

[Report 1947] / Medical Officer of Health, Halifax County Borough.

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Halifax (England). County Borough Council. nb2008024085

Publication/Creation

1947

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MEDICINE

10, PARKS ROAD.
OXFORD



County Borough of Halifax
Health Department

Annual Report


ON THE HEALTH
OF THE BOROUGH
FOR THE YEAR 1947



GEORGE C. F. ROE

M.R.C.P., L.R.C.S., L.M., D.P.H., D.P.M.

Medical Officer of Health



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County Borough of Halifax
Health Department

Annual Report

ON THE HEALTH
OF THE BOROUGH

FOR THE YEAR 1947



GEORGE C. F. ROE

M.R.C.P., L.R.C.S., L.M., D.P.H., D.P.M.

Medical Officer of Health

Health Committee

(as on December 31st, 1947).

Mayor - Alderman C. HOLDSWORTH, J.P.

Alderman L. CHAMBERS, Chairman.

Councillor E. RILEY, Vice-Chairman.

Alderman A. MUFF.

Alderman J. H. STEPHENSON.

Councillor A. GELDER.

Mrs. W. OXLEY.

" F. C. LAWRENCE.

Councillor D. ROBINSON.

" J. LUMB.

" G. W. SHOTTON.

" J. NICHOLL.

" F. SWIRE.

" H. NUTTON.

" T. STOTT.

Councillor Mrs. E. L. WHITLEY.

Sub-Committees

Appointed by the Health Committee.

Health Services Sub-Committee.

THE CHAIRMAN.
VICE-CHAIRMAN.

Alderman STEPHENSON.
Councillor LAWRENCE.

Councillor SWIRE.

Hospitals Sub-Committee.

THE CHAIRMAN.
VICE-CHAIRMAN.
Alderman MUFF.
Councillor GELDER.
" LUMB.

Councillor NICHOLL.
" OXLEY.
" ROBINSON.
" STOTT.
" WHITLEY.

Accounts Sub-Committee.

THE CHAIRMAN.
VICE-CHAIRMAN.

Councillor LUMB.
SWIRE.

Councillor SHOTTON.

Joint Recovery Sub-Committee.

The Members of the Health Committee who shall serve in rotation.

Maternity and Child Welfare Committee.

The Health Committee with the following additional members:—

Mrs. J. HODGSON.
Mrs. H. M. MARSLAND.
Mrs. J. MOORE

Mrs. FLORENCE RATCLIFFE.
Mrs. GERTRUDE TINKER.
Mrs. EPHALINA WHITAKER.

Committee for the Care of the Mentally Defective.

Alderman L. CHAMBERS
(Chairman).
Alderman M. LIGHTOWLER.
" J. ODDY.
Mr. G. H. BUTTERS.
Councillor W. HAIGH
(Vice-Chairman).

Councillor F. T. HODGSON.
" M. PICKLES.
" E. RILEY.
Mrs. E. L. EFFRON.
Mrs. L. STEPHENSON.
Mrs. E. TOWNEND.

Welfare of the Blind Sub-Committee.

THE CHAIRMAN.
VICE-CHAIRMAN.

Councillor OXLEY.
SHOTTON.

Councillor SWIRE.

Staff of the Health Department

(as on December 31st, 1947).

Medical Officer of Health.

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

Assistant Medical Officers of Health.

WILFRID SMITH, M.Sc., M.B., B.Ch., B.A.O., Senior Assistant Medical Officer of Health, Clinical Tuberculosis Officer and Resident Medical Officer, Sanatorium.

E. J. SIMPSON, M.B., Ch.B., Medical Officer to Maternity and Child Welfare Centre.

R. I. S. LEWIS, M.B., Ch.B., D.P.H., Resident Medical Officer, Isolation Hospital.

District Medical Officers.

A. GARVIE, M.D.

W. H. CRAVEN, B.Sc., M.B.,

J. MORRISON, M.B.

Ch.B., D.T.N.

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

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

R. LAWSON, M.B., Ch.B.

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

Public Analyst.

R. MALLINDER, B.Sc., F.I.C.

Inspectors.

J. W. BEAUMONT, Chief Sanitary Inspector.

H. MARGERISON,

Senior Sanitary Inspector and Housing Inspector.

District Sanitary Inspectors:

H. LEAPER.

A. PEARSON.

G. A. WOODHEAD.

J. L. MOXON.

F. BURKE.

F. BURTON, Sanitary Inspector and Housing Inspector.

J. FLANAGAN, Meat and Foods Inspector.

H. E. PERFECT, Rodent Operative.

Clerical Staff.

A. ROGERS, Chief Clerk.

H. WRIGHT, Senior Clerk.

Clerks:

N. BRADLEY.

T. K. BOOTHMAN.

D. ARCHBELL

E. A. BARKER.

(Resigned 20/9/47.

J. WILEY

P. GARSIDE.

(Commenced 3/11/47).

P. BLAKE.

Mrs. E. MALTON, M & C.W. Centre, L. WOOD, Housing Section.

Miss E. CLARKSON, Vaccination Officer, Visitor for Mental Deficiency Acts, Children and Young Persons Act (Part V.), Home Helps Organiser.

Maternity and Child Welfare.

Miss E. R. ORAM, Senior Health Visitor.

Health Visitors:

Miss M. MOORE.

Miss M. O. FORRESTER.

Miss S. E. BRIGGS.

Miss N. DINGSDALE.

Miss D. BARNES.

Miss P. A. VAUGHAN,
Tuberculosis Visitor.

The Halifax General Hospital.

Miss N. SPILMAN, Matron.

A. WHEELDON, Steward.

L. LYNN, Assistant Steward.

H. WILKINSON, Admission Officer.

Clerks:

Miss H. N. SHAW.

Mr. F. W. COATES.

Mrs. L. FARRAR.

Mr. H. V. WILKINSON.

Miss E. M. KEETLEY.

Miss M. STEPHENSON.

Miss W. GOODRICH.

Miss A. SYKES.

Halifax Sanatorium.

Miss M. F. McCAFFERTY, Matron.

Miss M. K. ELLWOOD, Clerk.

Isolation Hospital.

Miss R. E. STUBBS, Matron.

Miss O. I. BENTLEY, Clerk.

Day Nurseries.

Craigie Lea Day Nursery, Ovenden—

Matron: Miss A. L. GUMMERSON.

Ling Bob Day Nursery, Pellon—

Matron: Mrs. M. R. WILSON,

COUNTY BOROUGH OF HALIFAX

REPORT

OF THE

MEDICAL OFFICER OF HEALTH,
FOR THE YEAR 1947.

INTRODUCTION.

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

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present the Annual Report upon the health of the Borough of Halifax for the year 1947. The Report is the seventy-fifth of the series.

The prevention of disease is the ultimate aim of the Public Health Service. That we are still some distance from the attainment of that goal, the everyday prevalence of disease shows. But if this be discouraging, the history of the struggle against disease is inspiring. It is difficult to believe that less than a century ago the country was swept by epidemics of smallpox, typhoid and typhus fever. Epidemics killed hundreds of the population yearly. Fifty years ago enteric fever was always prevalent in Halifax. Today it is an uncommon event. These few examples are interesting to us because they throw some light upon the history of man's struggle for health. Progress in public health has been a slow and arduous matter. It has been as full of exciting incidents as were the battles of the two great world wars. World wide is the fame of men like Pasteur and Lister (to mention but two names) whose researches into the mysteries of the growth, habits and the activities of micro-organisms have saved human society from an incalculable amount of suffering.

The branch of the medical profession which has been most directly engaged in the prevention of disease is that of the Medical Officers of Health. Their duties include the study of the reports of the bacteriologist, the pathologist and the chemist. They examine the notifications of the infectious diseases and take the necessary steps to control and limit the spread of infections. Today, preventive and curative medicine cannot be understood as things apart. In a world of rapid changes—a complex world—no branch can do really effective work without the whole-hearted collaboration of the other. Fortunately in Halifax, such co-operation has, for many years existed.

Health and the expectancy of life are assessed on the fitness of one's organs, on family medical history, and on one's capacity to resist illness. The problems of disease are always modified by age. A child's physiological activities are incomparably greater than an adults. Children's diseases are so many and varied that they are now a special branch of medicine. It is called Paediatrics. With regard to adults, the killing diseases are Heart and Artery Diseases, Cancer and Tuberculosis. Special articles relating to these diseases appear in the body of the Report. I have endeavoured to dress them up in non technical language for the benefit of "the man in the street."

In July, 1948, the Hospitals will pass over to the Regional Board, and this is the last Annual Report giving an account of their activities for the period of a full year. When the change-over takes place, many new duties will be imposed on the Public Health Department. We shall become responsible for the new Mental Health Services. These embrace in their scope the administration and operation of the Lunacy Acts. Also we shall have to amend, extend and elaborate our schemes in respect of the care of mothers and young children, the care of premature infants, the supply of welfare foods and nursery provision. The present system of dental care will have to be amended in order that a properly co-ordinated scheme can be provided for the whole of the expectant and nursing mothers and children under five years of age. Premature babies include all babies weighing 5½ lbs. or less and arrangements have already been made whereby the weight of each child born is notified to the Health Department. The date of discharge from hospital of all premature babies is also notified. These arrangements make it possible for each premature baby to be visited by a Health Visitor the day following discharge from hospital, and advice is given to the mother as to the necessary care and attention of a premature infant. The two existing Day Nurseries are unable to cope with the demand, and steps have been taken to provide additional accommodation at the two Day Nurseries in the Borough. As you are probably

aware, the Northgate Clinic is inadequate for the needs of the area it serves. A scheme has been launched for its expansion. It is only a stop-gap provision (until it is possible to build Health Centres), but it should meet our needs for about ten years. The new scheme provides for an increase of about one-third of the present accommodation.

The basis of prevention of disease is a sound knowledge of aetiology. So long as it was believed that disease was due to the malign influence of demons or celestial bodies, no successful method of prevention could be devised. Preventive medicine, as we know it today, advanced but little until the comparatively modern developments of bacteriology. We can now group the majority of diseases into categories according to their aetiologies. It is advisable that every intelligent layman should realise the magnitude of the task of preventive medicine. In the year 1947 there occurred in Halifax 1,404 deaths. No Medical Officer of Health claims to be able to prevent death, which, for every person, is inevitable. But he does claim that the majority of deaths in infancy, childhood and early adult life can be prevented. Over 65% of deaths are due to the following diseases:—

Heart Disease.

Cancer.

Cerebral Haemorrhage and Apoplexy.

Tuberculosis.

Arterio-sclerosis (hardening of the arteries).

Nephritis (kidney disease).

Of these, some (T.B.) are due to the action of germs, Others (heart disease and arterio-sclerosis) are due to genetic factors and the stress and strain of life. Cancer alone is of almost unknown aetiology.

Deaths are the end results of disease, but there are many conditions, which since they rarely cause death, play no part in our death returns, but which give rise to incapacity and inefficiency. Preventive Medicine is now taking steps to diminish the amount of non-fatal illness in the community.

Vital statistics come in for a good deal of adverse criticism, but it is only by their use that we can determine to what extent a particular disease exists in a community, whether it is more prevalent in A or B, and whether its extent varies with climate or social conditions. Vital statistics—properly applied—give us exact information and suggest how most effectively to apply remedial measures.

The general report is planned so that the details of any specific section can be readily found.

I wish to express my thanks to the staff of the Health Department for the conscientious manner in which they have carried out their duties during the year.

Mr. J. H. Bargh, Chief Clerk, resigned in March in order to take up the post of Chief Clerk to the Islington Local Authority. Mr. A. Rogers was appointed Chief Clerk in April, and took up duty in June.

In conclusion, I have to acknowledge with many thanks the support, interest and encouragement of the Health Committee which I received throughout the year.

I am,

Mr. Chairman, Ladies and Gentlemen,

Your obedient Servant,

GEORGE C. F. ROE,

Medical Officer of Health.

Public Health Department,
Powell Street,
Halifax.

REPORT

Statistics

SECTION 1



Statistics

REPORT

Statistics

Latitude	53° 44' North.				
Longitude	1° 50' West.				
Mean height above sea level, feet	...	...	...	780	
Area in acres	...	...	...	...	14,081
Population (Census 1931)	...	...	...	98,115	
(Males 44,600. Females 53,515).					
Population (Mid year, 1947)	...	...	...	94,580	
Density of population per acre	...	...	...	6'7	
Number of inhabited houses (1931 Census)	...	...	...	28,488	
Number of houses according to Rate Books	...	...	...	31,540	
(15th October, 1947).					
Average number of persons to each occupied house...				2'99	
Rateable Value, 15th October, 1947	...	...	...	£637,196	
Sum represented by a penny rate	...	...	...	£2,499	
(Estimated Product).					

Summary of Vital Statistics.

Birthrate per 1,000 population	...	...	...	19'9	
Deathrate per 1,000 population	...	...	...	14'8	
Infantile deathrate per 1,000 births	...	...	...	41'77	
Respiratory deathrate	...	...	...	1'53	
Phthisis deathrate	...	...	...	0'4	
Deathrate from other forms of Tuberculosis	...	...	...	0'06	
Tuberculosis deathrate (all forms)	...	...	...	0'46	
Deathrate from Cancer	...	...	...	2'26	

Summary of Deaths.

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

Cause of Death	Number
Typhoid and Paratyphoid Fevers ...	—
Cerebro-spinal Fever ...	—
Scarlet Fever ...	—
Whooping Cough ...	1
Diphtheria ...	2
Tuberculosis of respiratory system ...	38
Other forms of Tuberculosis ...	6
Syphilitic Disease ...	15
Influenza ...	3
Measles ...	4
Acute Poliomyelitis and polioencephalitis ...	—
Acute Inf. Encephalitis ...	1
Cancer of Buc. Cav. and Oesoph (M) ...	6
Cancer of Uterus (F) ...	24
Cancer of Stomach and Duodenum ...	37
Cancer of Breast ...	19
Cancer of all other sites ...	128
Diabetes ...	14
Intracranial vascular lesions ...	188
Heart Disease ...	455
Other Diseases of Circulatory System ...	61
Bronchitis ...	89
Pneumonia ...	37
Other Respiratory Diseases ...	19
Ulcer of Stomach or Duodenum ...	11
Diarrhoea, etc. (under 2 years) ...	11
Appendicitis... ...	2
Other Digestive Diseases ...	20
Nephritis ...	26
Puerperal and post-Abort: Sepsis... ...	1
Other Maternal Causes ...	—
Premature Birth ...	24
Congenital Malformation; Birth inj.; Infant Dis. ...	29
Suicide ...	14
Road Traffic Accidents ...	7
Other Violent Causes ...	31
All other Causes ...	81
Total ...	1,404

	Year	Birthrate per 1,000 Total Population	Annual Deathrate per 1,000 Population								Rate per 1,000 Births	
			ALL CAUSES	Typhoid and Para-Typhoid	Small-Pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Diarrhoea and Enteritis (under two years)	DEATHS under one year
England and Wales ...	1947	20.5	12.0	0.00	0.00	0.01	0.00	0.02	0.01	0.09	5.8	41
126 County Boroughs and Great Towns including London ...	1947	23.3	13.0	0.00	0.00	0.02	0.00	0.03	0.01	0.09	8.0	47
HALIFAX ...	1939	13.8	15.3	0.00	0.00	0.01	0.02	0.03	0.05	0.17	1.4	60
	1940	13.0	15.6	0.01	0.00	0.00	0.00	0.02	0.15	0.23	4.0	45
	1941	13.3	15.7	0.00	0.00	0.04	0.00	0.03	0.12	0.10	21.3	65
	1942	15.8	14.6	0.00	0.00	0.03	0.00	0.00	0.05	0.05	6.9	56
	1943	17.1	15.4	0.00	0.00	0.00	0.00	0.04	0.04	0.31	5.2	50
	1944	18.6	14.5	0.00	0.00	0.01	0.00	0.03	0.04	0.03	3.5	38
	1945	16.39	16.1	0.00	0.00	0.01	0.00	0.02	0.05	0.09	3.4	42
	1946	18.6	14.4	0.00	0.00	0.00	0.00	0.02	0.00	0.04	2.3	31
	1947	19.9	14.8	0.00	0.00	0.04	0.00	0.01	0.02	0.03	5.8	42

Provisional figures.

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.

Vital and Mortal Statistics for Halifax during the last 21 years.

Year	Death-rate	Infant Mortality Rate	Maternal Mortality Rate	Tuberculosis (all forms)		Diphtheria		Scarlet Fever		Typhoid and Para-typhoid		Cerebro Spinal Fever		Smallpox	
				New Cases	Deaths	New Cases	Deaths	New Cases	Deaths	New Cases	Deaths	New Cases	Deaths	New Cases	Deaths
1927	15.4	90	7.4	194	96	83	8	192	2	5	nil	nil	nil	12	nil
1928	12.3	67	10.2	150	67	224	16	386	2	8	2	1	nil	221	nil
1929	14.7	76	6.8	183	82	146	9	431	3	73	1	nil	nil	156	1
1930	14.3	66	9.2	169	79	100	7	274	1	9	1	1	nil	56	nil
1931	14.9	77	3.2	198	70	165	17	163	3	4	2	nil	nil	nil	nil
1932	14.8	80	8.7	158	71	162	10	182	1	1	nil	2	2	nil	nil
1933	15.4	92	9.4	161	71	173	13	256	2	nil	nil	3	3	nil	nil
1934	13.9	77	10.5	132	60	344	20	337	2	nil	nil	1	1	nil	nil
1935	14.6	70	6.4	158	55	322	16	227	2	nil	nil	1	1	nil	nil
1936	15.2	68	7.02	206	75	206	12	136	nil	3	nil	2	2	nil	nil
1937	14.6	63	2.39	135	38	164	5	162	nil	1	nil	5	5	nil	nil
1938	14.1	57	2.92	165	55	155	6	145	nil	nil	nil	3	1	nil	nil
1939	15.3	60	4.4	135	65	129	5	184	2	nil	nil	nil	nil	nil	nil
1940	15.6	45	8.8	118	51	311	15	166	nil	3	1	31	9	nil	nil
1941	15.7	65	1.5	111	60	230	12	97	nil	nil	nil	16	3	nil	nil
1942	14.6	56	3.4	113	65	196	5	669	nil	nil	nil	9	4	nil	nil
1943	15.4	50	1.9	123	68	127	4	411	nil	1	nil	2	2	nil	nil
1944	14.5	38	2.3	156	54	118	4	481	nil	nil	nil	nil	nil	nil	nil
1945	16.1	42	2.0	110	53	92	5	173	nil	nil	nil	nil	nil	nil	nil
1946	14.4	31	1.1	69	41	17	nil	74	nil	73	nil	nil	nil	nil	nil
1947	14.8	42	0.52	87	44	21	2	84	nil	2	nil	3	nil	nil	nil

Vital and Mortal Statistics for Halifax during the last 21 years (continued).

Year	Pneumonia		Whooping Cough		Poliomyelitis		Cancer Deaths	Heart Diseases Deaths	Cerebral Hæmorrhage Deaths
	New Cases	Deaths	New Cases	Deaths	New Cases	Deaths			
1927	105	70	nil	6	1	1	158	254	125
1928	66	32	nil	nil	nil	nil	172	216	92
1929	87	38	nil	14	6	nil	170	308	100
1930	121	61	nil	2	nil	nil	170	308	114
1931	124	109	nil	4	1	nil	191	327	95
1932	105	82	nil	8	2	nil	176	342	85
1933	105	87	nil	3	4	nil	158	418	87
1934	80	66	nil	2	1	nil	180	381	74
1935	117	69	nil	1	1	nil	194	406	67
1936	91	74	nil	4	1	nil	193	448	74
1937	115	77	nil	2	nil	nil	178	424	73
1938	164	58	nil	nil	1	nil	186	419	77
1939	182	59	2	2	2	nil	193	449	89
1940	156	57	185	2	2	nil	187	408	232
1941	188	66	240	3	nil	nil	235	381	179
1942	226	61	174	nil	5	nil	216	374	164
1943	236	55	211	4	2	nil	205	374	179
1944	124	38	201	3	nil	nil	177	366	199
1945	103	43	133	2	nil	nil	219	398	237
1946	69	35	153	2	1	nil	206	464	182
1947	67	37	237	1	6	nil	214	455	188

Table showing comparative yearly Vital and Mortal Statistics from 1939 to 1947 inclusive.

Year	Birth-rate	Death-rate	Infant Mortality Rate	Maternal Mortality Rate	Pulmonary Tuberculosis		Venereal Diseases		Pneumonia	
					New Cases	Death-rate	Syphilis	Gonorrhœa	New Cases	Deaths
1939	13.8	15.3	60	4.4	83	.58	35	89	182	59
1940	13.0	15.6	45	8.8	106	.44	45	96	156	57
1941	13.3	15.7	65	1.5	102	.58	33	66	188	66
1942	15.8	14.6	56	3.4	98	.53	34	40	226	61
1943	17.1	15.4	50	1.9	101	.62	49	56	236	55
1944	18.6	14.5	38	2.3	90	.48	45	49	124	38
1945	16.39	16.1	42	3.0	90	.48	50	67	103	43
1946	18.6	14.4	31	1.1	53	.37	103	124	69	35
1947	19.9	14.8	42	0.5	72	.40	95	130	67	37

Year	Deaths from Heart Disease	Deaths from Cancer	Deaths from Cerebral Hæmorrhage	Deaths from Diabetes	Diphtheria		Scarlet Fever	
					New Cases	Deaths	New Cases	Deaths
1939	449	193	89	26	129	5	184	2
1940	408	187	232	8	311	15	166	nil
1941	381	235	179	17	230	12	97	nil
1942	374	216	164	19	196	5	669	nil
1943	373	205	179	20	127	4	411	nil
1944	366	177	199	19	118	4	481	nil
1945	398	219	237	15	92	5	173	nil
1946	464	206	182	16	17	nil	74	nil
1947	455	214	188	14	21	2	84	nil

Notification.

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

Disease					Number
Smallpox	...	...	...	...	—
Dysentery	...	...	...	...	1
Typhoid Fever and Enteric Fever	...	...	...	...	2
Para-Typhoid	...	...	...	...	—
Scarlet Fever	...	...	...	...	84
Malaria	...	...	...	...	—
Diphtheria	...	...	...	...	21
Puerperal Pyrexia	...	...	...	...	9
Erysipelas	...	...	...	...	9
Ophthalmia Neonatorum	...	...	...	...	2
Encephalitis Lethargica	...	...	...	...	—
Acute Poliomyelitis	...	...	...	...	6
Cerebro-spinal Fever	...	...	...	...	3
Measles	...	...	...	...	1826
Whooping Cough	...	...	...	...	237
Pneumonia—					
Influenzal	...	...	...	...	—
Primary	...	...	...	...	67
Tuberculosis—					
Respiratory	...	...	...	...	72
Other Forms	...	...	...	...	15
Total					2354

Road Traffic Accidents.

During the year there were 7 deaths attributable to Road Traffic Accidents. The following table affords a comparison with the number of fatal accidents occurring in previous years:

	1941	1942	1943	1944	1945	1946	1947
Fatal	18	9	7	6	9	4	7

The Growth of the Borough of Halifax.

Year	Population	Note
1848	40,000	Borough Incorporated.
1861	51,937	
1871	65,510	
1881	63,360	
1891	82,864	
1892	83,364	Borough extended by the additions of Ovenden and Illingworth Wards.
1899	90,934	
1900	96,684	
1901	104,936	Borough extended by the addition of Copley Ward.
1911	101,556	
1921	100,700	Borough extended by the additions of Warley and Northowram Wards.
1931	98,115	
1945	89,390	Mid year density of population per acre 6.3.
1946	93,280	
1947	94,580	

Are we as fit as our Vital and Mortal Statistics suggest ?

Only a few facts of our community health are revealed by vital and mortal statistics. Such statistics do not afford any index of the amount of sickness present in the population. Morbidity (sickness) statistics are imperfect and can therefore be accepted only provisionally and regarded merely as a rough indication of the state of our community health. The morbidity figures we possess suggest that diseases of the Respiratory System (including "colds") accounted for over a third of all cases of sickness. Diseases of the gastro-intestinal tract come next. Rheumatic and nervous diseases closely followed. The incidence of skin diseases—particularly boils, sores and vague rashes (possibly nutritional) has increased. More variety in respect of our food, more fat and more cane sugar would probably help to reduce the incidence of these conditions.

CONTROL OF MEASLES.

Measles has again assumed its biennial periodicity. But measles—although still a serious disease of childhood—has lost ground as a killing disease. There has been a remarkable reduction in measles mortality. I attribute this reduction to improved environmental conditions; to the delayed age of attack associated with smaller families and to the more successful treatment of secondary pneumonia with the sulphonamide drugs.

It is interesting to note that whilst mortality has declined, morbidity remains about the same. Not more than 15 per cent. of children in this area escape an attack of measles. The incidence is highest in the 3 to 4 age group. It is possible, by injection methods, (convalescent measles serum and normal adult serum) to modify an attack of measles. An attenuated attack is often preferable since it gives immunity. In Halifax we have endeavoured to make increasing hospital provision for cases of measles, but it must be remembered that the group nursing of children with measles is not without its attendant complications. Our cubicle isolation scheme is not adequate for dealing with this problem on a large scale. No doubt this matter will receive serious consideration under the new hospitals scheme which will come into operation in 1948.

THE ISOLATION HOSPITAL.

Isolation per se makes little impression on the incidence of infectious diseases. A modern isolation hospital is a specialist hospital. The doctors at an isolation hospital have a wide knowledge of clinical medicine, including bacteriology, chemotherapy and serotherapy. The nursing staff have special training and experience in respect of infectious diseases. Under present conditions there is no incentive for a good doctor to remain in a small Isolation Hospital and specialise. A first class Isolation Hospital should attract a first class staff.

SECTION 2



Public Health Act, 1936

General Provision of Health Services

General Provision of Health Services

(Arranged as required by the Ministry of Health)

Hospitals provided or subsidised by the Halifax Corporation :

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

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

Maternity Hospital—Maternity cases are provided at the Halifax General Hospital and the Royal Halifax Infirmary. There is an increasing demand for Maternity Hospital beds and some extension of maternity accommodation is a priority need. The Corporation makes a grant of £300 per annum towards the Infirmary Maternity Home.

Hospital for Children—By arrangement with the Education Committee operations for Tonsils and Adenoids are carried out at the Halifax General Hospital.

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

An Orthopædic Service has been set up at the Halifax General Hospital for the treatment of cases sent by the Maternity and Child Welfare and Education Committees.

Fever Hospital—The Corporation provides the Isolation Hospital which admits cases of Scarlet Fever, Diphtheria, Enteric and other fevers from Halifax, and from the areas of neighbouring local authorities. Accommodation for 96 cases.

Smallpox—The Halifax Corporation has, consequent upon the closure of the Smallpox Hospital at Belle Vue, Mount Tabor, concluded an agreement with the Bradford Corporation for all cases of smallpox occurring in this area to be admitted to the Bradford Smallpox Hospital.

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

Hospital Facilities.

Hospital and Situation	Purpose	Total Beds	Authority	Medical Staff	Consultants
Isolation Hospital, Northowram Hall	Fevers	96	Halifax Health Committee	1 Res. Medical Officer	As required
Halifax Sanatorium, Shelf	Tuberculosis	62	Do	1 Res. Medical Officer The Sen. Asst. M.O.H. and Tuberculosis Officer	As required
The Halifax General Hospital	General Surgical Medical Children and Maternity	450	Do	1 Medical Superintendent (Resident) 1 Dep. Medical Superintendent (Resident) 5 Resident Assistant Medical Officers	1 Pathologist & Bacteriologist 2 Physicians 8 Surgeons 1 Anaesthetist 1 Radiologist 1 Paediatrician 1 Psychiatrist 1 Dermatologist 1 Director of Radium Treat.

General Nursing—Under the Local Government Act 1929, the Halifax General Hospital was, on April 1st, 1931, transferred to the Local Authority and is administered by the Health Committee as a General Hospital.

AMBULANCE FACILITIES.

(a) For Infectious Cases—

Two "Austin" 18 H.P. Ambulances, worked from the Isolation Hospital, Northowram Hall, serve Halifax and the other districts from which cases are admitted to the Hospital.

(b) For non-Infectious and Accident Cases—
(From 1st November, 1944)—

(1) The Corporation's Motor Ambulance Service, worked by the Halifax General Hospital (Tel. 5816).

1 "Humber" 25 H.P., 2 "Austin" 20 H.P., 1 "Austin" 18 H.P., and 1 "Ford V8."

(2) The Ambulance of the St. John Ambulance Brigade.

Nursing in the Home—This is provided by :—

Halifax District Nursing Association.

Illingworth Nursing Association.

Luddenden Nursing Association.

Diphtheria Immunisation.

Immunisation is carried out at the Maternity and Child Welfare Clinic, the School Clinic and by general practitioners in the town. Immunising material is supplied free to Halifax doctors. The incidence of young people immunised has increased, but there is still plenty of room for improvement in this direction. It is very important that all pre-school children should be immunised against Diphtheria.

Bacteriological Examinations.

The arrangements are as follows:—

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

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.

Chemical Work.

All chemical analyses are performed by Mr. R. Mallinder, B.Sc., F.I.C., Borough Analyst. This work includes not only the analysis of samples taken under the Sale of Food and Drugs Acts, 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.

Public Health Act, 1936.

Child Life Protection.

It is the duty of the Local Authority to appoint Infant Protection Visitors to visit from time to time, to satisfy themselves as to the proper nursing and maintenance of such infants, or to give necessary advice or directions thereon.

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

(a) Number of foster parents on the Register at the					
end of the year	...	...	...	...	3
(b) Number of children on the Register :—					
At end of the year	...	...	...	...	3
(c) Number of Visitors at the end of the year who					
were :—					
(1) Health Visitors	...	...	...	...	6
(2) Female, other than Health Visitors	...	...	...	...	1
(3) Male	...	...	...	...	—

My thanks are due to Mr. Butler, the local Inspector of the National Society for the Prevention of Cruelty to Children, for his courteous and valued co-operation during the past year.

CLINICS.

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

Name of Clinic	Purpose	Where held	Times	
			Days	Hours
Tuberculosis Dispensary	Tuberculosis	8, Clare Road	Mon. & Thurs.	2-0 — 4-0
Maternity and Child Welfare	Sunlight and Massage	66/68, Northgate	Monday	9-30—11-30
1. Infant Welfare Centre	Posterior Schick	do	do	10-0 — 11-30
	Babies and Consultations	do	do	2-0 — 4-0
	Sunlight and Massage	do	Wednesday	9-30—11-30
	Babies and Massage	do	do	2-0 — 4-0
	Sunlight and Massage	do	Thursday	9-30—11-30
	Immunisation	do	do	2-30—4-0
	Immunisation and Massage	do	Friday	9-30—10-30
	Ante-Natal	do	do	10-30—12-0
	Babies and Massage	do	do	2-0 — 4-0
2. Queen's Road Clinic	Sunlight and Massage	Fairfield Meth. School	Saturday	9-30—11-0
	Babies	do	Tuesday	9-30—12-0
	do	do	do	1-30—4-0
3. Ovenden Clinic	do	Nursery Lane Methodist School	Wednesday	9-30—11-30
†Hx. District Nursing Assoc.	Ante-Natal Booking	Kirby Leas, Savile Road	Monday	2-30—4-0
	Ante-Natal	do	Thursday	*10-0 — 12-0
	Post-Natal	do	do	12-0 —
	Ante-Natal Booking	do	do	5-0 — 7-0
Halifax General Hospital	Ante-Natal	Halifax General Hospital	Monday	10-0 — 11-0
	do	do	Tuesday	10-0 — 11-0
	Post-Natal	do	Wednesday	10-0 — 11-0
	Ante-Natal	do	Thursday	10-0 — 11-0
	do	do	Friday	10-0 — 11-0
	do	do	Monday	10-30—12-0
Royal Halifax Infirmary	do	Royal Halifax Infirmary	Tuesday	10-30—12-0
	Post-Natal	do	Wednesday	10-30—12-0
	Ante-Natal (New Patients)	do	do	2-0 — 4-0
	Ante-Natal	do	Friday	10-30—12-0
	do	do	do	2-0 — 4-0

† Subsidised by Corporation.

* Doctor in attendance.

SECTION 3



Cancer

It is a tragedy that many patients with medical ailments are
 never when the disease is in an advanced and inoperable stage.
 I believe that well thought out policies on the subject would
 result in a proportion of such cases which would be treated
 and surgical treatment is an earlier stage of the disease. This
 is the reason why I put medical public health on each year on
 Cancer. It may be expected that cancer rates will increase
 globally. On the other hand, it may be that cancer health
 have been defined as part of the pattern of public health
 education there has been no serious attempt in anything
 in the realm of cancer education. Reports from the U.S.A.
 where cancer programs are active claim that the attendance
 at clinics of patients with early and treatable cancer have
 increased as a result. In Minnesota the delay in seeking
 expert advice has been reduced from six months to under four.

Cancer

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

In addition to the Radium Clinic at the Royal Halifax Infirmary, facilities for diagnosis and treatment (clinical, laboratory and X-Ray) exist at the Halifax General Hospital.

The following Table shows the death-rate from Cancer in Halifax from the year 1928 :—

Year.	Death-rate per 1,000 population.		Year.	Death-rate per 1,000 population.
1928	1.7		1938	1.9
1929	1.7		1939	1.9
1930	1.7		1940	1.9
1931	1.9		1941	2.5 Note Increase
1932	1.8		1942	2.3
1933	1.6		1943	2.2
1934	1.8		1944	1.9
1935	1.9		1945	2.5
1936	1.9		1946	2.2
1937	1.8		1947	2.3

It is a tragedy that many patients seek medical advice for cancer when the disease is in an advanced and incurable stage. I believe that well thought out lectures on the subject would result in a proportion of such cases obtaining skilled medical and surgical treatment at an earlier stage of the disease. This is the reason why I give several public lectures each year on Cancer. It may be objected that cancer talks lead to cancer phobia. On the other hand, in areas where cancer lectures have been delivered as part of the routine of public health education, there has been no evidence whatever of anything in the nature of cancer phobia. Reports from the U.S.A.—where cancer propaganda is active—claim that the attendances at clinics of patients with early and treatable cancer have increased as a result. In Massachusetts the delay in seeking expert advice has been reduced from six months to under four.

In Connecticut there has been a five per cent. improvement— from a fifth to a quarter of all patients treated—in the five year survival rates as a result of patients attending for early diagnosis and treatment. I suggest that these improvements are the results of carefully applied health teaching.

I do not suggest that every cancer patient could, if treated in an early stage of the disease, be cured. There are too many unknown and mysterious factors to prevent that, but I am of the opinion that early treatment would bring about an increase in cancer survival rates, and I submit that this can only be attained by well-informed education of the public.

It is too often thought that cancer is always incurable. The use of radium, X-Ray Therapy and modern surgical technique has saved many lives when applied at a sufficiently early date. The moral is obvious. We cannot afford to wait until research solves the riddle of cancer. There may be genetic factors in the aetiology of the disease, and if this is so, the solution of the problem is extremely complex. In the meantime we must advocate early competent advice, together with prompt treatment.

SECTION 4



Infectious Diseases

Isolation Hospital

Prevalence of, and Control over Infectious Diseases

Enteric Fever.

No case of this disease was notified during the year. No death occurred.

Typhoid Fever.

The following Table shows the incidence of Typhoid Fever in Halifax during the past 10 years:—

1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
—	—	5	1	1	2	—	—	2	2

Small-Pox.

No case of this disease occurred during the year.

Ophthalmia Neonatorum.

The following Table shows the number of cases notified, and where they were treated:—

Notified	Treated	
	at Home	at Hospital
2	2	—

Cerebro-Spinal Fever :—

No case of this disease was notified during the year.

Diphtheria Immunisation.

Number of persons having had full course of injections since inception of Scheme :—

Year	Under 5 years	Over 5 years	Total
1943	853	671	1524
1944	689	296	985
1945	841	315	1156
1946	636	219	855
1947	534	194	728

SCARLET FEVER.

In Halifax Scarlet Fever continues a very mild disease. Its incidence remains low. Scarlet Fever is a disease caused by several, but not all, varieties of streptococci and characterised, *inter alia*, by fever and a scarlet rash. The usual channel of infection is the throat, and the disease is spread by droplet infection. Scarlet Fever could be transmitted by persons who were not suffering from the clinical disease but who were disseminating the scarlet fever streptococcus. Scarlet Fever is only one of the clinical manifestations of infection by the streptococcus hæmolyticus. Immunisation for scarlet fever was not so satisfactory as immunisation for diphtheria. There was a relationship between scarlet fever and puerperal septicæmia. It sometimes happens that a child suffers from a typical attack of scarlet fever and after two or three weeks develops another rash similar to the first. This is due to the fact that the child has not developed an all-round immunity to the attack of the hæmolytic streptococcus, and is therefore susceptible to a further attack by a different strain of the same germ. These second attacks suggest there are different species of the same germs capable of causing scarlet fever. I am of the opinion that throat swabbing has a limited value in these cases, because, although it would confirm the presence or absence of streptococci, it would not demonstrate whether the streptococci were going to cause scarlet fever or not. Throat swabbing is a valuable indicant of a carrier of hæmolytic streptococci in a midwife in special circumstances and in a person associated with milk supplies.

The administrative measures taken in connection with scarlet fever include isolation, exclusion of contacts from school and their supervision. The policy of admitting all cases of scarlet fever to hospital is not sound. Cases should be considered for admission to hospital on their clinical and environmental merits and not as a matter of routine. If the former virulent variety of scarlet fever returned to this country it would be quite an easy matter to adapt administrative measures to meet the changed circumstances. Hospitalisation, *per se*, has had very little, if any, effect upon the prevalence of either scarlet fever or diphtheria. The reason is that endemicity is maintained not by clinically recognisable cases, but by the far more numerous unrecognised carriers and cases of sub-clinical infection. The desquamated skin after scarlet fever is not infectious.

Terminal Disinfection.

Modern medical opinion is, I believe, generally in favour of the abolition of terminal disinfection. Secondary cases are not increased when terminal disinfection is abolished. The procedure is ineffective and expensive and should be dropped.

ISOLATION HOSPITAL.

The Isolation Hospital is situated at Northowram, on a site of 32 acres and at a height of 800 feet above sea level. The nearest railway station is Halifax, 3 miles distant. The bus route between Halifax and Bradford is one quarter of a mile away.

There are about 10 acres available for expansion. Cases are admitted from surrounding areas if accommodation and nursing staff are available.

Accommodation is as follows :—

	Beds
Scarlet Fever. 2 blocks of 26 beds each...	52
Diphtheria. 1 block of 26 beds...	26
1 Cubicle block ...	12
1 other block ...	6
	96

It should be noted that we admit all types of infectious diseases to the Hospital according to the circumstances of the case in question. There is an Administration Block (the Old Hall), a Nurses' Home (built at the time when the ward blocks were erected) and the usual out-offices: Laundry, garage, laboratory, dispensary and mortuary. If the Hospital is extended I recommend an additional cubicle block—by far the most useful unit of the Hospital. At the time of writing it is difficult to envisage the future set up of our Hospitals but, I suggest that a considerable extension of this Hospital would—provided staff could be obtained—serve a large area. The erection of a Sanatorium on the Northowram Hospital site might be worth serious consideration. A complete unit (Isolation Hospital plus Sanatorium) under the administration of a Medical Superintendent and the necessary medical and nursing staff would I think serve a large area surrounding Halifax. Small hospitals are often inefficient and wasteful of staff and material. In view of the probable shortage of nursing staff for, perhaps, the next decade, the establishment of large Isolation Hospitals and Sanatoria will possibly have to be faced.

I am indebted to Dr. R. I. S. Lewis, the Resident Medical Officer, for the following report :—

Scarlet Fever.

The number of cases admitted was 99, of whom 57 were Halifax cases, and 42 non-Halifax cases. There were no deaths from Scarlet Fever.

Diphtheria.

During the year 42 cases (39 Halifax and 3 non-Halifax cases) were admitted for Diphtheria. Of these 25 (24 of them Halifax cases) were confirmed to be suffering from the disease. The average length of stay was 44 days. There were 3 deaths from Diphtheria, all of which occurred in Halifax children who had not been immunised against the disease.

Measles.

84 cases were admitted (68 Halifax and 16 non-Halifax cases). 1 Halifax child died from the disease.

Poliomyelitis.

21 suspected cases of Poliomyelitis were admitted to Hospital. (15 Halifax cases and 6 non-Halifax cases). Of this number 8 (5 of them Halifax cases) were confirmed to be suffering from the disease. There was 1 death, an out-of-Borough case.

Whooping Cough.

28 cases were admitted. There was 1 death.

Typhoid Fever.

2 cases, both Halifax, were admitted. There were no deaths.

Paratyphoid Fever.

No cases were admitted.

Enteritis.

13 cases were admitted, of whom 6 were cases of food poisoning.

Chicken Pox.

18 cases were admitted.

Erysipelas.

2 cases were admitted.

Cerebro-Spinal Fever.

2 cases were admitted. There were no deaths.

Rubella.

3 cases were admitted.

Vincent's Angina.

1 case was admitted.

Other Diseases.—12.**Laboratory Report, 1947.**

The following examinations were carried out :—

Test	Positive	Negative	Total
Swabs for K.L.B. ...	19	77	96

Disinfection.

The following articles were disinfected :—

Patients' articles	...	...	...	1214
Hospital bedding and clothing	...	...	...	2827
Sanatorium bedding and clothing	...	...	...	192

Number of Stovings—351.

SECTION 5



Tuberculosis

Tuberculosis

Although the incidence of Tuberculosis has declined there are still over 40 people per annum in Halifax who die from this scourge. Immunity against T.B. is greater in some people than in others. With regard to animals, the guinea pig has practically no immunity against T.B., while the goat has a very high degree of immunity. Children have less immunity than adults. Tuberculosis is often contracted in childhood, but does not become evident until the twenties.

The onset of T.B. is usually slow. Fatigue, a slight cough (dry at first but with spit later), a slight rise of temperature, usually in the afternoon, and increased by exertion, and loss of weight should suggest a medical examination. If necessary your doctor will arrange for X-Ray examination and sputum tests. People who act positively to a tuberculin test usually have an X-Ray examination. Rest is a very big factor in the treatment of tuberculosis. Change of climate alone will not suffice unless other factors are observed. Worry, excitement, and too much physical exercise are bad for T.B. cases. Recovery is a long slow process, even in early cases. Artificial Pneumothorax is useful in selected cases. By this means a gas is injected into the space between the chest and the outer surface of the infected lung. This "splints" the lung and gives it rest.

It is very important that T.B. patients should be taught how to take care of their sputum in order to avoid infecting others. T.B. is not hereditary, but is often found in several members of a family because of contact infection. The control and prevention of T.B. is largely a matter of the proper care of sputum and contacts. If these measures were always carried out, many cases of T.B. would be prevented.

Early diagnosis is also very important. Mass methods of finding early cases by mobile X-Ray units are of great value. Miniature X-Ray films are used. Some day a specific drug may be discovered which will arrest, or even cure, T.B. Until that time arrives, we must continue with our present methods of diagnosis and treatment.

Although T.B. is not inherited, the predisposition may be, and members of a family with a T.B. history should have periodic medical check-ups.

I am indebted to Dr. W. Smith for the following report :

Halifax Sanatorium.

	Halifax Cases	Other Cases	Total
Remaining in on Dec. 31st, 1946	31	21	52
Admitted during 1947	71	47	118
Discharged during 1947	52	45	97
Died during 1947	16	6	22
Remaining on Dec. 31st, 1947 ...	34	17	51

The figures of new cases of Pulmonary Tuberculosis for Halifax since 1940, are as follows :

1940	1941	1942	1943	1944	1945	1946	1947
120	110	98	106	90	90	53	63

The Health Committee in July, 1943, decided to put the new Tuberculosis Allowances Scheme into operation. It is at present too early to comment upon the effect of the scheme on the incidence of Tuberculosis. Miniature radiography has not yet come into force in this area.

TUBERCULOSIS DEATH-RATE.		
PERIOD	Respiratory only	All Forms
10 years average 1937-46 ...	'49	'63
1947	'40	'46

The following Table shows the number of notified cases of Tuberculosis remaining in the Borough on December 31st, 1947 :—

Total Cases	Pulmonary			Non-Pulmonary		
	Males	Females	Total	Males	Females	Total
558	253	237	490	37	31	68

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

FORMAL NOTIFICATIONS.

AGE PERIODS	Number of Primary Notifications of new cases of Tuberculosis											Total Notifications
	0-	1-	5-	10-	15-	20-	25-	35-	45-	55-	65-		TOTAL (all ages)
Pulmonary Males ...	—	3	1	—	2	3	5	5	10	5	2	36
Females ...	—	—	2	1	1	3	9	6	2	—	3	27
Non-Pulmonary Males	—	—	1	—	1	1	2	—	1	—	—	6
" Females	—	—	1	—	—	3	1	—	—	1	—	6

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

AGE PERIODS		0-	1-	5-	10-	15-	20-	25-	35-	45-	55-	65-	TOTAL
Pulmonary Males	...	—	—	—	—	—	1	3	—	—	1	1	6
Females	...	—	—	—	—	—	1	1	1	—	—	—	3
Non-Pulmonary Males		—	1	—	—	—	—	—	—	1	—	—	2
" Females		—	—	—	—	—	—	—	—	—	1	—	1

SOURCE OF INFORMATION.		No. of Cases.	
		Pulmonary	Non-Pulmonary
Death Returns	{ from local Registrars	...	1
	{ transferable deaths from Registrar General	...	2
Posthumous notifications	...	...	—
	“Transfers” from other areas (other than transferable deaths)	...	5
Other Sources	...	...	—
	—

SOURCE OF INFORMATION.

	No. of Cases.	
	Pulmonary	Non-Pulmonary
Death Returns { from local Registrars ...	2	1
transferable deaths from Registrar General ...	2	2
Posthumous notifications ...	—	—
"Transfers" from other areas (other than transferable deaths) ...	5	—
Other Sources ...	—	—

SECTION 6



Venereal Diseases

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 p.m. 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 Borough.

Dr. R. W. Hendry, M.B., F.R.C.S. (Ed.), and Dr. H. V. Phelon, M.R.C.P. (Lond.), are in charge of this Clinic.

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

The following figures refer to local patients attending Treatment Centres:—

Number of persons dealt with for the first time during the year, and found to be suffering from					Local Clinic	Other Clinics
Syphilis	...	...	...	...	93	2
Soft Chancre	...	...	...	...	—	—
Gonorrhoea	...	...	...	...	127	3
Conditions other than Venereal	...	...	...	...	102	4
Total					322	9
Total attendances at the out-patient clinic					9481	109
Aggregate number of in-patient days...					467	—

Pathological Work.

Microscopical :—				Specimens examined at the Treatment Centre
For Syphilis	...	...	...	89
For Gonorrhoea	...	...	...	1510

SECTION 7



Maternity and Child Welfare Home Help Service

Maternity and Child Welfare

I am indebted to Dr. E. J. Simpson, Medical Officer-in-Charge Maternity and Child Welfare Centre for the following report : —

Since September, 1947, there has been co-ordination of the Maternity Services. Mr. N. Emblin, M.D., F.R.C.S., M.M.S.A., M.R.C.O.G., became Consultant Obstetrician responsible for the midwifery department of the Halifax General Hospital, Royal Halifax Infirmary, and the domiciliary confinements attended by the District Midwives. There has been only one maternal death in Halifax—a case in early pregnancy—while 3,321 confinements were safely conducted, a result which reflects great credit on the ante-natal care and quality of the obstetrics.

Attendances at the Child Welfare Clinics reached the record figure of 21,094. The increase (31% since 1945) was partly accounted for by the rise in the birth-rate. As in the two previous years, approximately 80% of Halifax babies have been brought to the Child Welfare Centres, and the inadequacy of our premises and the shortage of medical and nursing staff is ever more apparent. With the numbers of babies and children under five years of age, it is also impossible for home visitation to be as frequent as is desirable.

Clinics at Northgate and Queen's Road were kept open all through the severe weather of February and March, but we were obliged to close the Ovenden Clinic for two weeks owing to lack of fuel and frozen pipes. The number of babies carried to the clinics, where for weeks snow made it impossible to wheel perambulators, was surprisingly large.

Our infant mortality rate of 41 per 1,000 live births is not so good as last year, but is the same as for England and Wales as a whole. Our neo-natal death-rate is 26.9. The greatest number of infants' deaths occurred during the two periods of temperature extremes, i.e., the exceptional cold of winter and heat of summer in 1947.

In September, combined whooping cough and diphtheria immunisation was started, and the response has been good. It is hoped that this preventative measure will considerably reduce the incidence and mortality from these diseases and their complications. Artificial sunlight and orthopaedic clinics have been used to the full. These facilities are especially valuable in industrial towns where smoke in the atmosphere cuts off some of the ultra-violet rays of the sun and lessens

the absorption of Vitamin D so that there is a high incidence of early rickets. The routine examination of infants and young children facilitates the diagnosis of this condition in its earliest stages when it is remediable, so that severe rickets is now very rarely seen.

Treatment classes are held for children with flat feet and knock-knees, and these not only encourage competitions among the small patients and their mothers, but save the physiotherapist's time which is needed for individual treatment of more serious orthopaedic cases.

We are, as before, deeply indebted to our voluntary workers for their help at Child Welfare Clinics. Mrs. Donohoe has retired after thirty years loyal service. She first helped in the old Wade Street premises, and many of the children she knew then are now returning with their own babies.

There have been no changes in Staff and all have worked well under difficult conditions.

Midwives.

Number of Midwives practising in the Borough during the year (including Midwives working in Institutions)	29
Number of Independent Midwives	4
Number of cases in which medical aid was summoned by the Midwives	141
Medical Aid Notices sent on behalf of child	37

Of these :—

Discharging Eyes	18
Unsatisfactory condition of infant	7
Dangerous feebleness	4
Prematurity	2
Septic Spots	1
Skin eruptions	2
Haemorrhage from umbilicus	1
Talipes of right foot	1
Unsatisfactory chest condition	1

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

Intention to resort to artificial feeding	27
Notification of death	6
Liable to be a source of infection	3
Luddenden—Number of cases in the Borough of Halifax	Nil

Notification of Births Act 1936.

Number of births notified (including births transferred to other districts)	3259
Number of births registered	...	...	...	...	...	3321
Number of stillbirths...	...	...	...	...	...	48
Number of notified births attended by doctors with and without midwives	...	...	...	...	...	39
Number of notified births attended by midwives only	...	...	...	...	...	396
Number of births notified from the Royal Halifax Infirmary	...	...	...	...	...	620
Number of births notified from the Halifax General Hospital	...	...	...	...	...	2119
Number of births notified from Nursing Homes	...	...	...	...	...	51
Number of births transferred to other districts...	...	...	...	...	...	1390

Infant Welfare Centres.**Northgate—**

Number of Sessions	...	...	...	...	136
Number of new cases	...	...	...	...	952
Number of repeat visits	...	...	...	...	7562
Average attendance per Session	...	...	...	...	62.6
Percentage seen by the Doctor at each Session	...	...	...	...	42.33

Queen's Road—

Number of Sessions	...	...	...	...	92
Number of new cases	...	...	...	...	539
Number of repeat visits	...	...	...	...	9717
Average attendance per Session	...	...	...	...	111.46
Percentage seen by the Doctor at each Session	...	...	...	...	34.69

Ovenden—

Number of Sessions	...	...	...	...	40
Number of new cases	...	...	...	...	220
Number of repeat visits	...	...	...	...	2104
Average attendance per Session	...	...	...	...	58
Percentage seen by the Doctor at each Session	...	...	...	...	37.6

Ante-Natal Clinic.

Number of Sessions	...	...	...	...	37
Number of new cases	...	...	...	...	75
Number of repeat visits	...	...	...	...	112
Average attendance per Session	...	...	...	...	5

Number of children attending the Clinics—

Under 1 year	...	...	...	...	1479
Between the ages of one and five years	...	...	...	...	3862

Diphtheria Immunisation Clinic.

This Clinic is now held on Thursdays at 2-30 p.m.

Number of cases treated	...	...	...	519
Number of cases treated elsewhere	...	...	...	10
Number of Post-Schick Tests	...	...	...	407

Immunisation using a combined serum for Diphtheria and Whooping Cough was started in September.

No. of cases treated	65
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The Work of the Health Visitors.

Visits to expectant mothers—

First visits	98
Repeat visits	...	...	...	176

Infants under 1 year—

First visits	...	...	...	1851
Repeat visits	...	...	...	5026
Children 1 to 2 years	...	...	...	1995
Children 2 to 5 years	...	...	...	3853
Ophthalmia Neonatorum	...	...	...	2
Puerperal Fever and Pyrexia	...	...	...	1
Miscellaneous	...	...	...	84

One Health Visitor has attended the Venereal Diseases Clinic each week throughout the year, and has paid 15 visits in connection with this work.

Infant Mortality.

Of the 78 deaths of infants under 1 year, 51 were boys and 27 were girls. Of these, 50 deaths occurred during the first month. Of these 50 deaths, 33 died within one week, and of these 24 died within 24 hours.

Maternal Deaths.

There was one Maternal death in Halifax during 1947.

Maternity Homes.

There were two Maternity Homes in Halifax at the beginning of the year, but Crevanagh closed early in November. Both these Homes have been inspected by Dr. Simpson.

Artificial Sunlight.

Number of Sessions	...	...	...	...	166
Number of cases treated	...	...	...	...	235
Number of attendances	...	...	...	...	3919
Number of attendances of non-tuberculous children of school age	...	...	...	...	512
Number of attendances of non-tuberculous children under school age	...	...	...	...	3407
Number of attendances of tuberculous children	...	...	...	...	0
Average attendance at each Session	...	...	...	...	23.6

Last June, the Artificial Sunlight Lamps were installed at the School Clinic, and since that date we have not treated any school children at the Infant Welfare Centre. Our numbers, therefore, show a slight decrease over the previous year's figures.

Staff.

There has been no change in the personnel of the Infant Welfare Centre.

HOME HELP SERVICE.

The Home Helps Service was taken over by the Public Health Department on the 1st October, 1946. In the Ministry of Health Circular 179/44, it was foreshadowed that the supply of helps would, in many areas, fall short of the demand. The cases assisted generally fall into one of the following groups :

1. Aged and infirm people—often living alone.
2. People suffering from Chronic Ailments such as heart disease, arthritis, and so on.
3. Cases of temporary illness.
4. Blind persons.
5. Maternity.

The following statement shows the cases dealt with during 1947: Number of families assisted, Maternity 90; Other cases 89.

The period of service in Maternity cases is usually the 14 days following confinement. In non-maternity cases the periods vary.

The following are the chief difficulties so far met with in operating the scheme :—

1. Maternity cases often from 1 to 7 weeks later than the approximate date booked.

2. People who engage a full-time Home Help, and after a day or two decide part-time will meet their requirements.
3. Impatient members of the Public who expect a Home Help to be available at the moment of their application.
4. People who look upon the Home Help as a charwoman—a splendid opportunity of getting their Spring cleaning done;
5. Home Helps, who though good workers, are not to be relied upon to keep regular time.
6. Home Helps who like to pick and choose their places of employment.

No. of hours worked	...	...	...	...	19,283
No. of hours standby	...	...	...	...	1,226
Average duration per case	...	...	...	... hours	110
No. of Helps supplied free	...	...	...	...	27
No. of Helps supplied at Part Cost	...	...	...	...	85
No. of Helps supplied at Full Cost	...	...	...	...	63

DAY NURSERIES.

In Halifax we have two Day Nurseries. These nurseries became the complete responsibility of the Local Authority on the 31st March, 1946.

During the year there were no cases of Infectious Diseases at the nurseries. Any child under suspicion was excluded by the Matrons as a precautionary measure.

NURSERIES.

Ling Bob Day Nursery, Pellon—Matron: Mrs. M. R. Wilson.
Tel. 61030.

Craigie Lea Day Nursery, Ovenden—Matron: Miss A. L. Gummerson. Tel. 2853.

Attendances :		0—2	2—5
Ling Bob	...	7,460	—
Craigie Lea	...	3,782	4,568

3. People who receive a full-time home health aide service
 day or two days per week and need the following services:
 4. Important members of the family who require a full-time
 to be available at the home of the patient.
 5. People who look upon the home help as a permanent
 important opportunity of having their family member
 6. Home help who though need services but not to be paid
 7. People who like to help and share their home
 8. People who like to help and share their home

No. of hours worked
 No. of hours worked
 No. of hours worked
 No. of hours worked
 No. of hours worked
 No. of hours worked
 No. of hours worked
 No. of hours worked

No. of hours worked at full cost
 No. of hours worked at full cost

DAY NURSERIES

In addition we have two day nurseries. These nurseries
 became the complete responsibility of the local authority in
 the 1940s.

During the year there were no cases of infectious diseases
 at the nurseries. The child health services were included in
 the health services of the local authority.

NURSERIES

Mr. Bob Day, Nursery Officer, and Mr. E. Wilson

Mr. Bob Day, Nursery Officer, and Mr. E. Wilson

Mr. Bob Day, Nursery Officer, and Mr. E. Wilson

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SECTION 8



Mental Deficiency

Mental Deficiency Acts, 1913-1938

St. Catherine's Certified Institution.

The Council has full membership of the Joint Board of this Institution and under the terms of the agreement the accommodation allotted to Halifax is as follows :

Males, High Grade (Adults)	...	...	35	Beds
Females, High Grade	...	...	47	„
Total	...	...	82	„

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

Name of Institution	Sex of Cases Received	Ages	Accommodation for		Grade	Remarks
			Males	Females		
Mid-Yorkshire Institution, Whixley, nr. York	Males	Over 16 years	21	—	High	
St. Catherine's, nr. Doncaster	Males		35	—	High	
	Females		—	47	Low	
Welfare Home, Halifax	Males and Females	Over 16 years	6	6	Active Medium to Low Grade	

The following Table shows the position on December 31st, 1947 :—

A.—Cases "Subject to be dealt with":—	M.	F.	Total
1. Under "Order"			
In Institutions (excluding cases on licence) ...	68	59	127
On Licence from Institutions ...	—	3	3
2. In "Places of Safety"	—	—	—
3. Under Statutory Supervision ...	26	33	59
B.—Number of Mental Defectives not at present "Subject to be dealt with," but for whom the Local Authority may subsequently become liable ...	31	32	63

The following visits were paid by the Official Visitor during the year :—

To cases under Statutory supervision	...	...	85
Re cases in Institutions	...	...	25
Enquiries and reports re home surroundings of patients in respect of applications for holiday leave from Certified Institutions	...	...	10
To cases on Licence	...	...	11
Other visits	...	...	2
Total			133

The particulars given above relate solely to cases under the care of the Statutory Committee, and have nothing to do with school 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.

As will be seen from our statistics, a great deal of our time and energy is taken up with the increasing problem of mental deficiency.

Mental Deficiency is a state of incomplete or arrested development of mind. In the great majority of cases the condition is innate and the result of inheritance. My own investigations which comprise details of some hundreds of cases of all ages, types and grades of defect, suggest that in approximately 85 per cent., the condition is due to inheritance. This means that the germ material of the stock from which these defectives arise is different from that of the non-defective section of the community. I do not believe in the hypothesis which is sometimes advanced, that mental defect is an example of atavism or reversion to a previous ancestral type. The transmission of germ impairment is in accordance with Mendel's laws.

It is sometimes asked how it comes about that mental defect occurs in a normal family. This is due to recessive factors carried in a latent state. When two such "carriers" mate, they produce a certain proportion of mental defectives.

Defectives vary greatly in degree of their defect. At one extreme, mind is so defective that it can hardly be said to exist at all. At the other extreme, the defect is so slight that it may be very difficult—if not impossible—to say that the person is really a defective. The high grade feeble-minded individual is often able to earn enough to provide for, or

contribute materially towards his keep. He can perform, under supervision, simple routine duties of a stereotyped nature. Idiots and imbeciles are in a different category. They have an almost complete incapacity for responding to any kind of training.

In addition to mental defectives there is the problem of "dull and backward" children. Taking the country as a whole, the proportion of children who are in this category is probably between 10 and 12 per cent. of the public elementary school population. Dull and backward children are often spoken of as if they were identical. This is not the case. Dullness is an inherent and permanent condition, whilst backwardness is usually acquired and remediable. The dull child is necessarily a backward one, the backward child is not necessarily dull.

With regard to defectives, the first point of importance to which it is necessary to direct attention is that of the incidence of defectives in the country. On a conservative estimate, the proportion is at least 8 per 1,000 population, corresponding to an approximate total of 330,000 defects in England and Wales. Of the total number, the great majority are feeble-minded, the remainder being imbeciles and idiots.

With regard to propagation, there can be no doubt that the disproportion obtaining between the birthrate of the mentally fit and the mentally unfit has now become a problem of most serious significance to the nation. The social care of defectives includes ascertainment, training and various forms of care, particularly institutional care. Inadequacy of institutional facilities results in many serious social evils.

With regard to the prevention of mental deficiency the questions to be considered are the prevention of propagation by (1) defectives, and (2) by non-defective carriers. These problems are too great and too complex to elucidate in a short report. So long as we are content to raise no voice and take inadequate action against the marriage of defectives, then so long will defectives continue to be perpetuated.

SECTION 9



Vaccination

Vaccination Order 1930

incorporating

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

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

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

District.	Public Vaccinator.
No. 1. Copley Ward.	Dr. H. W. Morck, Orrell House, Sowerby Bridge.
No. 2. Central, Pellon. Southowram, East, South, Kingston, West and Skircoat Wards.	Dr. P. Milnes, Arden Lodge, Halifax.
No. 3. North and Akroydon Wards.	Dr. A. Garvie, Woodlands House, Halifax.
No. 4. Illingworth and Ovenden Wards.	Dr. J. Morrison, Oak Leigh, Halifax.
No. 5. Northowram Ward.	Dr. J. J. Murphy, 50, West End, Queensbury.
No. 6. Warley Ward.	Dr. C. S. Ogilvy, Woodbank, Luddenden Foot.
No. 7. The Halifax General Hospital and Halifax Welfare Home.	Dr. R. Davidson, Woodgate, King Cross, Halifax.

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

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

NOTES ON VACCINATION PROCEDURE.

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

- (a) Form of statutory declaration of conscientious objection to vaccination. It must be completed and returned before the child attains the age of 4 months.

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

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

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

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

The following figures are extracted from the Return which was prepared for the Registrar General :—

Number of births returned in the "Birth List Sheets" as registered from 1st January to 31st December, 1946 .. 2992

Number of these births duly entered by 31st January, 1948, in columns 1, 2, 4, and 5 of the Vaccination Register, viz:

Successfully vaccinated	...	...	...	...	642
Insusceptible of vaccination	...	...	...	...	—
Had Smallpox	...	...	...	...	—
Number in respect of whom declarations of conscientious objection have been received	...	...	...	...	1778
Died unvaccinated	...	...	...	...	105

Number of these births which on 31st January, 1948 remained unentered in the Vaccination Register on account of :—

Postponement by Medical Certificate	...	...	...	15
Removal to other districts	...	...	...	270
(Vaccination Officers duly appraised)				
Removal to places unknown, or which cannot be reached or unfound	...	...	...	70

Number of these births remaining on 31st January, 1948 neither duly entered in the Vaccination Register nor temporarily accounted for in the Report Book	112
Total number of Certificates of successful Primary Vaccin- ation of children under 14 received during the Calendar Year, 1947	803
Number of Statutory Declarations of conscientious objection, irrespective of the dates of birth of the children to which they relate, during the Calendar Year 1947	2257
Number of children successfully vaccinated after declaration of conscientious objection had been made	6
Number of Certificates of successful primary vaccination of children under 14 sent to other vaccination officers	18

SECTION 10.



Public Health Propaganda.

Public Health Education.

The following Public Lectures were given:

Title	By	Notes (if any)
Riddle of Cancer	Dr. G. C. F. Roe	Illustrated
T.B.	Dr. G. C. F. Roe	Illustrated
V.D.	Dr. G. C. F. Roe	Illustrated
Brain Mysteries	Dr. G. C. F. Roe	Illustrated
Elementary Psychology	Dr. G. C. F. Roe	
Vitamins	Dr. G. C. F. Roe	
Hormones	Dr. G. C. F. Roe	
Microbes and Men	Dr. G. C. F. Roe	Illustrated
The Road to Maturity	Dr. G. C. F. Roe	
Clinical Cases	Dr. G. C. F. Roe	For Nurses
Heredity	Dr. G. C. F. Roe	
Immunisation	Dr. R. I. S. Lewis	
Rehabilitation	Mr. H. I. Deitch, F.R.C.S.	
National Health Service Act	Mr. A. Rogers	
The School Medical Service	Dr. E. J. Kelly	

SECTION 11

The Halifax General Hospital

The Halifax General Hospital

LIST OF MEDICAL OFFICERS

(31st December, 1947).

MEDICAL SUPERINTENDENT.

Mr. H. I. DEITCH, M.S. (Lond.), F.R.C.S. (Eng.).

DEPUTY MEDICAL SUPERINTENDENT.

Mr. J. N. I. EMBLIN, M.D., F.R.C.S., M.M.S.A., M.R.C.O.G.

Physician-in-Charge:

Dr. W. MacADAM, M.D., F.R.C.P.

Physician:

Dr. L. GLICK, M.D., M.R.C.P.

Medical Registrar:

Dr. A. P. D. WAIND, M.D., M.R.C.P.

Physicians to Dept. for Functional Nervous Diseases:

Dr. H. FELDMAN.

Dr. N. MONTGOMERY, M.D., D.P.M.

Surgeon-in-Charge:

Mr. H. I. DEITCH, M.S. (Lond.) F.R.C.S.

Surgeon:

Mr. R. W. HENDRY, F.R.C.S.

R.S.O.:

Dr. J. R. HESELTINE, M.B., Ch.B.

Consulting Surgeon:

Mr. E. R. FLINT, F.R.C.S.

Obstetrician & Gynæcologist-in-Charge:

Mr. J. N. I. EMBLIN, M.D., F.R.C.S., M.M.S.A.,
M.R.C.O.G.

Senior Obstetric Officer:

Dr. H. M. RUSSELL, M.B., B.S., D.R.C.O.G.

Junior Obstetric Officer:

Dr. M. J. TWOMEY, M.B., B.Ch., B.A.O., D.R.C.O.G.

Consulting Obstetrician & Gynæcologist:

Mr. B. L. JEAFFRESON, F.R.C.S., L.R.C.P., M.R.C.O.G.

Physician-in-Charge, Children's Dept.:

Dr. E. C. ALLIBONE, M.D., Ph.D., M.R.C.P., D.P.M.

Orthopædic Surgeon:

Mr. G. HYMAN, F.R.C.S.

Orthopædic Registrar:

Mr. A. FOWLER, F.R.C.S.

LIST OF MEDICAL OFFICERS—Continued.

E.N.T. Surgeon:

Mr. W. O. LODGE, M.D., F.R.C.S., D.O.M.S.

Ophthalmic Surgeon:

Dr. R. W. GREATOREX, M.B., Ch.B.

Neuro-Surgeon:

Mr. W. R. HENDERSON, F.R.C.S.

Thoracic Surgeon:

Mr. P. R. ALLISON, M.Ch., F.R.C.S.

Pathologist:

Dr. N. V. PHELON, M.R.C.P.

Radiologist:

Dr. R. I. LEWIS, B.Sc., M.D., B.S., D.M.R.E.

Dental Surgeon:

Mr. R. N. ROSS, L.D.S.

Director of Bradford Radium Institute:

Dr. F. E. CHESTER-WILLIAMS, F.F.R.

LIST OF OUT-PATIENT CLINICS.

ANTE-NATAL CLINIC: Daily (except Wednesday) 10 a.m.

EAR, NOSE & THROAT: Mr. W. O. Lodge, M.D., F.R.C.S.,
Monday 2 p.m. D.O.M.S.DENTAL: Mr. R. N. Ross, L.D.S.
Thursday, 9-30 a.m.FUNCTIONAL NERVOUS DISORDERS & CHILD GUIDANCE:
Tuesday, 2-30 p.m. Dr. N. M. Montgomery, M.D., D.P.M.
Wednesday 2 p.m. Dr. H. Feldman.
Thursday 2-30 p.m. Dr. N. M. Montgomery, M.D., D.P.M.
Friday 2 p.m. Dr. H. Feldman.GYNAECOLOGICAL: Mr. J. N. I. Emblin, M.D., F.R.C.S.,
Tuesday 10 a.m. M.M.S.A., M.R.C.O.G.
Wednesday 10 a.m.MEDICAL: Dr. W. MacAdam, M.D., F.R.C.P.
Tuesday 3 p.m.OBSTETRICAL CONSULTATIONS: Mr. J. N. I. Emblin, M.D.,
Tuesday 11 a.m. F.R.C.S., M.M.S.A., M.R.C.O.G.ORTHOPAEDIC: Mr. G. Hyman, F.R.C.S.
Friday 2 p.m.POST-NATAL:
Wednesday 10 a.m.SURGICAL CASES: Mr. H. I. Deitch, M.S. (Lond.), F.R.C.S.
Daily 10-30 a.m.

Physio-Therapy Department	}	9 a.m. to 12 noon. 2 p.m. to 4 p.m.
X-Ray Department		
Pathological Department		

Patients can be referred directly to any Department by
General Practitioners.

WORK OF THE HOSPITAL DURING THE PAST YEAR.

X-Ray Department. Radio-diagnosis only.

4,722 X-Ray examinations were carried out during the year.

Pathological Department.

Year	Morbid Anatomy	Bacteriology	Bio-Chemistry	Total
1940	—	—	—	5538
1941	—	—	—	6005
1942	—	—	—	6854
1943	2442	3451	1440	7333
1944	2926	3948	1346	8220
1945	2790	3831	1780	8401
1946	3272	4402	2066	9742
1947	4604	4133	1921	10658

The present Staff is as follows :—

- 1 Chief Technician, F.I.M.L.T.
- 3 Junior Technicians.
- 2 Apprentices.

Almoner's Department.

During the year the Almoner's Department has been consistently busy, and there is a growing recognition, both inside and outside the Hospital, of the value of medico-social work. To give only one example of this, the number of patients recommended for convalescent treatment has risen from 47 in 1946, to 72 in 1947.

The development of various Out-Patient Clinics has had its effect on the Almoner's work, and out of the 258 patients for whom the Almoner has performed some substantial piece of social work, 86 (or 34%) were Out-Patients, compared with 26% in 1946.

One of the most important features of the Almoner's work is to act as a link between the patient and the various Statutory and Voluntary Societies in the town and area, and grateful acknowledgment is made of the help and co-operation received from the staffs of the School Clinics, Maternity and Child Welfare Clinics, Health Departments, Education Offices, Employment Exchanges, Assistance Board, and from the District Welfare Officers, Probation Officers, The British Red Cross Society, British Legion, Council of Social Service, Moral Welfare Workers, the N.S.P.C.C. Inspector, District Nurses, and many others.

The Almoner continues to serve as a member of the Halifax and District Disablement Advisory Committee, and the Old People's Welfare Committee sponsored by the Council of Social Service.

Ambulance Service.

There were greater demands for the use of the Hospital Ambulance and Car Service during 1947. The total number of calls during the year was 7,627 and the mileage run was 59,456.

Total number of patients admitted or born in Hospital	...	8883
Total number of deaths	... ..	531
Number of deaths among children under 1 year of age	...	86
Total number of discharges (incl. infants born in hospital)	...	8471
Daily average number of patients in the Hospital	... ..	432

Duration and stay of patients:—

(a) Four weeks or less	... ..	7948
(b) Exceeding 4 weeks but under 13 weeks	...	818
(c) Thirteen weeks or more	... ..	136
Number of E.M.S. Patients admitted	... ..	83
Daily average number of E.M.S. patients	... ..	9.7
Number of Royal Halifax Infirmary Fund Contributors admitted	... ..	1569
Number of West Riding Public Health cases admitted	...	1125
Number of Private Patients admitted	... ..	207
Number of operations performed	... ..	2856
Number of operations for Tonsils and Adenoids	... ..	244
Number of Maternity Beds	... ..	92
Number of Maternity Cases admitted during the Year	...	2749
Number of Maternity Cases delivered	... ..	2105
(a) Midwives	... ..	1874
(b) Doctors	... ..	231
Maternal Deaths	... ..	1
Still Births	... ..	55
Infants deaths within 10 days of Birth	... ..	29
West Riding Maternity Cases admitted	... ..	625

Out-Patients.

The total number of Out-Patients seen in the Out-Patients' Department	... ..	4132
Total number of attendances	... ..	15837

Ante-Natal Clinic :—

Number of women seen	... ..	2224
Number of attendances	... ..	17594

Comparative Table of Various Classes of Patients Treated in the Hospital.

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
Daily average number of Patients in the Hospital	354	330	333	365	384	412	471	506	491	432
Total number of Patients admitted or born	4293	4392	4701	6106	6603	7591	8725	8101	9338	8883
Number of operations performed	1173	808	1109	1770	1635	2112	2392	2737	2583	2846
Number of deliveries	754	898	850	1044	1213	1446	1821	1461	2088	2105
Number of maternal deaths	4	5	2	6	2	6	4	3	2	1
Number of E.M.S. Patients admitted	—	—	297	872	1089	1049	1958	1630	504	83
Number of operations for Tonsils and adenoids during year	278	142	180	295	270	362	267	247	397	149
Number of Royal Halifax Infirmary Fund contributors	Nil	Nil	Nil	Nil	Nil	228	717	727	1035	1569
Number of West Riding assisted cases	721	559	479	575	516	680	629	650	1027	1125
Number of West Riding maternity cases...	270	167	141	179	193	251	425	290	423	625
Number of private Patients	194	189	204	222	223	238	209	174	207	207

SECTION 12**Inspection and Supervision
of Food**

Inspection & Supervision of Food

I am indebted to Mr. J. Flanagan, Meat and Foods Inspector, for the following Report:—

Meat Inspection.

Since January 1940, the slaughter of food animals has been under Ministry of Food Control at the abattoir which is a supply centre for the County Borough of Halifax, Sowerby Bridge, Hebden Bridge, Ripponden, Queensbury and Shelf, and Todmorden.

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

Description of Premises				Number of Visits
Public Slaughterhouses	...	...	...	577
Private Slaughterhouses	...	...	...	4
Borough Market	...	...	...	242
Wholesale Market	...	...	...	265
Lairages	...	...	...	54
Potted Meat Houses	...	...	...	20
Tripe Boiling Houses	...	...	...	48
Butchers' Shops	...	...	...	138
Other Visits	...	...	...	334
Total				1,682

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

	Cattle.	Calves.	Sheep and Lambs.	Pigs.	Total.
Number of Animals slaughtered at the public slaughter-house ...	6230	2115	18,723	302	27,370
Do. condemned..	87	12	5	8	112

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

	lbs.
Total Amount of Meat Destroyed	52,533
Total Amount of Offals Destroyed	85,375
Total Amount of Meat Destroyed on account of Tuberculosis	33,710
Total Amount of Offals Destroyed on account of Tuberculosis	34,698
Total Amount of Meat Destroyed from other causes	18,823
Total Amount of Offals Destroyed from other causes	50,677
Total Meat and Offals Destroyed	137,908

Food Inspection.

The following Table shows the amount of foods condemned:

Kinds of Food Condemned				Quantity in Lbs.
87 Carcases of Beef	...	...	...	38,342
Beef not in Carcase	...	...	...	12,896
8 Carcases of Veal	...	...	...	403
12 Carcases of Mutton	...	...	...	349
Mutton not in Carcase	...	...	...	21
5 Carcases of Pork	...	...	...	474
Pork not in Carcase	...	...	...	48
Offals	...	...	...	85,379
Fish	...	...	...	7,207
Fruit and Vegetables	...	...	...	23,127
*Canned Provisions	...	...	...	36,887
Biscuits	...	...	...	42
Sugar	...	...	...	170
Sweets and Chocolate	...	...	...	77
Sauce and Pickles...	...	...	...	1
Fish Cakes	...	...	...	119
Pikelets	...	...	...	85
Puddings	...	...	...	88
Preserves	...	...	...	76
*Prunes	...	...	...	110
Dates	...	...	...	19
*Raisins	...	...	...	93
*Dried Apricots and Peaches	...	...	...	88
Margarine and Fats	...	...	...	18
*Eggs	...	...	...	13
*Fowl	...	...	...	2
Tea	...	...	...	1
*Flour	...	...	...	218
Yeast	...	...	...	10
*Soup Powder	...	...	...	7
Cakes	...	...	...	9
Pepper	...	...	...	6
*Cereals and Dried Peas	...	...	...	1,015
Total Weight ...				216,400

The greater part of items marked * were left at the disposal of the Ministry of Food (Salvage Division).

Shell Fish.

Supplies of shell fish coming into the Borough received attention in an endeavour to ensure that they had first been subjected to treatment in purification tanks before being offered for sale. Certain known suspect sources were excluded.

SECTION 13

Sanitary Circumstances

Housing

**Milk Production and
Distribution**

Food Sampling

Factories

Smoke Abatement

Atmospheric Pollution

Sanitary Circumstances

AND

Sanitary Inspection of the Area

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

Inspection and Visits.

Dwellinghouses :—

Primary Inspections under the Housing Acts	23
Subsequent inspections under the Housing Acts.....	77
Visits re works in progress under the Housing Acts	25
Visits re removals and disinfestations	811
Visits re overcrowding	20
Re sanitary defects (complaints etc.)	1583
Re notifiable disease	160
Re dirty and/or verminous premises	127
Moveable Dwellings... ..	2
Common Lodging Houses	16
Houses-Let-in-Lodgings	74

Drainage :—

Special drainage inspections	636
Special drainage tests	252

Factories, etc.:—

Factories with mechanical power	176
Factories without mechanical power	11
Workplaces (general)	24
Workplaces (offices)	14
Outworkers' premises	13

Shops :—

Inspections, etc., under Shops Act, 1934. Section 10	11
Other visits under Shops Acts	18

Food Inspection :—

Cowsheds	303
Dairies and Milkshops	266
Ice Cream premises	184
Fried Fish Shops	143
Bakehouses	98
Restaurant Kitchens	24
Other food premises	103

Smoke Abatement :—

Smoke observations	16
Visits to works	19

Sampling :—

Food and Drugs Act, 1938	383
Bacteriological samples	222
Water	49
Fertilisers and Feeding Stuffs	9
Swimming Baths Water	11

General :—

Fertilisers and Feeding Stuffs premises	6
Rat infested premises	632
Stables re nuisances	7
Swine, fowls and other animals	9
Schools, Theatres, Cinemas, etc.	33
Public Sanitary Conveniences	321
Requisitioned Houses	18
Pharmacy and Poisons Act	69
Sewer inspections	139
Building Licences	2956
Miscellaneous visits	1874
Total number of inspections and visits	11310
Total number of Re-inspections	3419

Sanitary Improvements Effected.**Dwellinghouses :—**

	Informal Action
General repairs	626
Dirty houses cleansed	20
Council houses found bug infested and disinfested	10
Other houses found bug infested and disinfested	40
Houses cleared of other vermin	42
Houses-let-in-lodgings. (Nuisances abated, etc.)	2
Common Lodging Houses. (Nuisances abated, etc.)	1
Moveable Dwellings (Nuisances abated, etc.) ...	1

Drainage :—

Drains cleansed and/or repaired	170
Drains reconstructed or new drains provided	78

Factories :—

Factories with mechanical power (Nuisances abated, etc.) ...	7
--	---

Workplaces :—

General	1
---------------	---

Shops :—

Nuisances abated etc., under Section 10	4
---	---

General :—

Premises cleared of rats	203
Cowsheds—improvements effected	6
Dairies and Milkshops—improvements effected, etc.	5
Fried Fish Shops—improvements effected, etc.	1
Bakehouses—improvements effected, etc.....	2
Other food premises—improvements effected, etc. ...	3
Boiler Plants improved	5
Theatres, Cinemas, etc., improved.....	1
Public Sanitary Conveniences improved	23
Sewers cleansed and/or repaired	71
Persons cleansed	1
Miscellaneous improvements effected	99

Prosecutions during 1947.

Date of Hearing	Act	Offence	Penalty
18/6/47	Food & Drugs Act, 1938. Section 3.	Selling milk deficient in fatty solids.	Defendant fined £10 and £1/1/- costs.
18/6/47	Food & Drugs Act, 1938. Section 3.	Selling milk deficient in non-fatty solids.	Defendant fined £2 and £1/1/- costs.
4/11/47	Public Health Act, 1936 Section 93.	Failure to comply with an Abatement Notice.	Order made requiring compliance within three months.

Factories.

H.M. Inspector of Factories sent 15 notices under Section 9 of the Factories Act 1937, all of which referred to factories with mechanical power. In addition, there were 19 complaints brought forward from 1946.

Complaints dealt with during the year numbered 5, all of which referred to factories with mechanical power. There were 29 outstanding complaints at the end of the year.

There were 10 outworkers on the register at the end of the year, and no cases of default in sending lists to the Council were discovered (Sec. 110). There were no cases of outwork being carried on in unwholesome premises (Sec. 111).

Table 1.**Inspections for Purposes of Provisions as to Health.**

Premises	No. on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
(i) Factories in which Sections 1, 2, 3, 4 & 6 are to be enforced by Local Authorities	89	11	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	766	176	12	—
(iii)‡ Other premises in in which Section 7 is enforced by the Local Authority (excluding outworkers' premises)	—	—	—	—
Total	855	187	12	—

‡ Works of Building and Engineering Construction, Electrical Stations should be reckoned as factories.

Table 2.
Cases in which defects were found.

Particulars	Number of cases in which defects were found				No. of cases in which prosecutions were instituted
	Found	Remedied	Referred		
			To H.M. Inspector	By H.M. Inspector	
Want of Cleanliness (S.1)	—	—	—	—	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate Ventilation (S.4)	—	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7)	—	—	—	—	—
(a) Insufficient	2	1	—	2	—
(b) Unsuitable or defective	13	11	—	13	—
(c) Not separate for sexes	3	—	—	3	—
Other offences (not including offences relating to homework)	—	—	—	—	—
Total	18	12	—	18	—

Bakehouses.

The number of bakehouses on the register at the end of the year was 83.

There were 98 inspections made and the premises were generally found to be satisfactory.

Smoke Abatement.

The number of smoke observations taken during the year numbered 16, details of which are given in the following table.

Visits to works in connection with smoke emission numbered 19, and the average emission of black smoke was 0.312 minutes per observation, or 0.624 minutes per hour.

Chimney					No. of observations (36 minutes each)	Average minutes black smoke per observation
Central Laundry	...	...	...	...	1	Nil
Croftmyl	...	...	...	...	3	Nil
Dunkirk Mills	...	...	...	...	1	Nil
Globe Mills	...	...	...	...	1	Nil
Halifax Steam Laundry	...	...	...	...	1	Nil
Keighley Mills	...	...	...	...	1	0.25
Pellon Lane Mills	...	...	...	...	1	1.00
Pioneer Iron Works	...	...	...	...	1	Nil
Sun Works	...	...	...	...	1	2.75
Victoria Mills	...	...	...	...	1	Nil
Warley Road School	...	...	...	...	1	Nil
Wellington Mills	...	...	...	...	1	Nil
West Croft Mills	...	...	...	...	1	1.00
West Grove Mills	...	...	...	...	1	Nil
Total					16	0.32

Housing

Housing Statistics.

1. Inspection of Dwellinghouses during the year :—
 - (1) (a) Total number of dwellinghouses inspected for housing defects (under Public Health or Housing Acts) 1765
 - (b) Number of inspections made for the purpose 3953
 - (2) (a) Number of dwellinghouses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932 23
 - (b) Number of inspections made for the purpose 23
 - (3) Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation 6
 - (4) Number of dwellinghouses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation 17
2. Remedy of defects during the year without service of formal notices :—

Number of defective dwellinghouses rendered fit in consequence of informal action by the Local Authority or their officers 1046
3. Action under Statutory Powers during the year :—
 - (a) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :—
 - (1) Number of dwellinghouses in respect of which notices were served requiring repairs 15
 - (2) Number of dwellinghouses which were rendered fit after service of formal notices :—
 - (a) By owners Nil
 - (b) By Local Authority in default of owners Nil
 - (b) Proceedings under Public Health Acts :—
 - (1) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied 102
 - (2) Number of dwellinghouses in which defects were remedied after service of formal notices :—
 - (a) By owners 12
 - (b) By Local Authority in default of owners 35

- (c) Proceedings under Section 11 and 13 of the Housing Act, 1936 :—
- | | |
|--|---|
| (1) Number of dwellinghouses in respect of which Demolition Orders were made | 1 |
| (2) Number of dwellinghouses demolished in pursuance of Demolition Orders | 3 |
- (d) Proceedings under Section 12 of the Housing Act, 1936 :—
- | | |
|---|---|
| (1) Number of separate tenements or underground rooms in respect of which Closing Orders were made | 1 |
| (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been made fit | 2 |

4. Housing Act, 1936 (Part IV)—Overcrowding.

- | | |
|---|------|
| (a) (1) Number of dwellings overcrowded at the end of the year | 1017 |
| (2) Number of families dwelling therein | 1017 |
| (3) Number of "persons" dwelling therein | 3660 |
| (b) Number of new cases of overcrowding reported during the year | Nil |
| (c) (1) Number of cases of overcrowding relieved during the year | 40 |
| (2) Number of "persons" concerned in such cases | 160 |
| (d) Particulars of any cases in which dwellinghouses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding | Nil |
| (e) Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report | Nil |

Eradication of Bed-Bugs.

- | | |
|--|-----|
| (1) (a) (1) Number of Council Houses found infested | 10 |
| (2) Number of Council houses disinfested | 13 |
| (b) (1) Number of other houses found infested | 40 |
| (2) Number of other houses disinfested | 40 |
| (c) Number of houses where furniture was disinfested with HCN gas at Charlestown | 107 |

Closing and Demolition Orders : Housing Act, 1936.

Continuing the information given in previous reports, the following table shows the position on the 31st December, 1947.

Ref. No. (1)	Situation. (2)	Date of Report. (3)	Date of Closing Order. (4)	Date of Demolition Order. (5)	Remarks. (6)
117	5, Springhead, Pellon	23/1/47	—	—	Undertaking not to use as a dwellinghouse accepted 24/2/47.
118	19, Rothery Street	20/3/47	10/5/47	—	—
119	3/4, Battinson Place	21/8/47	—	—	Undertaking to make fit accepted 20/11/47. Not yet completed.
120	7, Shay Lane	18/12/47	30/1/48	—	—
121	2, Claremont Road	18/12/47	—	—	Undertaking not to use as a dwellinghouse accepted 22/1/48.

Common Lodging Houses.

There are only 2 Common Lodging Houses in the Borough and 16 inspections of the same have been made during the year. They were found to be in a satisfactory condition.

Houses-let-in-Lodgings.

At the end of the year there were 38 Houses-let-in-Lodgings providing accommodation for 188 families. There were 74 inspections made during the year and conditions were fairly satisfactory. In 2 cases nuisances were abated or improvements effected.

Theatres, Cinemas, etc.

During the year 8 inspections were made of premises for which stage play licences were necessary, and improvements were carried out in 1 case.

Inspection & Supervision of Food

Milk Supply.

There are 146 producers of milk with premises situated within the Borough.

Of these there are 2 holding licences to produce Tuberculin Tested Milk and 19 with the requisite licence to produce Accredited Milk.

During the year 303 inspections of cowsheds were made and improvements were effected in 6 cases.

There are 165 registered retailers of milk with premises within the Borough and 84 with premises outside our area. The number of registered dairy premises is 139.

In addition to the above, there are 287 registered retailers of milk in sealed bottles only.

During the year there were 266 inspections of dairies and milkshops.

Bacteriological Examination of Milk.

During the year 222 samples were examined. Of these, 65 were ungraded milk, 50 were T.T., 48 pasteurised and 59 farm samples of Accredited and T.T. milk.

Of the ungraded milks, 19 were produced within the Borough and 46 were produced outside.

The Resazurin test was applied to ungraded milks, with the following results:—

Locally produced milk—Satisfactory keeping quality 7, fair 2, doubtful 7, unsatisfactory 3.

Milk produced outside Borough—Satisfactory keeping quality 34, fair 3, doubtful 4, unsatisfactory 5.

* Of the 50 samples of T.T. milk, 30 (or 60 per cent.) failed to pass the tests applied, whilst of the 65 samples of pasteurised milk 2 (or 3.08 per cent.) failed to pass the tests.

Of the 59 farm samples of Accredited and T.T. milk—this milk is not retailed as such—33 (or 55.93 per cent.) failed to pass the tests applied.

Food and Drugs Act, 1938.

A total of 383 samples of Food and Drugs was obtained during the year and submitted to the Public Analyst.

These included 216 samples of milk and 167 samples of foods and drugs.

Samples of milk not genuine according to the Sale of Milk Regulations numbered 6, giving a percentage of 2.77.

Of the 167 samples of other foods and drugs, 7 (or 4.19 per cent.) were reported not genuine.

Full details of all samples taken will be found in the following table :—

TABLE 1.

Nature of Sample	No. of Samples taken			No. not genuine		
	Formal	Informal	Total	Formal	Informal	Total
Milk	*210	6	*216	5	1	6
Almond, Ground, subst'te	—	1	1	—	—	—
Apple Puree	—	1	1	—	1	1
Aspirin Tablets	—	4	4	—	—	—
Baking Powder	—	7	7	—	—	—
Barley, ground	—	1	1	—	—	—
Beer	7	—	7	—	—	—
Beverages—						
Bournvita	—	1	1	—	—	—
Cocoa	—	1	1	—	—	—
Chocolate Cup	—	1	1	—	—	—
Coffee	—	7	7	—	—	—
Coffee and Chicory	—	1	1	—	—	—
Malt Cup	—	1	1	—	—	—
Vitacup... ..	—	1	1	—	—	—
Butter	3	—	3	—	—	—
Cake & Pudding Mixture	—	4	4	—	—	—
Cascara Segrada	—	4	4	—	—	—
Cordials	2	4	6	2	2	4
Cod Liver Oil	—	1	1	—	—	—
Cod Liver Oil Capsules...	—	1	1	—	—	—
Dried Fruits—						
Currants	—	1	1	—	—	—
Dates	—	5	5	—	—	—
Prunes	—	1	1	—	—	—
Raisins	—	3	3	—	—	—
Sultanas	—	1	1	—	—	—
Epsom Salts	—	2	2	—	—	—
Flour, Self-raising	—	3	3	—	—	—
Golden Raising Powder	—	1	1	—	—	—
Gin	2	—	2	—	—	—
Halibut Liver Oil Caps'l's	—	2	2	—	—	—
Ice Cream	—	17	17	—	—	—
Indian Brandy	—	3	3	—	—	—
Jam	2	—	2	—	—	—
Jelly, Crystals	2	—	2	—	—	—
Jelly, Table	2	—	2	—	—	—
Lemonade Crystals	1	1	2	—	—	—
Margarine	3	—	3	—	—	—
Marmalade	2	—	2	—	—	—
Marzipan Mixture	—	1	1	—	—	—
Milk, Dried	—	7	7	—	—	—
Mincemeat	3	—	3	—	—	—
Mineral Waters	1	4	5	—	—	—
Mustard	—	2	2	—	—	—
Onions, Dried	—	2	2	—	—	—
Pepper	—	6	6	—	—	—
Pickles, Mixed	—	2	2	—	—	—
Pickles, Onions	—	2	2	—	—	—
Preserves—						
Chinese Chow-Chow...	—	1	1	—	—	—
Chinese Ginger	—	1	1	—	—	—
<i>Carried Forward</i> ...	240	115	355	7	4	11

TABLE 1—Continued.

Nature of Sample	No. of Samples taken			No. not Genuine		
	Formal	Informal	Total	Formal	Informal	Total
<i>Brought Forward</i> ...	240	115	355	7	4	11
Rum	1	—	1	—	—	—
Saccharin Tablets ...	—	4	4	—	—	—
Sauces	—	2	2	—	—	—
Spaghetti	—	1	1	—	—	—
Spices	—	2	2	—	—	—
Sweets	—	5	5	—	—	—
Vinegar—Malt	—	3	3	—	—	—
„ Non-brewed	1	2	3	1	1	2
Whisky	2	—	2	—	—	—
Wines—						
Champagne Perry ...	1	—	1	—	—	—
Sherry Cyprus... ..	1	—	1	—	—	—
Sherry British... ..	3	—	3	—	—	—
Total ...	249	134	383	8	5	13

*Includes 3 "Appeal to Cow" samples which were genuine.

TABLE 2.

Administrative Action taken in respect of Samples reported by the Public Analyst to be Not Genuine or otherwise irregular.

No. of Sample	Nature of Sample and Result of Analysis, etc.	Administrative Action taken
65	Milk— 1.6% added water	No action taken at time, but a further sample (No. 112) was taken from the same source at a later date and found to be satisfactory.
67	Milk— 2.5% added water	No action taken at time, but a further sample (No. 83) was taken from the same source at a later date and found to be satisfactory.
72	Milk— 12.0% added water	Sample from producer/retailer. "Appeal to Cow" samples (Nos. 80 & 81) obtained and reported to be genuine milk. Prosecution in Borough Police Court on 18th June, 1947, when defendant was fined £2, with £1/1/- costs.
82	Milk— 6.0% deficient in fat	Sample from producer/retailer. "Appeal to Cow" sample (No. 89) obtained and reported to be genuine milk. Prosecution in Borough Police Court on 18th June, 1947 when defendant was fined £10, with £1/1/- costs.
137	Milk— 3.3% deficient in fat	Informal sample obtained at a factory canteen following complaint of unusual odour in milk. No further action taken.
207	Lemon Barley— deficient in Citric Acid and containing Sulphur Dioxide and Benzoic Acid preservatives	Informal sample, followed by formal sample (No. 228) by same manufacturer.
228	Lemon Barley— containing Sulphur Dioxide and Benzoic Acid preservatives	Formal sample. Warning letter sent by Chief Sanitary Inspector to manufacturer.
208	Grape Fruit Squash— deficient in Citric Acid	Informal sample, followed by formal sample (No. 227) by same manufacturer
227	Grape Fruit Squash— deficient in Citric Acid	Formal sample. Warning letter sent by Chief Sanitary Inspector to manufacturer.

TABLE 2—Continued.

No. of Sample	Nature of Sample and Result of Analysis, etc.	Administrative Action taken
267	Vinegar (non-brewed)— 10% deficient in Acetic Acid	Informal sample, followed by formal sample (No. 314) obtained from manufacturer's premises
314	Vinegar (non-brewed)— 10% deficient in Acetic Acid	Formal sample. Warning letter sent by Chief Sanitary Inspector to manufacturer.
275	Milk— 2.5% added water	Formal sample from producer/retailer. Warning letter sent by Chief Sanitary Inspector to vendor.
347	Apple Puree— not labelled	Informal sample, reported as a genuine article, but the container from which the sample was obtained bore no label whatsoever, contrary to the Labelling of Food (No. 2) Order 1944. Vendor stated that the puree had been purchased for use in bakery and cafe kitchens only, and had been distributed to shops in error. An undertaking was given to withdraw all stocks from shops. No further action was taken.

TABLE 3.
Monthly Average Composition of Milk Samples.

Month	No. of Samples	Analytical Data	
		Milk Fat per cent.	Non-fatty Solids per cent.
January	9	3.52	8.85
February	—	—	—
March	—	—	—
April	28	3.71	8.63
May	46	3.80	8.74
June	16	3.71	8.95
July	22	3.87	8.70
August	18	3.93	8.76
September	22	3.96	8.83
October	19	4.09	8.82
November	12	4.18	8.82
December	21	3.89	8.66
Total	213		
Average for the year 1947 ...		3.88	8.76
" " 1946 ...		3.84	8.86
" " 1945 ...		3.79	8.85
" " 1944 ...		3.78	8.87
" " 1943 ...		3.83	8.83
" " 1942 ...		3.81	8.78
" " 1941 ...		3.73	8.78
" " 1940 ...		3.79	8.95
" " 1939 ...		3.74	8.95
" " 1938 ...		3.67	9.00

NOTE.—3 "Appeal to Cow" samples are excluded from the above Table.

TABLE 4.

Articles of Food examined for Preservatives in accordance with
the Public Health (Preservatives, etc., in Food) Regulations
1925/6/7.

Food (1)	No. of Samples examined (2)	Permitted Preservative (3)	Amount		Remarks (6)
			Allowed (4)	Found (5)	
Milk	216	Nil	Nil	Nil	
Beer	7	Sulphur Dioxide	70 ppm.	5-Nil 2-9 ppm.	Satisfactory ..
Butter	3	Nil	Nil	Nil	
Cordials : Grape Fruit Squash	2	Sulphur Dioxide or Benzoic Acid	350 ppm.	1-240 ppm. Nil	Satisfactory ..
			600 ppm.	1-285 ppm. Nil	
Lemon Barley	2			1-150 ppm. 300 ppm. 1-150 ppm. 520 ppm.	{ Unsatisfactory as both preservatives were present
Lemon Squash	1			215 ppm. Nil	
Orange Squash	1			243 ppm. Nil	..
Dried Milk	7	Nil	Nil	Nil	
Fruits ; Apple Puree ...	1	Sulphur Dioxide	350 ppm.	Nil	Satisfactory
Currants ...	1			Nil	..
Dates ...	5			5-Nil	..
Prunes ...	1			Nil	..
Raisins ...	3		750 ppm.	3-Nil	..
Sultanas ...	1			Nil	..
Jams : Gooseberry ...	1	Sulphur Dioxide	100 ppm.	Nil	Satisfactory
Plum and Raspberry	1			Nil 2-Nil	..
Jellies	4	Nil— except as allowed in ingredients		1-17 ppm. 1-19 ppm.	{ Satisfactory as the Sulphites present would be in ingred'nts
Ice Cream ...	17	Nil	Nil	Nil	
Margarine ...	3	Boric Acid	0.25%	1-0.06% 1.0.07% 1-0.12%	Satisfactory
Marmalade ...	2	Sulphur Dioxide	100 ppm.	2-Nil	Satisfactory

TABLE 4—Continued.

Food (1)	No. of Samples Exam'nd (2)	Permitted Preservative (3)	Amount		Remarks (6)
			Allowed (4)	Found (5)	
Mincemeat ..	3	Nil— except as allowed in ingredients		2-Nil 1-32 ppm.	Satisfactory Satisfactory as the Sulphites present would be in ingredients
Mineral Waters	5	Sulphur Dioxide or Benzoic Acid	70 ppm. 120 ppm.	5-Nil Nil	} Satisfactory
Mustard ...	2	Nil	Nil		
Onion Powder...	2	Not fixed		1-69 ppm. 1-131 ppm.	Preservative found was Sulphur Dioxide. As no limits have been fixed the samples are regarded as satisfactory
Pickles	4	Benzoic Acid	250 ppm.	4-Nil	Satisfactory
Preserves: Chinese Chow Chow	1	Sulphur Dioxide	100 ppm.	Nil	Satisfactory
Chinese Ginger	1			Nil	..
Sweets	5	Sulphur Dioxide	70 ppm.	5-Nil	Satisfactory
Wines: British Sherry	3	Sulphur Dioxide	450 ppm.	1-172 ppm. 1-198 ppm 1-402 ppm.	Satisfactory
Champagne Perry	1			Nil	..
Cyprus Sherry	1			Nil	..

Manufacture and/or Sale of Ice Cream.

During the year 184 inspections were made of 68 registered premises :—

Manufacturer vendors	...	...	...	9
Vendors only	...	...	...	59

A total of 75 samples were submitted to bacteriological examination by the methylene blue reduction test, particulars of which are given in the following Table :—

Produced	No. of Samples	Highly Satisfactory	Satisfactory	Unsatisfactory	Very Unsatisfactory
In Borough ..	27	7 (25.92%)	5 (18.52%)	7 (25.92%)	8 (29.63%)
Outside of Borough	48	5 (10.42%)	13 (27.08%)	23 (47.92%)	7 (14.58%)
Total ...	75	12 (16.00%)	18 (24.00%)	30 (40.00%)	15 (20.00%)

Of the above, 50 samples were also submitted to the plate count and coliform tests, out of which 36 (72 per cent.) attained the standard of not more than 100,000 bacteria per cubic centimetre and coliform bacilli in 1/100 c.c.

Fried Fish Shops.

During the year 143 inspections were made of 140 registered premises. In 1 case it was necessary to effect an improvement.

General

Fertilisers and Feeding Stuffs Act, 1926.

Of 9 samples obtained during the year, all were of fertilisers and were reported as satisfactory.

Rag Flocks Acts, 1911 and 1928.

There are no manufacturers of rag flock with premises within the Borough, and very few dealers in same.

No visits were paid to premises and no samples were taken during the year.

Pharmacy and Poisons Act, 1933 ;

Pharmacy and Medicines Act, 1941.

At the end of 1947 there were 181 registered sellers of Part II. poisons, occupying 242 registered premises.

There were 69 inspections of these premises during the year.

No samples were taken.

Swimming Bath Waters—Chemical and Bacteriological Examination.

During 1947, the only swimming baths in use within the Borough were those at the six schools referred to in the following Table.

The first samples were obtained on the 27th June, when it was found that in all cases, with the exception of the Crossley and Porter School, there was a deficiency of Free Chlorine.

The Chief Education Officer was notified and requested to arrange for Free Chlorine to be added to the swimming bath water in the proportion of 0.5 parts per million.

Further samples of water were obtained from the five schools affected, on the 15th and 19th August, when it was found that there was a considerable improvement, although the Public Analyst stated that in the case of Moorside School, Ovenden Senior School, Battinson Road School and Warley Road School, the bacteriological standard was still too low.

Following further representations to the Chief Education Officer, arrangements were made for the Corporation Baths Manager to instruct the respective school caretakers in the use of the chlorinating plant.

This important matter continues to receive attention, and further samples of swimming bath water will be obtained.

CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF SWIMMING BATH WATERS, 1947.

Sample No.	1	2	3	4	5	6	7	8	9	10	11
Swimming Bath	Moorside School	Ovenden Senior School	Warley Road School	Battinson Road School	Akroyd Place School	Crossley & Porter School	Battinson Road School	Warley Road School	Akroyd Place School	Moorside School	Ovenden Senior School
Date obtained	27/6/47	27/6/47	27/6/47	27/6/47	27/6/47	27/6/47	15/8/47	15/8/47	15/8/47	19/8/47	19/8/47
CHEMICAL ANALYSIS.											
Total Solids (pts per 100,000)	56.88	34.28	27.68	28.12	20.20	32.88	33.36	17.24	7.84	74.64	32.52
Mineral Matter (-do-)	50.76	31.12	26.72	21.60	15.84	27.16	21.16	15.60	6.00	69.04	32.36
Chlorine (-do-)	12.1	4.6	7.5	3.6	6.5	7.6	3.1	5.6	2.7	8.7	5.2
Free Ammonia (-do-)	0.0240	0.0012	0.0600	0.0700	0.0350	0.0500	0.0012	0.0300	0.0040	0.0072	Nil
Albuminoid Ammonia (-do-)	0.0108	0.0060	0.0280	0.0120	0.0300	0.0400	0.0400	Nil	0.0032	0.0108	0.0036
Oxygen absorbed in 4 hours at 80° F.	0.075	0.048	0.102	0.068	0.080	0.240	0.045	0.048	0.270	0.690	0.024
Nitrous Nitrogen (-do-)	Present	SL. Trace	Trace	SL. Trace	Present	Nil	Nil	Nil	Nil	SL. Trace	Nil
Nitric Nitrogen (-do-)	1.50	1.50	1.40	1.75	1.00	0.075	1.48	0.47	0.042	0.840	0.600
Temporary Hardness (degrees)	4.4	2.4	1.7	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Total Hardness (-do-)	4.4	2.4	4.2	10.2	6.6	5.6	12.4	4.0	3.0	2.0	3.0
Permanent Hardness (-do-)	Nil	Nil	2.5	10.2	6.6	5.6	12.4	4.0	3.0	2.0	3.0
Free Chlorine (pts per million)	0.07	0.02	0.03	0.01	0.05	2.00	0.01	0.01	0.35	0.05	0.01
pH Value	7.3	7.3	6.7	4.4	4.3	5.4	4.3	6.3	4.5	9.2	7.3
Appearance *	(w)	(x)	(y)	(x)	(x)	(x)	(x)	(x)	(x)	(z)	(x)
BACTERIOLOGICAL EXAMINATION.											
Total No. of Micro-organisms per m.l. growing on Agar at 22°C. 3 days.	180	3240	1200	9000	750	Nil	10000	14000	2	6600	780
Total No. of Micro-organisms per m.l. growing on Agar at 37°C. 2 days.	8	1800	800	2400	60	Nil	2	12000	Nil	2700	210
Presumptive B. Coli (per 100 m.l.)	Nil	1	Nil	3	Nil	Nil	20	Nil	Nil	Nil	5

* (w) - Slightly Turbid and Colourless ; (x) Clear and Colourless ; (y) Slightly Turbid and Light Brown ; (z) Almost Clear and Colourless.

TABLE 1.—DEPOSITED ATMOSPHERIC POLLUTION. 1947.

Month	WADE STREET (Central)				BELLE VUE PARK ($\frac{1}{2}$ mile West)				AKROYD PARK ($\frac{1}{2}$ mile North)				INFIRMARY (1 mile South)				WEST VIEW PARK ($1\frac{1}{2}$ miles West)			
	Rainfall in Inches	Insoluble Solids	Soluble Solids	Total Solids	Rainfall in Inches	Insoluble Solids	Soluble Solids	Total Solids	Rainfall in Inches	Insoluble Solids	Soluble Solids	Total Solids	Rainfall in Inches	Insoluble Solids	Soluble Solids	Total Solids	Rainfall in Inches	Insoluble Solids	Soluble Solids	Total Solids
January ...	2.92	35.47	14.80	50.27	2.46	9.15	5.67	14.82	2.99	8.78	7.89	16.67	2.42	5.77	3.95	9.72	2.84	8.46	10.51	18.97
February ...	1.46	35.66	17.29	52.95	1.07	8.71	6.49	15.20	1.64	12.04	7.82	19.86	0.69	7.46	4.11	11.57	1.41	9.64	6.88	16.52
March ...	5.56	60.83	22.76	83.59	4.95	11.96	8.01	19.97	5.40	19.74	13.33	33.07	4.57	9.64	9.33	18.97	5.53	7.26	9.80	17.06
April ...	4.04	30.77	12.80	43.57	4.72	16.03	13.90	29.93	3.98	14.58	9.98	24.56	4.05	11.18	10.02	21.20	3.81	9.03	8.14	17.17
May ...	4.59	47.62	13.87	61.49	3.92	14.53	10.14	24.67	4.03	11.06	15.44	26.50	3.98	11.82	8.52	20.34	3.14	9.96	8.59	18.55
June ...	2.71	20.25	8.56	28.81	2.49	6.80	5.31	12.11	2.48	9.93	4.95	14.88	2.55	5.04	4.21	9.25	2.50	5.33	5.03	10.36
July ...	2.19	14.55	6.46	21.01	2.04	5.82	4.16	9.98	1.90	7.47	6.82	14.29	1.99	6.03	4.09	10.12	2.20	4.66	5.59	10.25
August ...	0.22	19.59	7.09	26.68	0.09	6.40	3.42	9.82	0.20	6.18	3.99	10.17	0.14	6.63	2.43	9.06	0.25	7.60	4.10	11.70
September ...	1.54	15.69	13.52	29.21	1.36	6.92	5.20	12.12	1.59	7.73	5.40	13.13	1.11	3.87	3.37	7.24	1.67	5.12	4.38	9.50
October ...	0.74	12.69	16.20	28.89	0.87	8.66	4.70	13.36	0.96	5.83	4.95	10.78	1.25	6.75	6.69	13.44	1.05	6.26	4.80	11.06
November ...	4.85	12.13	14.30	26.43	4.77	5.42	7.87	13.29	4.64	5.04	7.54	12.58	4.64	4.56	5.91	10.47	4.37	3.06	5.46	8.52
December ...	3.24	15.58	15.18	30.76	2.89	7.07	7.40	14.47	2.59	8.56	16.72	25.28	2.77	5.99	6.05	12.04	3.03	4.90	6.38	11.28
AGGREGATES	34.06	320.83	162.83	483.66	31.63	107.47	82.27	189.74	32.40	116.94	104.83	221.77	30.16	84.74	68.68	153.42	31.80	81.28	79.66	160.94
MONTHLY AVERAGES...	2.84	26.73	13.57	40.30	2.64	8.96	6.86	15.81	2.70	9.74	8.74	18.48	2.51	7.06	5.72	12.78	2.65	6.77	6.64	13.41

Monthly Average for whole Borough :— Rainfall in inches ... 2.67
Insoluble Solids ... 11.85 tons per square mile.
Soluble Solids ... 8.30 " "
Total Solids ... 20.16 " "

Total Annual Deposit for whole Borough = 241.91 tons per square mile.

TABLE 3.
MEASUREMENT OF DAYLIGHT. 1947.
Potassium Iodide Method.

Station	Milligrams of Iodine liberated—Daily Average.												Total Daily Average
	January	February	March	April	May	June	July	August	Sept.	October	Nov.	Dec.	
WADE STREET (Central)	0.75	1.64	2.73	6.55	8.25	8.80	4.34	3.23	2.39	1.43	0.95	1.01	3.51
WEST VIEW PARK (1½ miles West)	1.20	2.17	3.35	7.83	7.94	5.00	3.69	4.38	3.03	2.87	3.06	2.04	3.88
Total Daily Average ...	0.97	1.90	3.04	7.19	8.09	6.90	4.01	3.80	2.71	2.15	2.00	1.52	3.69

SULPHUR POLLUTION — LEAD PEROXIDE METHOD. 1947.

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SECTION 14



Miscellaneous

Miscellaneous

WATER SUPPLY.

I am indebted to Mr. H. F. Lea, Waterworks Engineer and Manager, for the following report :—

During the year 1947, the supply of water has been of the highest quality. The methods of filtration at all three Filter Stations have been satisfactory and the daily routine analysis of both crude and treated water have been taken throughout the year, and in addition, independent samples taken from various points in the area of supply have been submitted to the Public Analyst, and in no case has the treated water been of a lower standard than Class 1 of the Ministry of Health Specification for Water Supplies.

The new pumping station at Thrum Hall was put into service during the year, and pumps water from the Thrum Hall filtration plant to Roils Head reservoir. Owing to the latter reservoir being an open one the water, after pumping, was re-chlorinated in conjunction with ammonia to allow residual chlorine to be retained in the water in Roils Head reservoir, to sufficiently guard against atmospheric pollution.

The laying of the new water mains on the housing estates of the Corporation has been carried out continually, and in all cases the mains were effectively sterilised before being used for supplying purposes.

In cases where burst mains occurred the mains were sterilised before being returned into supply.

CLEANSING.

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

Refuse Collection.

Apart from some delay caused by the transfer of labour and transport to snow removal duties during the months of February and March, this service operated regularly throughout the year, and the total refuse dealt with by the Department was 26,475 tons.

Salvage.

The total income from the sale of waste materials during the year amounted to £16,559. The separate collection of kitchen waste and waste paper has assisted considerably in maintaining this high figure—the total collected of the former being 1,183 tons.

The work of the Department generally, has been hampered by the acute shortage of labour, and this has been particularly marked in the street cleansing service.

SEWAGE.

I am indebted to Mr. C. Lumb, Sewage Works Manager, for the following report :—

Sewage Purification.

The efficient purification of sewage and trade effluent is a vital link in the chain of sanitation services which the notoriously insanitary conditions of the nineteenth century so clearly showed to be necessary.

Drainage from the bulk of the Borough falls to the Sewage Purification Works at Salterhebble, Copley and North Dean. Here all the sewage and trade effluents are efficiently purified by modern methods before discharge to the river Calder, the final effluents having to be within the standards of the West Riding of Yorkshire Rivers Board. The presence of trade effluents, the purification of which is just as necessary from a public health point of view as that of sewage, greatly complicates the treatment and due to this factor, the purification works are approximately double the size they would otherwise need to be.

The works are continuously maintained in efficient condition, while development is constantly taking place; amongst the processes in use are numbered some of the very latest and most modern methods. Maximum possible salvage of useful by-products is carried out and both grease and fertilisers are recovered in this manner. These products are sterilised during the technique of extraction and processed into conditions which show no trace of their origin, before return to productive channels. This feature is of particular importance from an economic standpoint at the present time.

The total volume of sewage and trade effluent dealt with by the Department during 1947 was 2,389,000,000 gallons, an average of 6,545,000 gallons for each day of the year. From this volume 42,067 tons of sludge residues were extracted, which were dewatered and worked up into grease and fertiliser.

Owing to the topography of the Borough, certain areas in the Warley and Northowram districts, serving about 5% of the total population, cannot be drained into the Salterhebble system. Drainage from the Warley district is dealt with at the Sewage Works of the Luddenden Foot Joint Sewage Board, of which Halifax Corporation is a constituent authority, whilst sewage and trade effluent from the Northowram area pass to the sewers of Brighouse Corporation and are dealt with, under agreement, by that Authority.

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General Summary of Meteorological Observations taken at the Central Public Library, Belle Vue, Halifax, from January 1st, 1947, to December 31st, 1947,
By FRANK HAIGH, CHIEF LIBRARIAN.

LATITUDE OF STATION = 53° 43' N. LONGITUDE = 1° 52' W. HEIGHT ABOVE SEA LEVEL = 625 FEET.

1947.	Pressure of Atmosphere in Month.		Temperature of Air in Month.							Mean Temperature.		Vapour			Mean degree of Humidity, saturation (100).	Mean Weight of a cubic foot of Air.	Mean Reading of Thermometer.		Estimated Strength.	Wind.									Mean amount of Cloud.	Rain.		REMARKS	
Month	Mean at 37° F. and Sea Level.	Range.	Highest.	Lowest.	Mean.			(Adapted.)	Dew Points.	Elastic Force.	In a cubic foot of Air.		Minimum in Rays of Sun.	Minimum on Grass.			Relative proportion of								No. of Days it fell.	Amount Collected.							
					Range.	Of all Highest.	Of all Lowest.				Daily Range.	Air.					Dew Points.	Mean.		Short of Saturation.	N.	N.E.	E.	S.E.			S.	S.W.		W.	N.W.		Calms.
ins.	ins.	°	°	°	°	°	°	°	ins.	grs.	grs.	grs.	°	°											ins.								
January	29-956	1-446	53-0	13-7	39-3	38-2	31-0	7-2	34-7	31-9	0-180	2-1	0-3	88	543-5	48-5	29-5	3-0	1	9	4	15	2	7	5	4	2	8-0	18	2-61	The observations have been reduced to mean values by Glaisher's Barometrical & Diurnal Range Tables, and the Hygrometrical results have been deduced from the seventh edition of Hygrometrical Tables, after corrections for Index errors of the Instruments employed.		
February	29-796	1-166	36-0	10-6	25-4	29-9	24-2	5-7	27-2	25-9	0-140	1-7	0-1	95	552-6	49-0	25-5	4-0	1	6	28	3	—	2	2	1	1	9-1	21	3-86			
March	29-568	1-024	53-0	9-9	43-1	38-9	28-8	10-1	34-2	32-9	0-188	2-2	0-1	96	544-4	67-3	29-4	2-5	—	14	3	12	3	7	3	3	8-0	26	6-07				
April	29-984	1-166	64-1	32-8	31-3	51-3	37-2	14-1	43-7	38-6	0-234	2-7	0-5	84	534-4	90-4	35-1	4-5	—	9	1	4	—	16	14	—	1	6-5	17	3-94			
May	29-982	0-592	82-8	35-6	47-2	61-9	44-0	17-9	52-7	45-9	0-310	3-5	0-9	80	524-6	102-3	41-3	2-5	1	9	12	12	4	3	4	1	3	7-1	13	4-10			
June	29-903	0-922	84-0	43-3	40-7	63-8	50-3	13-5	57-3	49-3	0-351	3-9	1-3	75	519-2	105-5	47-3	3-0	1	1	11	5	2	14	9	4	—	7-6	17	2-54			
July	29-899	0-842	78-3	47-0	31-3	64-6	52-1	12-5	55-9	52-3	0-393	4-4	1-0	81	518-0	107-0	51-4	3-0	—	3	3	5	1	12	17	2	1	7-9	18	2-04			
August	30-103	0-742	83-5	46-5	37-0	72-3	53-1	19-2	62-9	51-9	0-387	4-3	2-1	67	513-0	113-6	48-8	2-5	—	9	14	12	—	3	5	4	5-1	3	0-26				
September	30-023	0-726	72-2	37-0	35-2	63-2	48-5	14-7	55-8	50-2	0-365	4-1	0-9	81	520-1	103-7	44-1	3-5	1	1	5	5	1	15	6	8	1	6-5	16	1-53			
October	30-140	0-690	68-0	38-0	30-0	55-5	44-2	11-3	49-9	45-9	0-309	3-5	0-6	86	526-5	80-2	40-7	2-5	—	11	8	5	—	3	14	4	4	7-0	13	0-90			
November	29-843	0-996	58-9	25-1	33-8	47-8	37-2	10-6	42-9	40-8	0-255	2-9	0-3	92	534-3	71-8	33-5	4-0	2	4	1	1	—	15	12	8	2	6-7	20	4-76			
December	29-925	1-822	50-1	22-0	30-1	43-9	36-0	7-9	40-0	37-7	0-226	2-6	0-3	92	537-7	50-4	33-5	3-0	3	6	6	—	—	3	8	12	7	8-4	18	3-00			
Annual Means	29-927	1-011	65-3	30-1	35-4	52-6	40-5	12-1	46-4	41-9	0-278	3-2	0-7	85	530-7	82-5	38-3	3-0	1	7	8	7	1	8	8	4	2	7-3	—	—			

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

January, 42°	February, 40°	March, 39°	April, 43°	May, 47°	June, 53°
July, 55°	August, 58°	September, 57°	October, 54°	November, 50°	December, 45°

Highest Readings = 59° on August 25th to September 3rd.

Lowest Readings = 39° on March 6th to 28th.

Rain fell on 200 days, and measured 35-61 inches.

Journal of the American Medical Association

Published Weekly, except on Sundays and Public Holidays

Subscription Price, \$5.00 per Annum in Advance

Single Copies, 15 Cents

Published by the American Medical Association, 535 North Dearborn Street, Chicago, Ill.

Entered as Second-Class Matter, May 2, 1902, under Post Office No. 383, Post Office at Chicago, Ill., and for mailing at special rate of postage provided for in Act of October 3, 1917, authorized on July 16, 1918. Accepted for mailing at special rate of postage provided for in Act of October 3, 1917, authorized on July 16, 1918. Postage paid at Chicago, Ill., and at additional mailing offices. Postmaster: Send address changes in this journal to JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, 535 North Dearborn Street, Chicago, Ill.

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Printed at the Chicago Press, Chicago, Ill.

Volume 68, Number 1, January 7, 1919

Editorial Board: J. H. T. Moore, Chairman; J. C. Brannan, Secretary

Published by the American Medical Association, 535 North Dearborn Street, Chicago, Ill.