lack of cages for placing any carcase and offal under detention.
- (c) Lack of suitable cages for the depositing of offal of slaughtered animals, with the result the butchers have removed their offal immediately after slaughter to prevent loss by theft.

Private Slaughterhouses.

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

Cattle.	Calves.	Sheep and Lambs.	Pigs.
275	35	1050	75

Meat Inspection, etc.

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

De	Number of Visits			
Public Slaugh	terhous	е		 553
Private Slaug				 123
Borough Marl				 304
Wholesale Ma				 294
Lairages				 200
Potted Meat 1	Houses			 339
Tripe Boiling	Houses	3		 150
Butchers' Sho				 1634
Cowsheds	1			 805
Dairies				 314
Auction Mart				 72
Other Visits				 486
		Total		 5,274

It is pleasing to report that there has been a great improvement in the equipment of butchers' shops as fully 80 per cent have installed mechanical refrigeration.

The following Table shows the number of animals slaughtered during the year, the number condemned, and the total weight of the same:—

	Cattle.	Calves.	Sheep and Lambs.	Pigs.	Offals.	Total.
Number of Animals slaughtered at the public slaughter-house	9373	1983	23730	5340	lbs.	40426
Do. condemned	53	11	14	37		115
Number Condemned on account of Tuberculosis	48		1	16	6287	65
Any Weight of those	35200	551	639	3117	10398	49905

NOTE.—Of the 53 beasts condemned 5 were received under the Tuberculosis Order 1925.

I sheep was condemned on account of Tuberculosis, confirmed by Cambridge University. This is the third within recent years.

Tuberculosis has been less prevalent among pigs than in former years.

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 Total Amount of Offals Destroyed	1bs. 47612 10399
Total Amount of Meat Destroyed on account of Tuberculosis	40786
Total Amount of Offals Destroyed on account of Tuberculosis	6287
Total Amount of Meat Destroyed from other causes	6826
Total Amount of Offals Destroyed from other causes	4112
Total Meat and Offals Destroyed	58011

Kinds of Food Des	Quantity in lbs.		
53 Carcases of Beef			 35200
Beef not in Carcase			 7450
11 Carcases of Veal			 551
15 Carcases of Mutton an	d Lamb		 639
Mutton in Carcase			
Chilled and Frozen Beef			
37 Carcases of Pork			 3117
Pork not in Carcase			 655
127 Rabbits			 261
Fish			 1972
Fruit and Vegetables			 3187
Canned Provisions			 703
Shell Fish			 1120
	Total	Weight	 54855

Proceedings were instituted for slaughtering on unlicensed premises. Penalty 40/- and costs.

Offensive Trades.

These premises have been visited regularly during the year, and in one case namely, a knacker's, a new floor was laid.

Food and Drugs (Adulteration) Act 1928.

During the year 274 samples of Food and Drugs have been procured and submitted to the Public Analyst, who certified 257 samples genuine, and 17 samples adulterated (i.e., 6.20 per cent. adulteration).

Preservatives. All samples of Milk and Butter, and any articles likely to contain preservatives are examined for the same.

Informal or Test Samples. It will be seen from the tabular statement (Table I) that 123 informal samples were taken during the year and submitted to the Public Analyst for analysis. These samples are frequently purchased by an agent, and if any are found to be adulterated, formal samples are obtained with a view to summary proceedings being taken. This practice is found to be on the whole a very convenient one to follow as it provides a ready means of ascertaining whether vendors are supplying genuine articles, and occasions no inconvenience to the shopkeeper, such as is the case when formal samples have to be obtained. There is also a considerable saving of time to all concerned.

TABLE I.

Nature of Sample	Numb	Number of Samples taken			Number not Genuine			
Man.	Formal	Informal	Total	Formal	Informal	Total		
Milk	145	9	154	9	1	10		
Baking Powder	1	11	12	0	1	1		
Butter	1	18	19	0	1	1		
Cream	2	13	16	1	2	3		
Cream of Tartar	0	16	16	0	0	0		
Custard Powder	. 0	1	1	0	0	0		
Fruits, Dried	. 0	5	5	0	0	0		
Gin	. 1	5	6	1	1	2		
Ice Cream Powder	. 0	2	2 5	0	0	0		
Jam	0	5	5	0	0	0		
Lard	. 0	10	10	0	0	0		
Margarine	. 0	8	8	0	0	0		
Meat, Potted	0	4	4	0	0	0		
Meat, Mince	. 0	4	4	0	0	0		
Pepper, White	. 0	5	5	0	0	0		
Pudding	. 0	3	3	0	0	0		
Prescriptions	. 0	4	4	0	0	0		
Total	. 151	123	274	11	6	17		

Included in the above are three "Appeal to cow samples."

Average Composition of Milk Samples.

Year	No. of Samples	Milk Fat	Non-Fatty Solids
1929	154	3.63 %	8.96 %
1928	104	3.81 %	9.03 %
THE RESERVE OF THE PARTY OF THE	ts of the Sale of Milk	3.00%	8.20%

TABLE II.

Administrative action regarding samples reported to be not genuine.

not genuine.						
No.	Nature of Sample and Result of Analysis	Remarks				
18	Gin. 36'8 degrees Under Proof	Informal sample.				
22	Gin. 35'6 degrees Under Proof	Formal sample from same source as No. 18. Vendor cautioned by Town Clerk.				
31	Baking Powder. Available Carbonic Acid Gas only 3.2%	Informal sample. Formal sample later showed available Carbonic Acid Gas to be 6.38%.				
98	Cream. Contained 0°12% Boric Preservative	Informal sample,				
109	Cream. Contained 0.16% Boric Preservative	Formal sample from same source as No. 98.				
111	Cream. Contained 0.20% Boric Preservative	Formal sample from same source as Nos. 98 and 109. Vendor prosecuted, convicted, and fined £1.				
113	Milk. Deficient in Milk Fat 3%	Informal sample. Formal samples later proved to be genuine.				
118	Milk. Deficient in Milk Fat 19%	Vendor prosecuted, convicted and fined £1.				
120	Milk. Deficient in Milk Fat 8%	Vendor prosecuted, convicted and fined £1.				
141	Milk. Deficient in solids not fat equal to 1.8% of added water	Later samples proved to be genuine				
151	Milk. Deficient in solids not fat equal to 1% of added water	Sample taken on delivery to vendor of No. 141. Later samples proved to be genuine.				
164	Milk, Deficient in Milk Fat 5%	Later samples proved to be genuine				
171	Milk. Deficient in solids not fat equal to 1% of added water	Later samples proved to be genuine				
202	Butter. Contained 17.6% of water.	Informal sample. Formal sample taken later found genuine.				
240	Milk. Deficient in Milk Fat 9%	Vendor called before Health Committee and cautioned.				
248	Milk. Deficient in Milk Fat 2%	Sample taken on delivery to Vendor of sample No. 240.				
252	Milk. Deficient in Milk Fat 2%. Deficient in solids not fat equal to 1'40% of added water	"Appeal to cow" sample in con- nection with samples Nos. 240 and 248. Producer called before Health Committee and cautioned.				

Borough Analyst's Commentary.

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

As usual the major part of the samples examined under the Sale of Food and Drugs Act, has consisted of milk. That the procedure of collecting a larger number of samples of milk than of other food stuffs is justified, in that milk is produced and consumed in the Borough and the whole onus of checking its quality falls on the local authority. This most important food stuff requires great cleanliness and care both in production and transport, for besides being easily adulterated by skimming off the cream or by the addition of water, milk which has been dirtily handled is a source of considerable danger to the consumer. The quality of milk sold in the Borough judged by the proportion of constituents, compares very favourably with that of any other town. The average fat content of all samples taken during the year was 3.59 per cent. and the average non-fatty content 8.97 per cent. The fact that your Committee are now paying more attention to the cleanliness in production and distribution is all to the good, and will in time ensure the bacteriological standard of milk sold is as high as the present chemical standard.

Under the Food and Drugs Act, 124 samples of Drugs and Food Stuffs, other than milk, were examined during the year and call for no special comment. With the exception of two samples of cream, the food stuffs were found to be free from preservatives or to contain less than the limit allowed by the Public Health Preservatives Regulations.

During the summer months, when the great water shortage prevailed, householders in the out-districts used wells and springs instead of the Corporation supply. The reason was that though the Corporation supply was quite pure it was very discoloured by peaty matter. Many of these private supplies were found on bacteriological examination to be polluted with sewage and surface drainage. The attention of the inhabitants was drawn to the danger of drinking the water from the condemned wells by suitable posters.

Fertiliser and Feeding Stuffs Act 1926.

Thirteen samples were taken during the year, four of Fertilisers and nine of Feeding Stuffs. All samples were reported by the Public Analyst to be satisfactory.

Fish Friers.

There are about 170 fish friers in the town, and 172 visits were made to their premises during the year.

In a few cases unsatisfactory premises have been closed, and in several cases considerable sanitary improvements have been effected.

There are still many undesirable features of the purveying of this class of food, an instance of which being the use of newspapers for wrappers. The danger associated with this practice are increased when the newspapers are soiled.

Manufacture and Sale of Ice Cream.

158 visits have been made to premises used for the sale or manufacture of ice cream.

Section 61 of the Halifax Corporation Act 1911, prescribes the condition under which this commodity must be manufactured, stored and sold, whilst Section 93 of the Halifax Corporation Act 1926, states that any premises used for the manufacture or sale of ice cream must be registered by the owner or occupier thereof with the Corporation. Unfortunately, however, power is not given to refuse registration in respect of insanitary or otherwise unsuitable premises.

During the year a very strict supervision has been kept over these premises, and in several instances dealers have been required to give up the manufacture and sale of ice cream, whilst in other cases considerable sanitary improvements have been effected.

Prevalence of, and Control over, Infectious Diseases.

Paratyphoid Fever.

Between the end of April and the end of December there were notified to the Health Department 73 cases of Paratyphoid Fever.

Detailed enquiries into the history of the person's attacked established the following information—as set out in the Tables and text of this Report:—

Total No. of Car	ses	 	 73
True Cases		 	 59
Negative Cases		 	 14
O.B. Cases		 	 7

	Month		No. of Cases
April	 	 	1
May	 	 	1
June	 	 	1
July	 	 	12
August	 	 	8
September	 	 	28
October	 	 	16
November	 	 	5
December	 	 	1
	Total	 	73

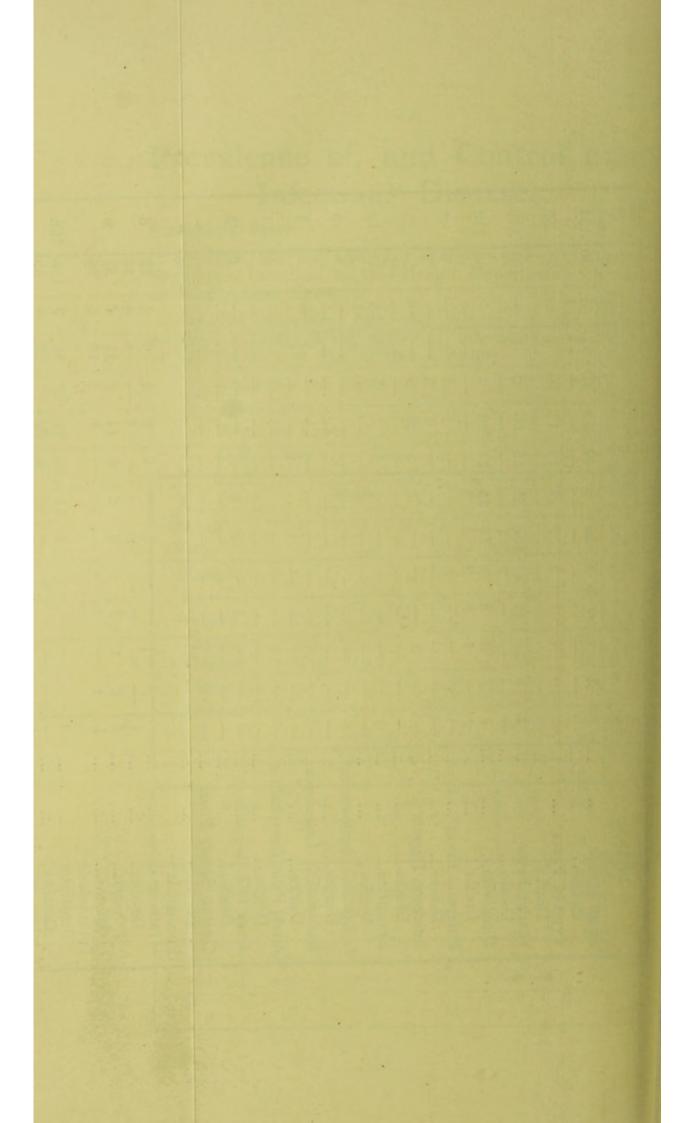
Males	Females	Total
30	43	73

Number	of	Houses	affected	 	69
Number	of	streets	affected	 	65

Under	Under	Under	Under	30 years	Total
1	5	15	30	and	
year	years	years	years	upwards	
	10	20	21	22	73

Cases	Total	1		73 53	,	431 349		146 118	6	3		42 22	1	47 12		6 5	1	1 1		-	'	6 3			1		27 6	12	57 8	26		138 108	65	45 2		17
	65 and	2	, -	1	1	1	I	1	1	1	1	1	1	00	-	1	1	1	1	-1	1	1	1	1	1		3	4	4	9		7	4	1		
	45-65	17	:	7	- 1	6	-	1	1	1	1	1	1	22	-	1	1	-	-	1	1	1	1	1	1		6	3		10		31	28	-	-	-
	85-45	17	:	10	-	9	1	-	1	2	2	6	1	5	1	1	1	-1	1	1	1	1	1	1	1		4	1	3	2		22	7	2	1	
DS	20-25	35	3 1	=	1	9	1	10	1	1	1	28	1	7	1	1	1	1	1	1	1	1	1	1	1		00	4	14	4		47	20	5	3	
RIO	15-20	40	1	15	1	55	1	12	1	1	1	3	1	2	1	1	1	1	1	1	1	-	1	1	1		-	1	9	1		10	9	2	-	
PE	10-15	6	, 1	=	1	86	1	25	3	1	1	-	1	1	1	1	1	1	1	1	1	2	1	1	1		1	1	2	1		11	1	6	1	
GE	5-10	26	1	6	1	167	-	72	2	1	1	1	1	1	1	1	1	1	7	1	1	2	1	1	1		2	1	6	1		7	1	15	2	
1 ×	4-6	3	1	5	1	21	-	00	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	-	1	1	3	1	2	-	
	4-2	1	1	-	1	14	1	00	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	7	7		1	1	7	-	
	2-3	-	1	4	1	=	1	00	-	1	1	-	1	1	1	1	1	1	1	-	1	1	1	1	1		1	1	-	1		1	1	-	4	-
	1-2	2	1	1	1	-	1	-	1	1	1	1	1	1	1	1.	1	1	1	1	1	1	1	1	1		1	1	7	-		1	1	1	7	
	Under	-	1	1	1	-	1	-	1	1	1	1	1	3	1	9	1	1	1	1	1	1	1	1	1		1	-	7	-		1	1	9	3	-
	DISEASE	Small Pox	Deaths	Typhoid Fever	Deaths	Scarlet Fever	Deaths	Diphtheria	Deaths	Puerperal Fever	Deaths	Puerperal Pyrexia	Deaths	Erysipelas	Deaths	Ophthalmia Neonatorum.,.	Deaths	Encephalitis Lethargica	Deaths	Acute Polio Encephalitis	Deaths	Acute Polio Myelitis	Deaths	Cerebro Spinal Fever	Deaths	Pneumonia-	Influenzal	Deaths	Primary	Deaths	Tuberculosis-	Kespiratory	Deaths	Other Forms	Deaths	

For notes on these figures see following pages.



A total of 78 cases were admitted to Hospital (53 residents and 25 non-residents).

The following complications occurred among these cases:-

Toxaemia 4 Meningitis 2

- (2) Bacteriological examinations of the blood served to establish beyond doubt the fact that the illness was the result of infection by the Bacillus Paratyphosis B, as a positive Widal reaction to that organism was obtained in each instance of a true case. Careful enquiries were made concerning the use of shell-fish, ice cream, uncooked vegetables, confectionery and milk, but there was nothing to suggest that the outbreak was due to the consumption of such articles. By a process of elimination two facts were established: firstly, that water was the only common factor in all the cases, and secondly, that four of the cases had been outside the Borough during the incubation period of the disease. This latter point was followed up but without result. Further detailed enquiries regarding the first point established the fact that several of the cases had been drinking infected well water, probably polluted from the surface, and this pollution was rendered the more easy by the fact that the excessively dry summer had cracked and fissured the ground in such a manner that surface pollution could easily find its way to the waterbearing strata. The Town's water supply also came under consideration, but many samples examined showed no evidence of excremental contamination.
- (3) The clinical features of the disease were of a mild type; no deaths occurred. The onset was abrupt. The majority of patients complained of headache, general malaise and nose-bleeding. Diarrhoea was not a constant feature. There were only three cases of intestinal haemorrhage. Rose spots developed in 20 per cent. of the cases. Nervous and cerebral symptoms were occasionally met with, some patients being in a very confused state for a week. Pyrexia was of an intermittent type. Relapses occurred in three cases.

Action taken to combat the Disease.

(4) (1) Inquiries were made regarding the sewerage, drainage, water supplies, milk supplies, shell-fish, ice cream, celery, water-cress, uncooked vegetables and confectionery as possible sources of infection.

- (2) Cases were removed to the Isolation Hospital forthwith.
- (3) The Town's water supply was chlorinated.
- (4) Action was taken to prevent the drinking of polluted water from wells and springs.
- (5) There was constant vigilance on the part of the officers of the Health Department in connection with (a) all possible sources of infection, (b) persons engaged in occupations associated with the production and distribution of food and milk.
- (6) Consultations between M.O.H. and General Practitioners.
- (7) Consultations between M.O.H. and Waterworks Officials and Committee.
- (8) Anti-typhoid propaganda work warning the public to boil drinking water, by means of articles in the public press, posters in trams, posters on hoardings, slides shown in the cinemas, and public lectures by the M.O.H.
- (9) The possibility of carriers being connected with the outbreak received careful consideration.

Conclusions.

(5) This outbreak of Paratyphoid Fever affords an example of the danger to a community from drinking water from wells and springs especially during a season of drought. The excessively dry summer cracked and fissured the ground in such a way that surface pollution found its way into water-bearing strata. Fortunately the outbreak was a small one, and the type of the disease mild.

The outbreak also demonstrated the comprehensive nature of the investigations which have to be made in order to trace the vehicle by means of which infection is caused and spread. Over 700 special visits were made by the officials of the Department in this connection.

The difficulty often experienced in establishing the cause of an outbreak of paratyphoid fever was well demonstrated in this instance. It is, however, gratifying to record that the disease was completely stamped out by the end of the year.

Small-pox.

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

1929	Inside the Borough	Outside the Borough	Total
January	 No. of Cases	No. of Cases	40
February	 45	1	46
March	 11	1	12
April	 8	_	8
May	 12	1	13
June	 6	-	6
July	 4	2	6
August	 2	_	2
September	 8	-	8
October	 5	_	5
November	 5	2	7
December	 12	pian- gond	12
	156	9	165

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, workhouses, infirmaries and hospitals informed when a new outbreak occurs.

Other measures are dictated by circumstances of the case.

		Number Vaccinated	Exemptions granted
1925	 	 563	1952
1926	 	 1078	1834
1927	 	 1609	1683
1928	 	 3201	1647
1929	 	 857	1713

Scarlet Fever.

The number of notifications of this disease received during the year was 431, and the total number of cases admitted to hospital was 409. Three hundred and fortynine cases were from within the Borough, and 60 from outside the Borough. There were 2 "return" cases during the year.

The following complications occurred amongst Scarlet Fever patients:—

Complications.	10.		No.	of Cases.
Mastoid Disease		 		I
Otorrhoea		 		44
Rhinorrhoea		 		63
Albuminuria		 		2
Rheumatism		 		44
Impetigo		 		_
Tonsillitis		 		6
Toxaemia		 		- 1
Pneumonia		 		3
Bronchitis		 		-
Septic sores		 		41
Adenitis		 		48
Conjunctivitis		 		-

The diagnosis was changed from Scarlet Fever to Tonsillitis in 24 cases. Measles and Pneumonia, Whooping Cough, Pulmonary Tuberculosis and Rheumatic Fever in I case each.

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 I 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.

Diphtheria.

There were 146 notifications received and 132 cases were admitted to the Fever Hospital as suffering from Diphtheria. Eighty-two cases were negative, leaving 50 cases of true Diphtheria.

There were 14 cases admitted from outside the Borough. Of the 50 cases of true Diphtheria, 26 had the Larynx affected and Tracheotomy was necessary in three cases. Seven of the cases died; the others recovered. There were no return cases of Diphtheria.

The following complications occurred among the Diphtheria patients:—

Complications.			1	Vumber
Palatal Paralysis		 		4
Ocular Paralysis		 		-
Adenitis		 		8
Heart Disease		 		2
Rheumatism		 		2
Otorrhoea		 		4
Rhinorrhoea		 		2
Albuminuria		 		I
Facial Paralysis		 		-
Limb Paralysis		 		16
Quinsy		 		3
Pharyngeal Absor	ess	 		-

In 48 of the cases admitted the disease was over three days old. Three cases were admitted in a moribund state. Four cases received anti-toxin prior to admission.

In 2 cases the diagnosis was changed to Scarlet Fever. 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.

Schick Test. (Diphtheria Immunisation).

This test detects those who are susceptible to Diphtheria. It has been extensively employed in America with great success in preventing Diphtheria. By injecting the test substance into the skin of each arm it can be discerned who is susceptible to Diphtheria and who is not. Nonsusceptibles are unlikely to develop the disease, susceptibles are if they become infected. Susceptibles may be actively immunised by inoculating them with toxin-antitoxin. Protection lasts for at least seven years. Diphtheria is a dangerous infectious disease and it is probable that the time will come when this method of prevention will be added to the routine of public health administration. Immunisation is bound to fill an important place in the preventive medicine of the future.

Puerperal Fever and Puerperal Pyrexia.

Three cases of puerperal fever were notified and three died.

Forty-four cases of puerperal pyrexia were notified: all recovered.

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.

Ophthalmia Neonatorum.

Numerous cases of blindness result from this infection. The disease is usually caused by Gonorrhoea and the consequences of neglecting treatment are serious.

The following Table classifies the notified cases :-

	C	ases.					
		Treated.	Vision Unimpaired	Vision	Total Blindness	Death	
Notified	At Home	In Hospital	- Cinapaned	- Inpaned			
6	1	5	6	-	_	-	

Encephalitis Lethargica.

		NUMBER OF	CASES	
Notified	Died	Recovered	Treated at Home	Treated in Hospital
1	1	_	_	1

No special institutions are required for these cases in the acute stage and they may, in general, be properly admitted to the Fever Hospital. The proper care and management of cases of post-encephalitic moral degeneration is another matter. The after histories of these cases are usually tragic. It would appear that the mental changes induced by Encephalitis Lethargica affects temperament more than intelligence. The fundamental cause of the disease is unknown, but it is possibly due to ultra-microscopic organisms affecting the basal ganglia of the brain. Throat, nose and oral hygiene are preventive measures.

Cerebro-Spinal Fever.

No case occurred in Halifax 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. One case was registered in Halifax. It recovered.

Acute Poliomyelitis.

Six cases were reported.

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 influenzal epidemic raises the mortality for the time being in sufferers from Pulmonary Tuberculosis. During an outbreak every opportunity is taken of impressing 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. The following Table sums up the cases:—

umber Notified	Number Died
57	26
	57

Non-Notifiable Infectious Diseases.

Measles.

The control of measles is especially difficult owing to the fact that it is infectious for some days before the rash appears. This year in Halifax there were 3 deaths from the disease.

Whooping Cough.

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

A somewhat widespread epidemic of a rather virulent type occurred during the year, from which 14 deaths resulted.

The Fever Hospital, Stoney Royd.

During the year no structural improvements were carried out. The stock of linen, etc., for use in the Wards and Home has been replenished.

The Hospital has been recognised as a Training School for Fever Nurses by the General Nursing Council. During the year under review six Probationers received training.

The Hospital has exerted and is still exerting a very favourable effect upon the mortality from Infectious Diseases. In a town like Halifax the application of a universal system of home nursing of cases of Infectious Diseases, is impracticable.

The following Table shows the number and classification of cases admitted, including those received from adjacent areas at the cost of the respective Local Authorities:—

Total	80 404 132 1	617
Hebden Bridge U.D.C.		1
Ripponden U.D.C.	11]	2
Barkisland U.D.C.	6	6
Shelf U.D.C.	121	12
Queensbury U.D.C.	4 0	13
Sowerby U.D.C.	1112	4
Luddendenfoot U.D.C.	4 22 1 1 1	26
Midgley U.D.C.	V421 1	23
Elland U.D.C.	10011	4
Brighouse Joint Hospital Board		2
Halifax	53 349 118 1	521
Disease	Enteric Fever Scarlet Fever Diphtheria Encephalitis Lethargica Other Diseases (including observation cases)	Totals

The health of the staff remained on the whole, very good. No member of the staff contracted Scarlet Fever or Diphtheria. Routine immunisation of the nursing staff against Diphtheria and Scarlet Fever is not practised at the Hospital.

Small-pox Hospital, Mount Tabor.

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

The following cases were admitted during the year:-

Halifax			 	131
Brighouse Joint	Hospital	Board	 	4
Sowerby Urban	District C	Council	 	4
				139

The Hospital was staffed (in addition to the resident caretaker and his wife) by nurses from Stoney Royd Fever Hospital, and the victualling and nursing was supervised by Miss Wilson, Matron, Stoney Royd. The Medical Officer of Health and the Assistant Medical Officer of Health, provided the medical attendance. The situation of the Hospital, on the open moorland, is such as to expose it to wild weather, and the wood and iron buildings are not the most suitable type for such a situation, the upkeep being costly. Still, the patients seemed very comfortable. Small-pox being now a permanent guest in the country, owing to neglect of vaccination, permanent and more suitable hospital accommodation will be required for it, and must be definitely anticipated. This will involve heavy expenditure; vaccination would be cheaper, but the public, rejecting advice, has chosen. It must pay for its choice.

Disinfection.

The steam disinfector is situated at the Borough Fever Hospital, Stoney Royd, and 16,951 articles of bedding, clothing, etc., were disinfected during the year. Also 486 library and other books were disinfected in a special apparatus which is provided for that purpose. 811 rooms in private houses were disinfected.

Cleansing Station.

This is at the Stoney Royd Hospital. 29 children were treated during the year, these being sent by the Education Committee, suffering from scabies and other conditions.

Tuberculosis.

TUBERCULOSIS DEATH-RATE.						
PERIOD	Respiratory only	All Forms				
10 years average 1919-28	. 70	'90				
1929	. 69	*84				

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

			TUE	ERC	CUL	OSIS		
ATRICU DE LA	*N	EW	CASE	s		DEA	THS	
AGE PERIOD	Pulm	onary		on- onary	Pulm	onary	Pulm	on- onary
	M	F	М	F	М	F	M	F
Under 1 year 1 to 5 years 5 to 10 ,, 10 to 15 ,, 15 to 20 ,, 20 to 25 ,, 25 to 35 ,, 35 to 45 ,, 45 to 55 ,, 55 to 65 ,, 65 and upwards	2 2 4 5 6 16 10 10 9 5	1 5 7 5 8 17 12 7 5 2	4 3 4 4 2 - 1 - 1	2 2 11 5 — 2 2 2 — —			2 3 — 1 1 — 1 — 1 —	1 3 2 1 — 2 — —
TOTALS	 69	69	19	26	38	27	8	9

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

The ratio of non-notified tuberculosis deaths to total deaths from this disease was 12 per cent.

The following Table shows the number of notified cases of Tuberculosis remaining in the Borough on December 31st, 1929:—

Total		Pulmonary			Non-Pulmonary	
Cases	Males	Females	Total	Males	Females	Total
640	270	201	471	76	93	169

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 domicilary treatment by their private doctors. Close co-ordination exists between the Clinic, Medical Practitioners, and the Health Department.

Tuberculosis Scheme.

Diagnosis. A—New cases (excluding contacts):	m		Non-Pul- monary.	Total.
() DOLLI I		120	-	127
		130	7	137
(b) Doubtfully tuberculous				5
(c) Non-tuberculous		-	-	47
B—Contacts:				
(a) Definitely tuberculous		3	I	4
(b) Doubtfully tuberculous		-	-	-
(c) Non-tuberculous		-	-	12
C—Cases written off Clinic				
Register as:				
(a) Cured		18	7	25
(b) Diagnosis not confirmed of Non-tuberculous (including cancellation of cases not	ıg			
fied in error)		-	-	75

D—Number on Register Dec. 31st:	
(a) Diagnosis completed 398 103	501
(b) Diagnosis not completed	4
Number of persons on Clinic Register on Jan. 1st	456
Number of persons transferred from other areas, and of "lost sight of" cases returned	6
Number of patients transferred to other areas and cases "lost sight of"	17
Died during the year	45
Number of observation cases under A (b) and B (b) above in which period of observation exceeded two months	
Number of attendances at the Clinic (including contacts)	
Number of attendances of non-pulmonary cases at Orthopaedic out-stations for treatment or supervision	
Number of patients given Dental treatment	
Number of consultations with medical practitioners:	
(a) At homes of applicants	23
(b) Otherwise	197
Number of other visits by Tuberculosis Officer to homes	
Number of visits by Nurses or Health Visitors for Clinic purposes	2357
Number of	
(a) Specimens of sputum, etc., examined	501
(b) X Ray examinations made in connection with Clinic work	12
Number of Insured persons on Clinic Register on Dec. 31st	
Number of Insured persons under Domiciliary Treat- ment on the 31st December	

Shelf Sanatorium. Admissions and Discharges during the year:—

	Halifax cases	Other Cases	Total
Remaining in on December 31st, 1928	30	13	43
Admitted during the year	110	38	148
Discharged during the year Died	0	38	} 162
Remaining in on December 31st, 1929	26	13	39

Grouping of cases admitted during the year :-

A. Non-Pulmonary: -2.

B. Pulmonary :-

	Male.	Female.	Total.
Observation		2	2
Group 1. Early cases	24	28	52
Group 2. Intermediate cas	ses 25	22	47
Group 3. Advanced cases	23	24	47

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

The average length of stay was 133 days, as compared with 128, 139 and 129 days in the preceding three years respectively.

The condition of the patients discharged was as follows:

All the deaths were pulmonary cases and Halifax residents.

Tuberculosis After-care Committee.

The Tuberculosis After-Care Committee of the Halifax Council of Social Welfare continued its useful work in the manner described in previous Reports.

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 however, to find K.L.B., does not negative the presence of diphtheria.

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 1929.

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

Sputum for Tubercle	Mark on	 525
Diphtheria Swabs		 739
Water for Typhoid		 14
Hair for Ringworm		 1
Agglutination Test (Widal)	T.A.B.	 74
Others (Pus, Fluids, etc.)		 5
	Total	 1358

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.

Venereal Diseases.

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

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

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

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

Number of persons de time during the ye	alt wi	th for t	the fir	rst be	
suffering from :-		1900		Local Clinic	Other Clinics
Syphilis		125		22	1101-
Soft Chancre				10000	-
Gonorrhoea				98	-
Conditions other	r than	Venere	al	149	-
				-	-
	To	otal		269	-
Total attendances at	the	out-pa	tient		
ćlinic				9,010	1

Aggregate number of in-patient days	161	1 1mg
Number of doses of Salvarsan Substitutes given	371	-
Specimens sent to an approved Laborat for:-	ory	
Detection of Spirochaetes	4	-
Detection of Gonococci	-	-
Detection of other organisms	_	_
Wassermann Reaction	200	_
Total	204	-

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

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

Maternity and Child Welfare.

Midwives.

Number practising in the Borough of Halifax during the year (This includes Midwives working in Institutions).	
Number holding the Central Midwives Board Certificate (by examination)	
Number of bona fide Midwives (i.e., holding the Certificate of the Central Midwives Board by virtue of having been in practice before 1902)	
Number of cases in which Medical Aid was summoned by Midwives	
28 Medical Aid Notices were sent on behalf of child: 9 for inflammation of eyes, 15 for feebleness	

for skin affections, I for need for circumcision (phimosis).

Medical Assistance for Midwives.

This scheme works well and is a success. It facilitates medical assistance being obtained. While the cost of the scheme is of some moment it is really secondary to important health considerations. Doctors are summoned for delayed labours, ruptured perineum, rise of temperature, discharges from the eyes and feebleness of the infant, etc. The analysis of the figures does not suggest unnecessary calls upon the medical practitioners' services. The increase in the number of calls for doctors since the inauguration of the scheme means an increased benefit to patients.

Notification by midwives of intention to resort to artificial feeding, 8.

Notification by midwives of liability to be a source of infection, 4.

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 376; and of these 51 were in the Bradshaw area. A doctor was also engaged in 83 of the 376 cases (in 76 cases in the ordinary district midwifery, and in 7 cases in the Bradshaw area).

Luddenden.

The Nurse Midwife of the Luddenden Nursing Association has attended 12 cases for the Borough. This is a marked increase upon 1928, even allowing for the time which elapsed before the new nurse began work.

Notification of Births Act 1907.

Number of births notified Number of births registered including births transferable to other districts.	1447
Ratio of notified to registered	89.43
Number of stillbirths notified	77
Number of notified births attended by Doctor	S
with and without Midwives	311
Number of notified births attended by Mid-	
wives only	519
Number of notified births attended in St.	
Luke's Maternity Home and Hospital	277

			births attend	ed in	Royal	
Halif	ax I	nfirmary	,			340
Number	of	births	transferred	to	other	
distri	cts					250

Health Visiting Summary.

		 1,187
Visits 1-5 years Repeat Visits under 1		 4,047
Repeat Visits under I	year .	 5,032
Ante-natal Visits		 195

The Health Visitors also devote part of their time to visiting cases of tuberculosis and mental deficiency.

253 visits were paid to cases of tuberculosis, and 53 to mental deficiency cases.

The slight decrease in the number of visits paid, is owing partly to absence through illness, of members of the staff (one for three months and another for two weeks); and also to the time taken up by the Sunlight Clinic as referred to elsewhere.

Infant Welfare Centres.

Northgate-

No. of sessions, 223. New cases, 590. Re-visits, 8,334. Average attendance per session, 40 (last year 36.1).

Queen's Road-

No. of sessions, 87. New cases, 211. Re-visits, 3,403. Average attendance per session, 41.54.

Children who are attending the Sunlight Clinic rarely attend the ordinary Clinic, and this tends to reduce the numbers shown as attending ordinary Clinics.

Ante and Post-natal Clinics:-

No. of sessions, 44. No. of new cases, 107. Total attendances, 322. Average attendance per session, 7.31.

It is gratifying to note that Halifax women are using this Clinic more fully than in former years.

At the request of the Ministry, an Ante-natal Clinic was commenced at the end of the year, at the District Nursing Association Headquarters in Clare Road, and this has been satisfactorily attended.

The Medical Officer attends once a month during ordinary booking hours in the evening.

Toddlers Clinic-

No. of sessions, 7.* Attendances, 55.

Average attendance per session, 7.8.

*The Sunlight Clinic room was undergoing structural alterations in the early part of the year, and was rendered unsuitable for drill and games, and we were without full staff for 3 months or more, so this Clinic suffered.

Artificial Sunlight:-

This Clinic has been held regularly throughout the year, commencing 17th January, 1929.

No. of sessions, 131. Cases treated, 219. Attendances, 4,056.

Average attendance per session, 30.96.

The room was used for the Sunlight Clinic, weeks before the builders finished the alterations made necessary by the street accident in November, 1928.

Attendances of non-tuberculous children under

School age 2,754

Attendances of non-tuberculous children of School

age 1,143

Attendances of tuberculous children 159

There is sustained enthusiasm amongst the parents as to the benefit derived from Artificial Sunlight in cases of debility, rickets, enlarged glands, and malnutrition.

The attendance of the nurses at the Sunlight Clinic throughout the year has involved diminished time for visiting on the district.

It is interesting to note that of the *1,368 Halifax babies born during the year, 801 have attended the Municipal Clinics.

(* 1368 + (250 referred to other districts = 1618 total births registered).

Infant Mortality.

Out of 99 deaths under one year, 58 occurred during the first month, and 41 over one month and under twelve months. Of this number 61 were boys and 38 were girls.

On examination of the causes of death of children dying under one month, it is obvious that the great majority of them were born weaklings and had practically no chance of surviving. It is some consolation to know that these cannot be considered preventable deaths, except in so far as their vitality might have been improved by greater care of the mother during pregnancy.

Referring to the deaths of children over one month it is remarkable how few of these are attributable to digestive disorders purely.

Bronchitis and Pneumonia take their usual toll and account for 16 out of 41.

The following rough classification shows that a large number of the deaths are due to prematurity and developmental defects, over which we have no control.

	Under 1 month	Over 1 month and under 12 months
Bronchitis and Pneumonia	1	16
Whooping Cough	2	5
Prematurity	29	
Debility and Marasmus		4
Cerebral Haemorrhage	2	
Meningitis		1
Congenital Syphilis	2	1
Gastro Enteritis	1	4
T.B. Meningitis		
Encephalocele	MEAN TO THE	2
Influenza		1
Congenital Heart	6	
Convulsion in case of Mental Deficiency		2 1
Measles		1
Congenital Pyloric Stenosis	1	2
Diarrhoea—two babies (twins—		305000
brothers) 1 month	2	5
Defective development	2	
C. f. (Accidental overlaying, 1		
Suffocation { Accidental overlaying, 1 Want of attention at birth, 1	2	
Congenital Obliteration of Bile Duct	1	
Nephritis	1	
Convulsions due to Maternal Toxaemia	1	
Melaena Neonatorum	2	
Jaundice	2	11 1000
Erysipelas	1	
The second secon	58	41

The infantile mortality rate for the Country as a whole is higher than in 1928.

Midwives' Inspection.

The midwives have been inspected periodically. There has not been any case of serious anxiety concerning inflammation of the eyes of the newly born, which reflects great credit on the care the midwives have taken in this respect.

Midwives have been supplied for some years with eye drops from the Local Supervising Authority, and the use of this preventive solution appears to have been successful.

Only 6 cases of Ophthalmia Neonatorum were notified, and all were fairly mild in type. It is some years since any case of permanent damage to sight from this cause has had to be recorded in Halifax.

Maternal Deaths.

A.B., 21 years—Puerperal Septicaemia, Scarlet Fever, Uraemia.

R.M., 27 years—Cardiac Syncope, Confinement Instrumental, Post Anaesthetic vomiting, Toxic Albuminuria.

*A.M.R., 30 years-Influenza, Parturition (8 days).

S.H.W., 26 years—Broncho - Pneumonia, Operation, Caesarean Section.

M.F., 30 years—Acute Pyelitis, Albuminuria of Pregnancy, Acute Toxaemia.

R.M., 30 years-Puerperal Sepsis, Pyelitis.

A.P., 29 years—Post Partum Haemorrhage, Adherent Placenta, Confinement.

D.S., 29 years—Puerpural Sepsis, Post-Partum Haemorr-hage.

A.B., 27 years—Placenta Praevia, Caesarean Section.

L.D., 21 years-Eclampsia, Caesarean Section.

*J.V.H., 24 years—Broncho - Pneumonia, Miscarriage Pregnancy.

*These deaths have been deducted by the Registrar-General from the Maternal Deaths.

Maternal Mortality.

The continued high rate of maternal mortality is alarming. About 700,000 women give birth to children every year. Of them, 3,000 die. Puerperal sepsis is the main cause of maternal mortality. Authorities are divided in their opinion upon the question of the channel of intection in puerperal sepsis. Indeed some state that infection is

endogenous, and therefore nobody's fault. The truth appears to be that most cases are infected from without. The maternal mortality in Halifax is excessive despite the provision of good facilities for ante-natal examination and institutional treatment of pregnant women. The co-operation between doctors and midwives in the town is good, and indeed everything possible is being done to reduce the maternal mortality rate to a much lower figure.

The following Table shows the serious increase in this rate during recent years:-

Mark .	1921	1922	1923	1924	1925	1926	1927	1928	1929
Sepsis Other causes	3 9	3 7	3 7	0	1 7	1 7	1 9	5 8	3 6
Per 1,000 births	6.7	6.5	6.2	4.0	5.6	5'7	7.4	10.5	6.8

Orthopaedic Clinic.

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

Mr. Goyder's Report.

Mr. Goyder reports on the work carried out at the Northgate Clinic during the year as follows:—

The Orthopaedic Surgeon has attended at the Northgate Centre. During this period he has examined 103 cases, of which 43 were seen for the first time, and 60 were re-examinations. 51 children have been under treatment during the year.

The treatment given was: -Massage, 1,053 attendances: Ultra Violet Radiations, 1,009 attendances.

In addition, five children were sent to Bradford for operation by the Orthopaedic Surgeon, including three other cases who had just reached school age; 18 children were operated on under 7 years of age. All were deformities due to rickets.

Of the cases treated at the Clinic there were:-

Rickets		 	 40
Paralysis		 	 4
Miscellaneo	ous	 	 7
			51

That is, 40 out of 51 were cases of rickets.

The figures of the Maternity and Child Welfare Clinic show an increase both in the new cases examined and in the re-examinations, and a large increase in the number of remedial treatments given by the massage staff. The development of this department is slow, but the increase is progressive, and the percentage of attendances for treatment per child is very much higher than it was last year. Much better use is being made of the facilities afforded by this branch of the Clinic.

(Signed) F. W. GOYDER.

Artificial Sunlight Clinic.

I am glad to be able to report that the artificial sunlight is a very satisfactory feature of the Health Department's activities. During the year under purview, 219 cases were treated and 4,056 exposures were given.

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

The following is the routine course of dosage:-

For first dose, two minutes back and two minutes front. For a very young child less than this.

Two treatments per week arranged, and the dose gradually increased up to eight minutes back and eight minutes front. If treatment appears doubtfully beneficial the dose is not increased and is even diminished, should unaccounted for loss of weight or other indication be found.

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

Our experience has been that cases of rickets, debility, malnutrition and glands of neck are indubitably benefitted by the treatment. We found that epileptic and nervous children did not respond very well and the treatment was discontinued. Some cases of chronic eczema did very well. Parents very often reported beneficial results in cases of sleeplessness.

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

Dr. Latchmore is in charge of the Clinic and is assisted by Miss Oram, the Superintendent Health Visitor, and the Health Visitors.

Inspection of Maternity Homes.

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

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

Staff.

The personnel of the staff engaged upon Maternity and Child Welfare work has not changed during the year.

One nurse was off duty three months through illness, and another for two weeks.

Health Talks.

Eight Health Talks were given during the year, but owing to the pressure of work and absence through illness of one of the Health Visitors for 3 months, further addresses could not be arranged.

Voluntary Workers.

Indebtedness to our voluntary helpers remains as great as in past years. Their very lively interest in and sympathy with the work is a continual encouragement. We often hear of voluntary workers who feel braced to tackle their own problems with greater courage, after contemplating the hardships cheerfully endured by many of the mothers.

Public Health Propaganda.

The various clinics continued to be centres of health education, and in addition to the teaching received in those places large quantities of useful pamphlets were distributed, touching on a variety of topics, these being of special interest to parents.

During the Winter Session, Health Lectures were given fortnightly by the Medical Officer of Health. Other propaganda methods include Health articles in "Better Health" and Health articles in the local Press. The Press in Halifax is always ready to give publicity to health subjects. Frequent interviews are given to press representa-This is a valuable method of imparting health knowledge to the public. During the drought period-by arrangement with the Tramways Manager and the Managers of the Cinemas-health slogans were shown in the tramcars and in the cinemas. Suitable posters were also displayed at points of vantage throughout the town. Also instructive health literature is distributed to the mothers at the Welfare Centres and to the general public at the Health Office. The erection of a Wayside Health Pulpit is under consideration. A Health Department exists to prevent disease, and to this end it is bound to be constantly thinking of new weapons to add to its armoury. Money spent on the Prevention of Disease is an ultimate economy.

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Publicity and Education on Health.

The following is a list of the Lectures, Talks, etc., given during the year 1929:—

-					-	,												
Attendance	(approx.)	100	40	200	150		20	80	25	40	80	200	40	20	80	180	40	40
	Given to	Y.M.C.A.	Boys' Club	The Public of Halifax	The Farmers' Association		Toc H	Round Table Society	Northgate Chapel Society	The Lads' Club	Holmfield Mutual Improve- ment Society	Members of the R.E.S. Gym- nasium and their friends	St. Augustine's Men's Club	Social Welfare Council	Mothers of School Children (Girls)	Mothers of School Children (Girls)	Northgate Chapel Society	Northgate Chapel Society
	Title	"Cancer"	"Personal Hygiene"	"The Stress of Modern Life"	"Invisible Foes in Milk"		"The Pre-frontal Lobes of	"The Brain in Health and	"Mental Hygiene "	"The Human Body"	"The Prevention of Mental Disease"	"Physical Development"	"Mental Deficiency"	"Public Health Administra-	"General Hygiene"	"General Hygiene"	"Vitamines"	"Immunity"
	Lecturer	Dr. Roe		Dr. Roe	Dr. Roe Mr. Pollard M.R.C.V.S.	Mr. Bundred,	Dr. Roe	Dr. Roe	Dr. Roe	Dr. Roe	Dr. Roe	Dr. Roe	Dr. Roe	Mr. Beaumont,	Dr. Heynemann	Dr. Heynemann	Dr. Waterworth	Dr. Roe
	Where held	Y.M.C.A.	Boys' Club,	Council Chamber,	Mechanics' Hall		Toc H,	Swan Hotel	Northgate End Chapel	Great Albion Street Club	Holmfield Club	R.E.S. Gymnasium Gt. Albion Street	Hanson Lane Club	Imperial Cafe	Technical College	Technical College	Northgate End	Northgate End Chapel
	Date	1/2/29	12/3/29	12/4/29	7 6/29		25/6/29	25/7/29	8/9/29	9/10/29	16/10/29	19/10/29	27/10/29	13/11/29	31/10/29	7/11/29	11/12/29	8/12/29

Co-operation with Medical Practitioners.

Number of visits to houses by Doctors of the Health Department at the request of Private Practitioners		Telephone Consultations	Total
93-	71	261	425

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

Medical Examination of Tramwaymen and Gasworkers.

The Medical Officer of Health and Dr. Smith carried out the following medical examinations on behalf of the Tramways and Gas Committees, including several consultations with usual medical attendants:—

Tramwaymen-

Applications for employment or promotion ... 104
Return to work after sickness (other than cases certified by usual medical attendants)... ...
Gasworkers—
Special examinations

Mental Deficiency Acts, 1913 and 1925.

The outstanding difficulty in the work of the Halifax Committee for the Care of the Mentally Defective is the inability to secure vacancies in suitable institutions for female defectives. Therefore several women and girls who would be better off if placed in such institutions must remain at home. The Committee fully recognises its responsibility and has taken steps, but so far no new accommodation has become actually available. Another difficulty is to get accommodation for young boys. This may be overcome by an extension of the existing accommodation at Whixley Institution, of which the Halifax Committee are part-owners.

In the meantime the Committee has reason to feel satisfied with much of its work of guarding the unfortunate people whose mental development is below normal.

We are at present making a very complete survey of mental deficiency. When this is completed the question of further provision for children and adults will have to be seriously considered.

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.

Halifax cases are at present in the following Institutions:

The Home, Everton Terrace, Liverpool.

Mid-Yorkshire Institution, Whixley, near York.

Gibbet Street Institution, Halifax.

Pontville R.C. Special School, Ormskirk, Lancs.

Stoke Park Colony, near Bristol.

Royal Albert Institution, Lancaster.

Wordsley Institution.

Tenterden Union, Tenterden, Kent.

Settle Union Institution, Giggleswick.

The following Table shows the position on December 31st, 1929:—

A. Number of Cases "Subject to be dealt with." :-

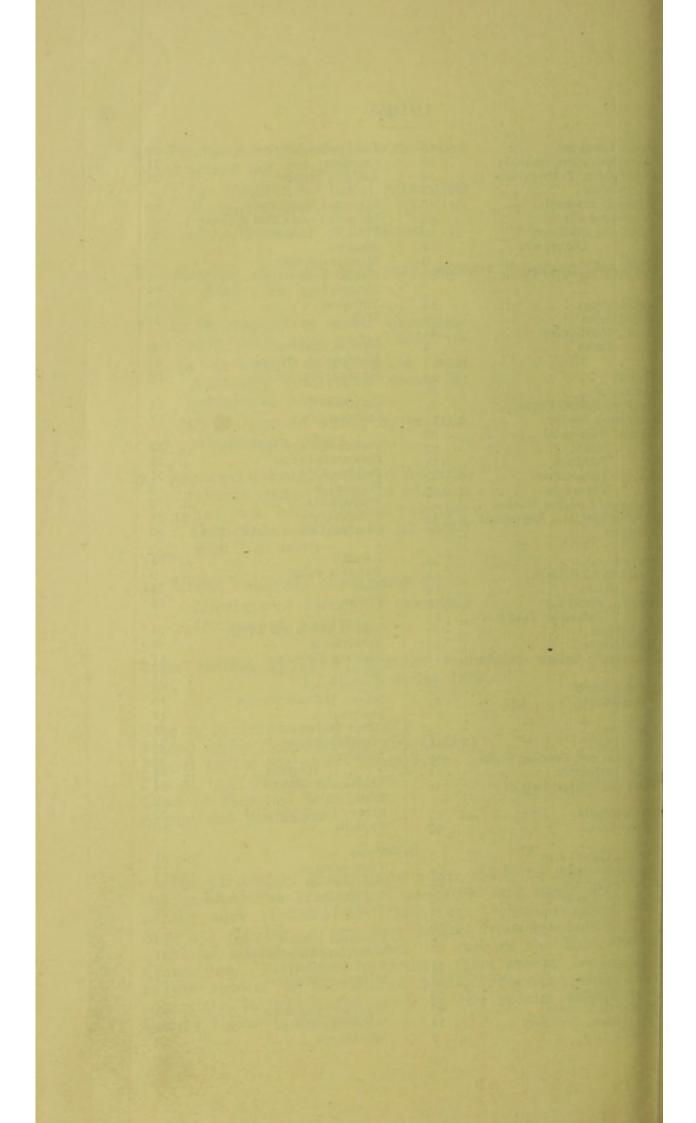
I.	Under "Order"	M.	F.	Total
	(a) In Institutions	26	16	42
	(b) Under Guardianship	11	-	oile &
	Out on Licence from Institutions	3	-	3
2.	In "places of safety"	M. —	F. —	Total —
3.	Under Statutory Supervision Numbers of foregoing:—	33	31	64
	(a) Attending Occupation Centres	-	_	PROLL .
	(b) Awaiting removal to an Institution	4	3	7

4. "Subject to be dealt with," but action not yet taken:—			
(a) Notified by Local Education			
Authority, Sec. 2 (1), (b) (v) (b) Otherwise "ascertained"			_
B. Number of Cases who may become dealt with":—	" Subj	ect to	be
I. In Institutions or under Guardian- ship dealt with under Sec. 3—			
(a) in regard to whom the Local Authority contributes under its permissive powers			
(b) Maintained wholly by parents, relatives or others	_	-	
2. Reported to Local Authority from any reliable source but as to whom it had not been decided whether they are "subject to be dealt with" or not:—			The second
3. Under Voluntary Supervision Numbers of foregoing attending Occupation Centres	-	-	-
Cases Notified by Local Education Authoriti (i), (b), (v) during 1929.	es und	er Sec.	. 2
	M.	F. To	tal
Sent to Institutions (by Order) Placed under Guardianship (by Order)	= .	_	-
Placed under Statutory Supervision	_	_	-
Placed in "Places of Safety"	-	-	-
Died or removed from area Actior not yet taken			
Action not yet taken	_	_	-
Total	-	-	-
The particulars given above relate solely	y to cas	ses uno	ler

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.

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General Summary of Meteorological Observations taken at the Public Library, Belle Vue, from January 1st, 1929, to December 31st, 1929.

By E. Green, Librarian.

1923. Almosphere in Amount of Month. 1924 1925 1	Temperature of Air in Month. Mean.	Mean Temperature. Vapour (Adopted.) In a foot of	Then	ean Reading of Thermometer.	Wiel.	Rain,	
Month. W g	Mean.	(Adep- In a	247 25				
Month. Eg		184.)	Medical foot of Sec.	8 8 1 8 8 1 B 1 B 1 B 1 B 1 B 1 B 1 B 1	Relative proportion of	P. Cloud.	RTMANA
# 2	Highert. Lowest. Range. Of all Highest. Lowest.	Air. Dew Poissts Rlastic For-	Mean W. Cubic for Maximum Maxi	Ministry of S Ministry on Grave Strength	N. N.E. E. S.E. S. S.W. W. N.W. Calms.	Men of 1 No. of 1 it fed Amont	
February 30-036 1-126 50 March 30-284 0-860 70 April 29-969 0-754 68 May 29-919 1-216 74 June 30-248 1-108 74 July 29-915 0-976 80 August 29-902 0-966 75 September 30-043 1-850 76 October 29-735 1-386 60 November 29-552 2-048 54	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 30.4 27.5 15.0 1-8 4 41.6 38.7 235 2.7 0.41.6 38.7 226 2-6 1 48-9 41.7 263 3-0 0 52.4 43.9 287 3.3 5 58 7 52.3 393 4.4 7 54-8 50.2 365 4.1 1 56-1 52.1 391 4.4 2 47.2 42.8 275 3.2 3 42.5 39.8 245 2.8 9 40.6 35.4 207 2.4	12 90 549:2 45:5 29 536:5 75:6 39 2 537:7 81:7 18 79 529:0 100:5 10 81 518:0 109:6 10 81 520:1 106:5 10 81 520:1 106:5 1	11-7 26-9 2-5 10-2 31-9 3-0 14-6 36-6 2-5 19-0 40-8 2-0 16-3 41-4 2-5 11-1 35-7 2-5 11-8 31-7 3-0 11-9 27-0 3-0 14-1 26-0 3-5	4 3 7 0 0 1 0 3 29 0 0 0 0 24 1 2 0 0 17 1 6 0 0 0 4 0 9 26 2 16 2 3 0 4 3 13 1 0 9 1 3 4 10 2 4 12 5 5 0 0 2 10 7 13 4 3 4 1 5 1 9 5 7 12 2 1 0 0 20 1 4 8 10 0 0 0 0 0 1 7 8 21 2 0 0 0 1 16 16 8 6 0 2 0 2 5 13 4 2 20 0 0 0 3 2 16 4 10 10	7·8 19 1·62 8·5 10 ·47 7·5 6 4.6 6·5 17 1·30 6·9 15 1·67 7·4 12 1·95 8·0 21 2·38 6·9 8 90 6·4 22 3·66 8·2 24 6·11 7·5 26 7·15	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

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

 January, 41°
 March, 39°
 May, 46°
 July, 53°
 September, 55°

 February, 41°
 April, 43°
 June, 51°
 August, 54
 October, 52°

November, 47° December, 45°

Highest Readings = 55° on Sept. 2nd to 24th.

Rain fell on 195 days, and measured 28.56 inches.

Lowest Readings = 38° on March 5th to 20th.

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