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County Borough



of Middlesbrough.

HEALTH DEPARTMENT.

Annual Report

AND

VITAL AND MORTALITY STATISTICS

For the Year 1926.

Middlesbrough :
JORDISON & Co., Ltd., PRINTERS, LITHOGRAPHERS, &c.

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COUNTY BOROUGH OF MIDDLESBROUGH.

Members of the Sanitary Committee, 1926-7.

Chairman—ALDERMAN A. MATTISON.

Vice-Chairman—ALDERMAN W. TREVELYAN THOMSON, M.P.

HIS WORSHIP THE MAYOR (COUNCILLOR A. WEATHERHEAD, M.B.E.).

ALDERMEN W. J. BRUCE, O.B.E., J.P., G. A. CAREY, J. FORBES, J.P.,
J. RODDY.

COUNCILLORS MRS. MARION COATES-HANSEN, A. ELSTROP, MRS. H. GUTHRIE,
H. D. LEVICK, M.B., J.P., H. M. LEVICK, M.D., S. LEVY, A. MARSHALL,
T. MEEHAN, J. G. PALLISTER, J. PICKERING, P. SULLIVAN, A. TODD, E. TURNER,
J. G. WADDINGTON, C. B. WOOD.

Members of the Sanatorium Committee, 1926-7.

Chairman—COUNCILLOR J. G. PALLISTER.

HIS WORSHIP THE MAYOR (COUNCILLOR A. WEATHERHEAD, M.B.E.)

ALDERMEN W. J. BRUCE, O.B.E., J.P., J. FORBES, J.P., A. MATTISON, T. G. POOLE, J.P.,
W. TREVELYAN THOMSON, M.P.

COUNCILLORS F. CAREY, MRS. MARION COATES-HANSEN, A. COOPER, H. D. LEVICK,
M.B., J.P., H. M. LEVICK, M.D., A. MARSHALL, T. MEEHAN, S. A. SADLER, J.P.,
P. SULLIVAN, C. B. WOOD.

Members of the Maternity and Child Welfare Committee, 1926-7.

Chairman—LADY CALVERT, J.P.

HIS WORSHIP THE MAYOR (COUNCILLOR A. WEATHERHEAD, M.B.E.)

MRS. M. E. HEWITSON, MISS PURVIS, MRS. KEDWARD, MRS. BRUCE, MRS. STANLEY
A. SADLER, MRS. TRURAN, DR. HAROLD LOWE.

ALDERMEN A. CAREY, J. FORBES, J.P., T. J. KEDWARD, A. MATTISON, J. RODDY.

COUNCILLORS G. ALEXANDER, J. WESLEY BROWN, MRS. MARION COATES-HANSEN,
T. CURRAN, J. GRAHAM, MRS. H. GUTHRIE, J. HAMILL, H. D. LEVICK, M.B., J.P.,
H. M. LEVICK, M.D., T. D. STEWART, P. SULLIVAN, C. B. WOOD.

STAFF.

MEDICAL OFFICER OF HEALTH AND SUPERINTENDENT OF HOSPITALS :

‡CHAS. V. DINGLE, M.D., B. Hy., D.P.H.

ASSISTANT MEDICAL OFFICER OF HEALTH :

WILLIAM L. TULLIS, M.D., Ch. B., D.P.H.

TUBERCULOSIS OFFICER :

‡F. J. HENRY, M.B., F.R.C.S., D.P.H. (BARRISTER-AT-LAW).

MATERNITY AND CHILD WELFARE MEDICAL OFFICER :

‡Mrs. GRACE H. GIFFEN DUNDAS, F.R.C.S., D.P.H.

VENEREAL DISEASES MEDICAL OFFICER (PART TIME) :

‡ARTHUR BRYANS, L.R.C.P. & S. (Ed.), L.R.F.P.S. (GLAS.) :

CHIEF SANITARY INSPECTOR :

*‡‡THOMAS P. DIXON, MEM. S.I.A., MEM. R.S.I.

ASSISTANT SANITARY INSPECTORS :

†A. W. LUCAS (Factories, Workshops, &c.)	*‡H. WHITFIELD.
*‡J. N. MARTIN.	*‡A. C. WALKER.
†M. GUTHRIE (Appointed April, 1926).	†F. FRANKS (Resigned Dec. 1926).
*‡R. LEGGETT (Appointed Dec. 1926).	†H. WATSON.
*‡S. E. ELLIS (Food and Drugs).	P. B. STAMP (Probationer).

HEALTH VISITORS :

‡‡MISS L. BELL (Supervisor)	‡§‡MISS M. NESBITT.
‡‡MISS M. A. BLAKE.	‡‡§‡MISS R. SPITTEL.
‡‡§‡MISS M. VEITCH.	‡‡§‡MISS A. G. TODD.

NURSES :

‡MISS M. OWEN (TUBERCULOSIS).	‡MISS STOCKTON (TUBERCULOSIS).
‡‡MISS D. E. HALL (TUBERCULOSIS)	‡MISS G. VAUGHAN (MEASLES).
(Appointed 19/4/26).	

MATRONS :

MRS. B. GARDNER : FEVER AND SMALLPOX HOSPITALS.
‡‡‡MISS ANNIE DAVIES : MUNICIPAL MATERNITY HOME & CHILDREN'S HOSPITAL.

CLERKS :

†JOHN W. RAWDON.	J. E. DODSWORTH.	R. JAMES.
P. E. TAGGART.	G. DANNELL.	‡Mrs. C. WALLER.
‡Miss ANDERTON.	‡Miss H. DANBY.	

FOREMEN SCAVENGERS :

G. STEVENSON.

T. WILSON.

*Meat Inspector's Certificate of R.S.I.

†Sanitary Inspector's Certificate of R.S.I.

‡Salaries rank for Exchequer Grant.

§Certificate of Central Midwives' Board.

‡‡Health Visitor's Diploma, Board of Education.

‡‡State Registered Nurse.

THE HEALTH DEPARTMENT,
MUNICIPAL BUILDINGS,
MIDDLESBROUGH,

JULY, 1927.

TO THE CHAIRMAN (ALDERMAN A. MATTISON) AND
MEMBERS OF THE SANITARY COMMITTEE.

LADIES AND GENTLEMEN,

I have the honour to present for your consideration my Twenty-Eighth Annual Report on the Health of the County Borough of Middlesbrough.

During the year 1926, the Health of the population of Middlesbrough was very satisfactory, both the Death Rate and the Infantile Mortality Rate were the second lowest rates during the past twenty-eight years. The Zymotic Death Rate was also a very low one.

The steady improvement in the Health of the town is very encouraging, but must not lead to any relaxing of efforts for further improvement. The one most unsatisfactory fact in relation to the health of this town at present is the high mortality from Respiratory Diseases due to the number of fatal cases of Pneumonia which are approximately twice as many per 1,000 of the population as they are in other towns in the North East Coast Area.

Pneumonia is a germ disease and is infectious, and can be spread very much in the same manner as Pulmonary Tubercular Disease, *i.e.*, by healthy persons inhaling the disease germs which are present in the air.

In the body of this report you will find certain suggestions of the Chief Medical Officer of the Ministry of Health relating to Respiratory Diseases and their treatment, and I recommend them to you for your careful consideration.


I have the honour to be,

Ladies and Gentlemen,

Your obedient servant,

Charles V. Dring

Medical Officer of Health.



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ANNUAL REPORT

of the Medical Officer of Health for 1926.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres): 4,323 acres, including 173 acres of tidal land.
 Population: Census 1921: 131,103. Estimated 1926: 133,600.
 Number of Inhabited Houses (1921): 25,541.
 Number of Families or Separate Occupiers (1921): 27,891.
 Rateable Value 1926: £667,377 15s. 0d.
 Sum represented by a penny rate: £2,248.

EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

	Male.	Female.	Total.	Birthrate:
BIRTHS: Legitimate ..	1,662	1,569	3,231	} 25.35 per 1,000 per annum.
Illegitimate ..	76	80	156	

DEATHS: 1,759. Deathrate: 13.16 per 1,000 per annum.

Number of Deaths of women dying of, or in consequence of, Childbirth:

From Sepsis	5
„ other Causes	13

Deaths of Infants under one year of age per 1,000 births:

	Legitimate.	Illegitimate.	Total.
	95	186	99
Deaths from Measles (all ages) .. .. .	..	..	4
„ Whooping Cough (all ages) .. .. .	..	..	54
„ Diarrhoea (under 2 years of age) .. .. .	..	..	49

VITAL STATISTICS.

Population.—At the Census 1921, the population enumerated was 131,103, consisting of 66,201 males and 64,893 females. In 1925 the Registrar-General estimated the population of the County Borough of Middlesbrough to be 136,200, in 1926 his estimate was 133,600, a reduction of 2,600 based upon an estimate of the births, deaths and migration which occurred between the Census date and June 30 last. It is probable, owing to trade depression, that many have left this town during the past five years, but from local knowledge the Registrar-General's estimate would appear to be in excess of the actual number. For the purpose of estimating the statistics of 1926, the Registrar-General's figure of 133,600 has been used.

Births.—The number of births registered during 1926 was 3,401, the nett births being 3,387, males 1,738, females 1,649, giving a birth rate of 25.35 per 1,000 of the estimated population. Since the big jump in the birth rate in 1920, following the very low rates during the war years 1917-1918-1919, there has been a steady decline in the birth rate of Middlesbrough.

Year.		Nett Births.		Rate per 1,000 pop.		England and Wales.
—		—		—		—
1917	..	3,062	..	23.03	..	17.8
1918	..	3,327	..	25.64	..	17.7
1919	..	3,531	..	26.66	..	18.5
1920	..	4,431	..	33.51	..	25.5
1921	..	4,218	..	31.62	..	22.4
1922	..	3,774	..	27.99	..	20.4
1923	..	3,728	..	27.53	..	19.7
1924	..	3,589	..	26.33	..	18.8
1925	..	3,501	..	25.70	..	18.3
1926	..	3,387	..	25.35	..	17.8

The notified births totalled 3,244, being only 143 below the registered deaths—of these 1,658 were males and 1,586 females.

Illegitimate births numbered 156. Males 76 ; females 80.

The birth rate varied very considerably in different areas of the town :—

Wards.		Mean birth rate 1921-25.			Rate 1926.
Ayresome	..	17.48	..	..	16.22
Acklam	..	20.13	..	..	18.25
Cannon	..	36.13	..	..	36.10
Cleveland	..	28.22	..	..	24.69
Exchange	..	17.90	..	..	16.99
Grove Hill	..	21.88	..	..	23.50
Linthorpe	..	21.49	..	..	15.49
Newport	..	36.34	..	..	31.44
Ormesby	..	28.45	..	..	25.31
St. Hilda's	..	34.99	..	..	37.56
Vulcan	..	25.82	..	..	27.05

the decline in the birth rate is not marked in the Cannon, Newport and St. Hilda's Wards.

Deaths.—The number of deaths registered in Middlesbrough during 1926, was 1915, giving a crude death rate of 14.33 per 1,000 of the estimated population. The nett deaths of persons belonging to the district numbered 1,759, the death rate corrected by the factor for standardizing is 13.16 per 1,000 population.

Taking into account the decrease in the estimated population for 1926, the death rate is very satisfactory and is much nearer the average death rate of the large towns of the country than it has ever been.

The following have been the mean death rates in Middlesbrough during the past 25 years :—

Years.	MIDDLESBROUGH.		ENGLAND AND WALES.	
	Mean death rate per 1,000 population		Mean death rate per 1,000 population.	
1901-1905	..	21.01	..	..
1906-1910	..	19.59	..	..
1911-1915	..	19.65	..	..
1916-1920	..	19.45	..	14.5
1921-1925	..	15.16	..	12.2
1926	..	13.16	..	11.6

The number of deaths in Public Institutions was 642, of which 315 took place in the Union Infirmary. The Hospitals in Middlesbrough are increasingly made use of by the surrounding districts, this is one of the causes of the large number of transferable deaths.

Percentage of deaths at various age periods to total deaths in Middlesbrough :

Year	Under 1 year	1 & under 2 yrs.	2 & under 5 yrs.	5 & under 15 yrs.	15 & under 25 yrs	25 & under 45 yrs.	45 & under 65 yrs.	65 years & over
1921	26.4	8.0	4.0	3.3	4.7	12.5	20.5	20.4
1922	21.4	8.6	5.2	2.9	4.7	12.6	23.0	21.3
1923	18.1	7.7	6.5	3.7	4.4	12.7	23.3	23.1
1924	21.2	10.6	6.9	3.5	4.3	12.2	21.1	19.9
1925	17.2	6.8	6.4	5.0	4.8	12.4	23.8	23.1
Mean of 5 years	20.9	8.4	5.8	3.7	4.5	12.5	22.3	21.5
1926	19.1	6.1	4.1	4.1	5.1	11.9	23.0	26.2
County Boroughs England and Wales 1925	12.7	4.0	3.4	3.0	4.3	11.4	25.7	35.2

Death rates per 1,000 estimated population in the various districts of the town :

Ward.	Mean of 5 yrs. 1921-5.				1926
Ayresome	9.56	..	..	..	11.27
Acklam	12.04	..	..	..	8.50
Cannon	17.59	..	..	..	16.94
Cleveland	16.86	..	..	..	13.01
Exchange	12.91	..	..	..	9.74
Grove Hill	9.88	..	..	..	9.00
Linthorpe	10.89	..	..	..	11.91
Newport	19.61	..	..	..	14.56
Ormesby	12.18	..	..	..	11.10
St. Hildas	24.67	..	..	..	21.26
Vulcan	15.14	..	..	..	14.30

The whole of the scheduled insanitary areas are situated in the St. Hildas Ward.

Deaths from Principal Causes.

Disease.	Proportion per 1,000 deaths from all causes.				
	England & Wales	Middlesbrough		St. Hildas Ward	
	1925	1925	1926	1925	1926
Measles	11	26	2	30	Nil
Whooping Cough	13	9	31	13	51
Influenza	27	19	19	17	11
Tuberculosis of Respiratory System	68	87	81	102	94
Other forms of Tuberculosis ..	17	24	18	23	22
Cancer, Malignant Disease ..	110	66	95	44	94
Disease of the Heart	135	82	85	88	76
Bronchitis	75	85	81	109	102
Pneumonia (all forms) ..	78	167	133	170	131
Premature Birth and diseases of Early Infancy ..	42	62	62	51	88
Violence (all forms)	39	38	29	17	25
Diarrhoea and Enteritis ..	18	19	33	30	58

Of the principal causes of death those from Respiratory Diseases have for many years been the most noticeable in Middlesbrough.

The following Tables compare the mortality from Respiratory Diseases in various districts of the Country with those in the North of England and also compare the rates for Middlesbrough with those of the neighbouring towns.

RESPIRATORY DISEASES.

The Chief Medical Officer of the Ministry of Health in his Report for the year 1925, commenting upon the high mortality from these diseases in the Northern Area of the Country, quotes the Registrar General's Report for 1913. "When comparison is restricted to the same class of area in each case the mortality of the North is in no instance very much less than twice that of the South. No doubt this depends to some extent upon industrial conditions but these can scarcely explain the great difference between the North and the Midlands. Evidently Pneumonia is to a large extent a preventable disease, and the North of England has still much to learn with regard to its prevention." The death rate from Pneumonia in each class of area in 1924 was substantially the same as in 1913.

In the North Western portion of the Northern Area, (*i.e.*, Lancashire and Cheshire), the Pneumonia rate is greater than that for the North generally.

In this Country the seasonal curve of mortality from Respiratory Disease is fairly constant, the maximum of mortality is not in the depth of winter, but in the early spring. This is not the coldest season of the year, but it is a time of great variation. In respect to atmospheric pollution, the Chief Medical Officer says there is a general concordance between exposure to atmospheric contamination and the existence of high mortality from respiratory diseases which is impressive. Commenting on the action to be taken by Local Authorities in dealing with the situation, the Chief Medical Officer says the problem calls for continued and vigilant attention, both of Authorities and those responsible for commercial concerns. There is needed an increase in the knowledge and practice of healthy living. Much can be done by personal prudence, by cleanliness, by exercise, by correct breathing, by domestic ventilation, and by the practice of individual hygiene.

With regard to treatment of Respiratory Disease, it is probable at present that much less is done than could properly be done. The time has come when the whole

question of using Isolation Hospitals to greater advantage calls for the consideration of Local Authorities, and it may well be that fuller regard should be paid to patients suffering from Respiratory Disease.

In Middlesbrough the death rate from Respiratory Diseases has for the past thirty or forty years been high, due entirely to an excessive rate of mortality from Pneumonic disease which is on the average greater than that for the Northern Area District, and twice as great as that for all England. This high mortality from Pneumonia is not exclusive to Middlesbrough alone, as the more immediate neighbouring North East Coast towns also show a corresponding high rate as will be noted in the following tables; this high rate is the more noticeable as mortality from Bronchitis in all the North Eastern Coast towns is not above the average for the Northern Area, and in many instances is equal to that of the Midland Area.

In most instances it is found that high Infantile Mortality corresponds with a high Respiratory death rate and in the years of highest mortality we find an increase of deaths from Measles and Whooping Cough amongst infants, and from Influenza amongst adults.

**Aggregate Death Rates per 1,000 of the population from Respiratory
Diseases in the County Boroughs of England and Wales.**

Death Rates per 1,000 pop.	1921	1922	1923	1924	1925	Mean for Eng. & Wales 1921-25
All Respiratory Diseases ..	1.95	2.30	1.86	2.12	2.60	2.17
Bronchitis .. ..	.88	1.07	.85	.97	.90	.94
Pneumonia all forms	.91	1.07	.87	1.00	.95	.96

**Aggregate Death Rates of the County Boroughs in various
Areas per 1,000 population.**

		1921	1922	1923	1924	1925	Mean 1921-5
North of England	All Respiratory diseases	2.60	2.91	2.57	2.86	2.68	2.73
	Bronchitis	1.15	1.37	1.12	1.25	1.17	1.22
	Pneumonia (all forms)	1.30	1.47	1.31	1.46	1.38	1.39
Midlands	All Respiratory diseases	2.05	2.52	1.98	2.25	2.19	2.14
	Bronchitis	0.93	1.18	0.93	1.04	1.00	1.02
	Pneumonia (all forms)	0.98	1.18	0.90	1.08	1.06	1.04
South of England	All Respiratory diseases	1.57	1.97	1.55	1.93	1.65	1.74
	Bronchitis	0.76	0.99	0.73	0.93	0.77	0.84
	Pneumonia (all forms)	0.65	0.81	0.65	0.83	0.71	0.73

Middlesbrough—Death Rate per 1,000 population.

	1921	1922	1923	1924	1925	1926
All Respiratory diseases ..	3.71	4.15	2.84	5.1	3.70	2.97
Bronchitis	1.23	1.26	0.80	1.30	1.02	1.06
Pneumonia (all forms) ..	2.25	2.83	1.89	3.50	2.40	1.75

The Northern area includes the Counties of Cheshire, Lancashire, Yorkshire, Durham, Northumberland, Cumberland and Westmoreland.

Mean Death Rates per 1,000 population of towns on the North East Coast for the years 1921-25, in order of highest mortality.

Towns	Death rate from Total Respiratory Diseases per 1,000 pop.			Towns.	Death rate from Pneumonia (all forms) per 1,000 pop.		
Hartlepool	4.32	Middlesbrough	..	..	2.56
Middlesbrough	3.90	Jarrow	..	..	2.02
Sunderland	3.27	Stockton	..	..	1.89
Jarrow	3.22	Hartlepool	..	..	1.89
Stockton	3.04	Gateshead	..	..	1.58
Gateshead	2.85	Eston ..	..	..	1.55
West Hartlepool	2.76	Sunderland	..	..	1.53
Hull	2.64	West Hartlepool	..	..	1.52
Newcastle	2.59	Newcastle	..	..	1.50
South Shields	2.55	Tynemouth	..	..	1.37
Eston	2.34	Hull	..	..	1.34
Darlington	2.25	Darlington	..	..	1.34
Tynemouth	2.17	South Shields	..	..	1.17

INFANTILE MORTALITY.

The nett number of deaths under one year of age during 1926 was 337, equal to an infant mortality rate of 99 per 1,000 births

The infant mortality rates during the following periods were :—

1901-5	..	..	..	..	181
1906-10	..	..	..	..	160
1911-15	..	..	..	..	145
1916-20	..	..	..	..	138
1921-25	..	..	..	..	109

Only twice before has the annual infantile mortality rate been under 100 per 1,000 births.

Neo Natal Deaths.

Age distribution of Infantile Mortality. Deaths per 1,000 Births.

Age	Middlesbrough					Northern Area County Bor- oughs	England and Wales
	1905-9	1910-14	1915-19	1920-5	1926	1925	1925
Under 4 weeks	47	46	46	42	39	36	32
4 weeks to 3 months	30	25	23	15	17	16	13
3 to 6 months	33	22	22	15	12	15	11
6 to 9 months	26	23	23	20	16	} 27	19
9 to 12 months	26	24	23	17	13		

The steady improvement in the Infant Mortality in Middlesbrough is being maintained.

Infantile Mortality from various causes. Deaths per 1,000 Births.

Disease	Middlesbrough		County Boroughs in Northern Area
	1920-25	1926	1925
Common Infectious Diseases	5.5	9.1	7.5
Premature Births	20.9	22.7	19.6
Wasting Diseases	34.1	23.0	33.5
Diarrhoea and Enteritis	13.7	11.8	11.4
Tubercular Diseases	1.4	1.7	1.4
Respiratory Diseases	32.4	24.2	23.8
Convulsions	6.5	4.4	5.3

Infantile Mortality Rates in the various Wards.

Districts	Deaths per 1,000 Births	
	1920-1925 (Mean)	1926
Ayresome	97	68
Acklam	86	57
Cannon	118	114
Cleveland	108	95
Exchange	97	120
Grove Hill	73	60
Linthorpe	71	64
Newport	126	121
Ormesby	125	67
St. Hildas	148	142
Vulcan	121	133
Deaths of Legitimate Infants	102	95
Deaths of Illegitimate Infants ..	138	186

General Provision of Health Services for the Area.

HOSPITALS PROVIDED BY THE LOCAL AUTHORITY.

- A.** (1) **FEVER : West Lane.**—There are 200 beds for the usual Notifiable Diseases.
 (2) **SMALLPOX : Hemlington.** There are 100 beds.
- B.** (1) **TUBERCULOSIS : West Lane.** 28 beds and 3 huts.
 Broomlands. 6 beds are retained for Surgical Tubercular cases.
- (2) **MATERNITY : Municipal Maternity Hospital, Park Road North.** There are 21 beds for Maternity cases.
- (3) **CHILDREN'S HOSPITAL : Children's Municipal Hospital, Park Road North.** There are 15 beds for Infants under 5 years of age.
- (4) **OTHER : Children's Cripples Home.** The R. C. Davison Holiday Home at Danby, supported by voluntary contributions, to which Cripple Children are sent. About 100 children are received for 3 weeks each in the summer months.

INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS, &c.

There is provision for these at the **Holgate (Guardians) Hospital**, and at the **Holy Cross Refuge**. The latter is a Church of England Institution and receives a grant from the Local Authority. It provides for unmarried mothers.

HOMELESS CHILDREN : Guardians Children's Homes, Nazareth House (R.C.) 206, Holy Rood Orphanage (C.E.) 16, and a branch of Dr. Barnardo's Homes (Undenom.) 24.

CLEANSING STATION : 52, Bridge Street W. This is a small Cleansing Station fitted with a steam disinfecter and baths for dealing with verminous persons.

Ambulance Facilities :

- (1) For infectious cases there are 3 motor ambulances.
 (2) For non-infectious cases and accidents there are two motor ambulances provided by the Town Council.

CLINICS AND TREATMENT CENTRES.

(a) **Maternity and Child Welfare Centres** (Consultation and Treatment) :—

NAME OF CENTRE.	HELD AT	ORDINARY CHILD WELFARE MEETINGS.	
(1) East Centre	5, The Newlands	Mondays	2 p.m.
(2) Cannon Centre	Settlement Hall Church Street	Mondays ..	10 a.m.
		Tuesdays ..	2 p.m.
(3) American Red Cross Centre	Market Place	Wednesdays	2 p.m.
(4) Settlement Centre	Settlement House, Church Street	Thursdays ..	2 p.m.
(5) North Ormesby Centre	Mount St. Mary's, North Ormesby	Fridays ..	2 p.m.
(6) Grove Hill Centre	The Institute	Tuesdays	10 a.m.

Each of the above Centres has a special Ante Natal Clinic once each month.

At all the Centres "Toddlers" from 1 to 5 years are received at each Session and are examined and supervised.

These Centres have Voluntary Helpers working under the direction of the Medical Officer for Maternity and Child Welfare and the Health Visitors.

(See Report on Maternity and Child Welfare).

(b) **Day Nurseries** : Nil.

(c) **School Clinic** :—

This is held at 52, Grange Road W., daily from 9 a.m. to 12 noon, for consultations and treatment of minor ailments, and every Saturday morning for refractions.

(d) **Dental Clinic** :—

Held at 52, Grange Road W., daily, and is attended by a whole-time dentist.

(e) **Tuberculosis Dispensary** :—

79, Grange Road W., Open daily from 9 a.m. to 5 p.m. and attended by the Tuberculosis Medical Officer, who has a staff of three nurses and 2 clerks.

(See Tuberculosis Medical Officer's Report).

(f) Venereal Diseases Clinic :—

105, Grange Road W. Open on Mondays and Fridays at 8-30 a.m. and 5-30 p.m. for Males, and on Wednesdays at 5-30 p.m. for Females ; also every week-day morning at 8-30 and every weekday night except (Wednesdays and Saturdays) at 5-30 for irrigations for males. Treatment is carried out by a part-time Medical Officer, one male and one female attendant and two clerks.

(See the Venereal Diseases Officer's Report).

PROFESSIONAL NURSING IN THE HOME.**(a) General :—**

This is provided by the Middlesbrough and District Nursing Association. The Association is supported by voluntary contributions, but receives grants from the Local Authority for various services, *e.g.*, home nursing of Tuberculosis, Puerperal Fever, Pneumonia, Ophthalmia Neonatorum, Expectant and Nursing Mothers, and Infants under 5 years of age, if required. These cases are referred to the Association by the Departmental Medical Officers of the Local Authority.

(b) Infectious Diseases :—

One wholtime Nurse is employed by the Local Authority to visit and, when necessary, nurse cases of Measles. Temporary Nurses are engaged as required.

Midwives :—

There are 40 Midwives practising in the Borough, 36 of whom are trained and 4 untrained.

LABORATORY WORK.

The Bacteriological and Pathological Laboratory work is sent to the Clinical Research Association.

The Chemical Analysis is done by Messrs. Scholes and Jackson, of Middlesbrough.

BACTERIOLOGICAL EXAMINATIONS—1926.

Specimen.	Positive	Negative	Total
Diphtheria	47	161	208
Enteric Fever	5	4	9
Cerebrospinal Fever .. ..	..	1	1
Rats for (B. Pestis) .. ..	..	15	15
Polypus (for Cancer) .. ..	..	1	1
Hair (for Ringworm) .. ..	..	1	1
Milk (for B. Coli.)	49	88	137
do. (for B.T.B.) .. ..	..	72	72

SERUMS, VACCINES, ETC., ISSUED.

Salvarsan Substitutes supplied to General Practitioners, &c.:	Tubes	178
Anti-Diphtheritic Serum	{ 2,000 units.	do. 108
	{ 3,000 „	do. 3
	{ 4,000 „	do. 22
	{ 8,000 „	do. 1

Outfits Supplied for diagnosis :—

Widal	7
Diphtheria	174
Wasserman	25

ADOPTIVE AND LOCAL ACTS AND BYELAWS.

There have been no additions or alterations to the list given in last year's Report.

SANITARY CIRCUMSTANCES OF THE AREA.

Water :—

Report by the Engineer (G. R. Collinson, B.Sc.) to the Tees Valley Water Board.

In July, 1926, a large number of bacteria appeared in the water drawn from a Middlesbrough tap and the Water Board immediately investigated the matter and traced the pollution to the presence of an unusually large number of sea-gulls at Long Newton Reservoir.

It was found that the gulls were making a favourite resting place of the flat topped dividing wall between the two halves of the reservoir and also that the gulls were becoming accustomed to operations of the reservoir attendants who fired blank cartridges to scare the gulls.

To combat the difficulty, handrails were fixed by the Water Board across the dividing wall, with the result that the access and egress of the gulls has been almost entirely prevented, and the wall has been made safe for the reservoir attendants to fire at the gulls at a sufficiently close range at any part of the reservoir.

The reservoir has been emptied and thoroughly cleaned out and the appended Report shews that the trouble has been overcome.

THE COUNTIES PUBLIC HEALTH LABORATORIES,

91, Queen Victoria Street, London, E.C. 4.

John C. Thresh, M.D., D. Sc., etc.

John F. Beale, B.A., M.R.C.S., D.P.H., etc.

April 11th, 1927.

**Report on the Bacteriological Examination of a sample of Water
received on April 6th, 1927, from the Tees Valley Water Board.**

Number of Organisms per cubic centimetre capable of growing upon nutrient gelatine at 20° C in 3 days	40
Number of organisms per cubic centimetre capable of growing upon agar at 37° C in 1 day	3
Smallest quantity of water giving acid and gas in bile-salt glucose broth	50 c. c.
Smallest quantity of water giving gas in bile-salt lactose broth	100 c. c.
Smallest quantity of water containing the <i>Bacillus</i> <i>Coli Communis</i>	Present in 100 c.c. Absent in 50 c.c.
Smallest quantity of water giving the reaction of the <i>Bacillus Enteritidis Sporogenes</i>	Absent in 100 c.c.
This water is of good quality bacteriologically.	

(Signed) JOHN F. BEALE,

for Drs. Thresh, Beale and Suckling.

Rivers and Streams :—

The River Tees Fishery Board are negotiating with the owners of various works situated on the banks of the river in respect to trade pollution and action is being taken to deal with such pollution. There is nothing further to add to last year's Report.

Sewers and Drainage :—**Report by the Borough Engineer and Surveyor (S. E. BURGESS, M.I.C.E.).**

The works of drainage completed during the year 1926, were as follows :—

(1) Main Sewers in Newport area, *i.e.*, along Cannon Street, Rockcliffe Street, Newport Road, Dale Street, Brentnall Street, Grange Road, etc., were constructed and new sewers of various diameters from 18in. up to 5ft. were laid—a total length of approx. 2,600 L.yds. By this scheme flooding which did occur in that area is now obviated.

(2). North Ormesby Main Sewer.—A length of 364 L.yds. 5ft. diam. Sewer has been laid along Cargo Fleet Lane and South Bank Road. This sewer will eventually be extended to further areas as development takes place. North Ormesby now has good main sewers of 5ft. diameter.

Report of the Chief Sanitary Inspector for the Year 1926.

SANITARY INSPECTION OF THE AREA.

DESCRIPTION OF THE WORK CARRIED OUT.

Number of Inspections made	8,430
Number of Re-inspections made	16,514
Number of Food Inspections	6,523
Number of Notices served and letters sent	7,426

Drainage :—

Tests applied to New Drains	201
Drains Re-constructed	156
Cleansed and Repaired	400
Waste Pipes of Sinks Trapped or Re-newed	81
Defective Yard Gullies	16
Grates provided for Gully Traps	25
Drains Cleared with Cooper's Vacuum Pump (free of cost to Owners)	2,850
Defective Gully Covers	27

Water Closets :—

Provided with a sufficient supply of Water	54
Basins Re-newed	26
Cisterns Repaired or Re-newed	196
Foul Watercloset Drains	142
Defective Closet Doors	201
Dilapidated Closet Seats	15
Defective Closet Roofs	150
Defective Joint between Flushpipe and Watercloset Basin	13

Houses :—

Cleansed or Limewashed	230
Roofs, etc., Repaired	387
Waterspouts Fixed or Repaired	1,041
New Sinks Fixed	28
Accumulation of Manure or Refuse removed	15

Nuisances arising from the keeping of Animals, Poultry, etc.	..	4
Pavement of Yards Repaired	.. .. .	120
New Floors Laid or Repaired	.. .. .	125
Provided with a sufficient Supply of Water	.. .. .	36
Dilapidated Ashpans	.. .. .	35
Dilapidated Dustbins	.. .. .	2,670
Dilapidated Panhole Doors	.. .. .	3
Defective Ceilings	.. .. .	83
Defective Chimneys	.. .. .	38
Defective Sashcords and Windows	.. .. .	169
Defective Fireplaces	.. .. .	16
Defective Fireranges	.. .. .	70
Defective Walls	.. .. .	268
Defective Ovens	.. .. .	16
Dilapidated Setpots	.. .. .	82
Dilapidated Setpot Firebars	.. .. .	27
Defective Handrails	.. .. .	17
Dirty Premises	.. .. .	5
Defective Flues	.. .. .	26
Defective Yard Doors	.. .. .	165
Dilapidated Back Passages	.. .. .	97
Miscellaneous Works not classified	.. .. .	580
Number of Housing Cards compiled since January, 1926	.. ..	121

All the above Sanitary Defects were satisfactorily remedied during the year.

The attention of the Borough Engineer has been called to the following defects :—

Apparently dangerous structures	.. .. .	130
Miscellaneous	.. .. .	15

SANITARY CONVENIENCES.

In the Annual Report for the year 1925, a Table was inserted dealing with the Conveniences in the Borough for the years 1910 to 1925, inclusive. No change has taken place.

The only Privy Pan Closets that now exist within the Borough are in the Nile Street and Dacre Street Areas, and number 123. With the demolition of the Dacre Street Area these Pan Closets will decrease accordingly.

REFUSE COLLECTION AND DISPOSAL.

A regular weekly collection is made from the 28,550 houses and shops within the Borough. The collection is made by 19 horse vehicles and 7 motor vehicles (consisting of 6 Ford Tonners and 1 S. D. Freighter), and these were employed for the greater part of 1926, when two further S. D. Freighters were ordered and commenced work in December. This meant a re-organisation of collection so that the Freighters worked on a triangular system. A reduction of four horses was made, resulting in a speeding up in collection with every success.

The number of motor vehicles is now brought to 9, but owing to the unique character of the back streets which serve the houses within the Borough, I cannot at the moment recommend further motor vehicles to replace the horse vehicles on short leads.

There are 7,000 houses with 3-feet back streets, 11,300 houses with 9-feet back streets, 7,000 with 12-feet back streets, and 3,250 houses with no back streets at all, and are what I term "carry-outs." You will observe the difficulties which are experienced in collection, and from the houses served with 3-feet back streets and the "carry-outs," the refuse has to be carried 40 to 50 yards before the receptacles are emptied and returned.

During the year, 31,196 loads of Refuse were collected ; 22,417 loads representing 26,420 tons collected by horse vehicles, and 8,779 loads representing 11,735 tons collected by motor vehicles. The motors are worked in those outlying districts where the time taken in disposing of the load is greater than the time taken by the loaders in loading the vehicle following up.

38,155 tons represent 279.72 tons per 1,000 population per annum. This figure cannot be considered high, but one must not lose sight of the fact that a considerable amount of waste which finds its way into the dustbins could be obviated if the housewife had more consideration for her coal bills, by not wasting so much large cinder. Unfortunately each town has this waste of good material to contend with, which all means added costs to the collection of household Refuse.

70,541 bags of paper and light refuse matter were collected free of charge from the shops within the Borough. This is disposed of chiefly at the Swimming Baths, and undoubtedly is a cheap fuel whereby the whole of the steam raising plant is fed.

Household refuse was disposed of by barging to sea and tips. Two hoppers were employed for the disposal of refuse at sea ; 82 trips were made and 19,567 tons were disposed of. 17,583 tons of refuse were disposed of at the Tips, assisting in re-claiming

the old brick ponds at Linthorpe, which I am now pleased to say are used as gardens and Tennis Courts. 1,005 tons were sold to Farmers as manure.

Barging to sea of household refuse is an excellent method of disposal, but without wishing to qualify as a prophet, I do think that in the immediate future our methods will be considered wasteful, as other means more profitable to the Ratepayer will be evolved.

From the latest available figures supplied by the Borough Accountant, the costs are as follows :—

Cost of Collection	..	..	..	..	..	..	£14,729
Cost of Disposal	..	..	..	..	..	..	£4,768
							<hr/> £19,497
Cost per ton—Collection	..	..	..	..	..	..	8/3½
Cost per ton—Disposal	..	..	..	..	..	..	2/8
Total Cost per ton for Collection and Disposal	..	..					10/11½

COLLECTION AND DISPOSAL OF ORGANIC REFUSE.

The Organic Plant has been in full work during the year, although the Strike, which extended over a period of 7 months, had to be faced. Large quantities of Coke were purchased before the Strike commenced which kept the Plant at work. The undermentioned were dealt with :—

							Stones.
Diseased Meat	..	..	..	..	..	..	6,986
Organic Waste from Slaughterhouses				..	..	..	16,432
Fish Offal	..	..	..	..	..	..	32,848
Dead Dogs and Cats		..	..	..	..	..	1,078

The following manufactured Products were sold :—

	Tons.	£	s.	d.
Fish Meal	361½	554	8	9
Blood Meal	5	68	17	0
Meat Meal	7	111	4	3
Fertiliser	15	136	16	0
Tallow—White	5½	185	14	11
Green	5	119	13	1
Total Income		£1,176	14	0

I am pleased to again report that the Plant has been very successful and a profit of approximately £400 was realised on the year's working. During the year a larger machine was installed at a cost of £140, to replace a smaller machine. By this means the raw material is got into the oven quicker instead of lying about the Store.

SMOKE ABATEMENT.

In consequence of the industrial unrest which covered a greater part of the year when the whole of the works were laid idle, no smoke observations were taken; but the two chimneys at Holgate Poor Law Institution—which had been a continual source of trouble owing to the emission of black smoke—received attention. Two new boilers were installed with mechanical stokers, and one chimney was demolished. This meant that the nuisance from black smoke in this district was removed.

A considerable amount of work has been done at the numerous works within the Borough by the scrapping of obsolete steam plant and substituting electricity as the motive power. In this direction, during the past six post War Years, 56 boilers have been taken out and electric power used in their stead.

This is undoubtedly a step in the right direction in eliminating smoke from the atmosphere, which is not only detrimental to the health of the inhabitants, but also takes toll on the buildings—particularly stonework. Much has been said that smoke is a sign of prosperity, but we must not lose sight of the fact that a considerable amount of this smoke should never find its way into the atmosphere; it is a waste from beginning to end, and often due to gross carelessness and want of a little foresight.

The household chimney is a bigger sinner than one realises, as not more than 50% of the volatiles are consumed, and even then not so thoroughly as in the case of the industrial chimney where 90% are wholly consumed. In consequence, the contamination in the atmosphere is considerably greater from this source, so we must bear in mind and not lose sight of this—which is a large factor when condemning the industrial chimney.

SHOPS ACT.

During the year the shops within the Borough have been kept under close observation. Several letters of warning for contravention of the Closing Hours have been sent out, but on the whole all have been satisfactory.

RATS AND MICE (DESTRUCTION) ACT, 1919.

During the year 55 complaints have been received of Rats infesting houses, shops, or warehouses within the Borough. All complaints were promptly attended to, and where possible, the Rats were traced to their sources and destroyed. Every assistance and advice has been given to householders and others to clear their premises of the pest.

The 5 Official Rat Clubs have also continued their operations against these pests ; 292 places were visited and 2,813 rats were killed. I consider that this weekly destruction of rats is more efficacious than holding up your efforts until the recognised Rat Week, as during the year large numbers of rats are bred which would not have been in existence at the Rat Week if the methods employed in Middlesbrough were general throughout the Country.

SANITARY CONDITIONS OF THEATRES AND MUSIC HALLS.

In accordance with the requirements of the Ministry of Health (Circular No. 120), an inspection of the Sanitary conditions of the Theatres, Music Halls and places of public entertainment, has been made, and found satisfactory.

HOUSES LET IN LODGINGS.

Number of Keepers	..	..	..	..	75
Number of Houses	..	..	..	..	96
Number of Rooms for Sleeping	..	..	..	..	463
Number of separate Families	..	..	..	..	192
Number of Inspections	..	..	..	..	251
Number of Notices to Limewash	..	..	..	..	146
Number of Applications to Register	..	..	..	..	13
Number of letters re Cleanliness, Repairs, etc.	..	..	..	..	87

COMMON LODGING HOUSES.

Number of Keepers	..	..	..	..	11
Number of Houses	..	..	..	..	13
Number of Inspections	..	..	..	..	219
Number of Lodgers accommodated nightly	..	..	..	..	689
Number of Notices to Limewash	..	..	..	..	28
Number Closed or Discontinued	..	..	..	..	3

The Bye-Laws have been carefully observed, although it has been necessary to call the attention of the Registered Keepers to several minor contraventions.

SLAUGHTERHOUSES.

December, 1920		January, 1926		December, 1926	
Registered.	Licensed.	Registered.	Licensed.	Registered.	Licensed.
39	3	37	2	35	2
Number of Notifications of Change of Occupier				..	2
Number of Inspections				..	5,567
Number of Notices to Limewash				..	47
Number of Notices to provide a Refuse receptacle				..	5
Public Slaughterhouse				..	1
Letters re Cleanliness, Repairs, etc., of Slaughterhouses				..	8

OFFENSIVE TRADES.

Number on Register	..	..	..	..	..	153
Number of Fried Fish Shops	..	..	..	..	..	130
Number of Tripe Boilers	..	..	..	..	..	10
Number of Tallow Melters	..	..	..	..	..	2
Number of Tallow Chandlers	..	..	..	..	..	1
Number of Gut Scrapers	..	..	..	..	..	3
Number of Fat Renderers	..	..	..	..	..	2
Number of Bone Steamers	..	..	..	..	..	1
Number of Glue Makers	..	..	..	..	..	1
Number of Fellmongers	..	..	..	..	..	1
Number of Lubricant Makers	..	..	..	..	..	2
Number of Inspections	..	..	..	..	..	231
Number of Notices to Limewash	..	..	..	..	..	39
Number Closed or Discontinued	..	..	..	..	..	2
Letters of Warning for minor contraventions of Bye-Laws	..	..	..	..	..	67

FRIED FISH SHOPS.

These businesses came within the provision of Section 112 of the Public Health Act, 1875, as amended by Section 51 of the Amendment Act, of 1907, as an Offensive Trade, in July, 1922. The whole of the Fried Fish Shops within the Borough have now been brought up to a good standard; new ranges have been provided which are more satisfactory from an effluvia nuisance standpoint, and the whole generally are carried on in a most satisfactory manner.

ICE CREAM DEALERS.

The Middlesbrough Corporation Act of 1910, Sections 38 and 39, give the Corporation power to govern the manufacture of Ice Cream.

There are 58 persons on the Register manufacturing Ice Cream and 81 persons are selling Ice Cream.

All premises where Ice Cream is manufactured or stored have been visited regularly and found satisfactory.

Number manufacturing Ice Cream January, 1926	..	..	52
Number discontinued during year	..	..	12
Number registered during year	..	..	18
Number on Register December 31st, 1926	..	..	58

COW SHEDS.

Number of Cowsheds within the Borough	..	..	4
Number discontinued since January, 1926	..	..	Nil
Number of Registered Cowkeepers	..	..	4
Number of Cows kept in Town	..	..	37
Number of Inspections	..	..	12
Number of Notices to Limewash	..	..	7

DAIRIES AND MILKSHOPS.

Number of Inspections	..	..	229
Number on Register	..	..	146
Number discontinued since January, 1926	..	..	6
Number Registered since January, 1926	..	..	12
Number of Notices requesting Purveyors to register	..	..	8

Letters of warning for minor contraventions of the Bye-Laws were sent to several Milk Purveyors, but the conduct of the whole generally was satisfactory, and the multifarious Orders have been carried out.

ADMINISTRATION OF THE FACTORY AND WORKSHOPS ACT, 1901.

There are 424 Workshops on the Register, including :—

Workshop Bakehouses	53	Tinsmiths	6
Factory Bakehouses	24	Watch Repairing	9
Boot and Shoe Repairing ..	60	Cabinet Making	14
Dressmaking	27	Laundries	9
Millinery	14	Cycle Making and Repairing ..	20
Tailoring	44	Workplaces	18
Joinery	47	Blacksmiths	11
Plumbing	10	Miscellaneous	55
Saddlery	3		

On the whole, the Workshops, Retail Bakehouses, etc., were found to be in a satisfactory condition, and no Legal Proceedings were instituted.

Full details of the Workshops and Inspections have been placed on record in accordance with the Act.

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

Notices received from His Majesty's Inspector of Factories :—

Re-occupation of Workshops	13
Unsuitable Sanitary Accommodation	6
Dirty Workshops	8

Factories :—

Number Inspected	145
Number of Inspections	496

Workshops and Domestic Workshops :—

Number inspected	424
Number of Inspections	2,073

Notices Served under the Public Health Acts :—

To Cleanse and Limewash	21
To provide means of Ventilation, Sec. VII. ..	Nil
Re Wet Floors, Sec. VIII.	Nil
Sanitary Defects	22
To provide Refuse Receptacle	7
Overcrowding	Nil

Bakehouses, 77 in number, including 24 Factory Bakehouses :—

Number Inspected	77
Number of Inspections	263
Notices Served to Limewash	1

Factory Bakehouses :—

Number of Inspections	96
Unsuitable Premises	Nil

Sanitary Conveniences in Workshops :—

Closets Insufficient, Unsuitable or Defective ..	19
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Home Work (Section 107 to 115) :—

34 Lists of Out-workers (or Home workers) were received in the first half of the year, and 34 for the second half.

Number of Lists of Outworkers received	68
Number of Employers	34
Number of Outworkers Premises inspected ..	89

Workplaces (Restaurant Kitchens, etc.) :—

Number on Register	41
Number Inspected	41
Number of Inspections	102

HOUSING.**Number of New Houses erected during the year 1926—**

a Total (including numbers given separately under b) ..	607
b With State Assistance under the Housing Acts	551
1. By the Local Authority	343
2. By other Bodies or Persons	208

1. Unfit Dwelling Houses.**Inspection :—**

(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	8,430
(2) Number of dwelling houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910, or Housing Consolidated Regulations, 1925	104
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation (Scheduled Areas)	357
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	6,998

2. Remedy of Defects without Service of Formal Notices :—

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their Officers ..	6,998
--	-------

3. Action under Statutory Powers :—**A.—Proceedings under Section 3 of the Housing Act, 1925 :—**

(1) Number of dwelling houses in respect of which Notices were served requiring repairs	Nil
(2) Number of dwelling houses which were rendered fit after service of Formal Notices :—	
(a) By Owners	Nil
(b) By Local Authority in default of Owners	Nil
(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by Owners of intention to close	Nil

B.—Proceedings under Public Health Acts :—

(1) Number of dwelling houses in respect of which Notices were served requiring defects to be remedied	1,432
(2) Number of dwelling houses in which defects were remedied after service of Formal Notices :—	
(a) By Owners	1,432
(b) By Local Authority in default of Owners	Nil

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

(1) Number of representations made with a view to the making of Closing Orders	Nil
(2) Number of dwelling houses in respect of which Closing Orders were made	Nil
(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit ..	Nil
(4) Number of dwelling houses in respect of which Demolition Orders were made	Nil
(5) Number of dwelling houses demolished in pursuance of Demolition Orders	25

Housing Schemes (Scheduled Areas) :—

Dacre Street Area, 25 of the 59 houses have been demolished and 14 more are vacant and in hand for demolition.

Nile Street Area.—No further progress has been made with this area. 27 houses have been erected at Marton Grove, and 30 at Acklam Garden Colony to replace demolished houses.

INSPECTION AND SUPERVISION OF FOOD.

MILK—BACTERIOLOGICAL EXAMINATION OF MILK.

During the year, 137 samples were procured and submitted for Bacteriological Examination, as compared with 156 samples in 1925, and 140 samples in 1924.

Upon Examination, 22 or 16% were found to contain Coliform Bacilli upon first test; and 27 or 19% were found to contain Coliform Bacilli upon second and third tests.

72 samples were examined for Tubercle Bacilli, all being returned "Negative."

Letters of warning, together with suggestions on "How to Produce Clean Milk," are sent to all Farmers whose Milk is dirty. Letters notifying Farmers who are producing Clean Milk are also sent.

Year	Number of Samples taken	Number of Samples containing Tubercular or Coliform Bacilli		Number of Cases reported to Medical Officer of Health of District	Number of Supplies Withdrawn	Out-standing
		First Test	Second and Third Tests			
1924	140	77	9	4	5	Nil
1925	156	28	Nil	Nil	2	1
1926	137	22	27	10	Nil	3

REPORT OF ADMINISTRATION IN CONNECTION WITH THE PUBLIC HEALTH (MILK AND CREAM) REGULATIONS OF 1912, DURING THE YEAR ENDED, DECEMBER 31st, 1926.

1. Milk and Cream Not Sold as Preserved Cream :—

Number of Samples examined for the presence of preservative.	Number in which Preservative was reported to be present and percentage of preservative found in each sample.
--	--

Milk	..	..	..	98	Nil
Cream	..	..	..	2	Nil

Cream Sold as Preserved Cream :—

(a) Instances in which samples have been submitted for analysis to ascertain if the statement on the label as to preservative was correct :—

(1) Correct Statements made	..	..	..	7
(2) Statements Incorrect	..	..	..	2
				—
				9

(b) Determinations made of Milk Fat in Cream sold as Preserved Cream :—

(1) Above 35%	..	..	..	..	9
(8) Below 35%	..	..	..	..	Nil
					—
					9

Preservatives :—

All Samples of Milk and Butter and any Article likely to contain Preservatives are examined for the same.

FOOD AND DRUGS ACT.**SAMPLES TAKEN FOR ANALYSIS.**

Description of Sample	Number taken	Number Genuine	Number Adulter'd	Results of Analysis	Number of official Samples	Number unofficial Samples
New Milk	97	82	15	....	69	28
Separated Milk	1	1	..	....	1	..
Whisky	11	8	3	3—36.01°; 39.15° and 35.13° under proof	11	..
Sausage	2	2	..	2—Meat, 47% and 25% Cereal Filler, 35% and 48%. Additional water 18% and 27%	..	2
Apples	57	7	50	50—Arsenic varying from 1/100th to 1/11th of a grain per pound	3	54
Ground Almonds	2	2	..	....	..	2
Disinfectant	1	1	..	..	..	1
Fresh Butter	11	10	1	1—contained 16.39% water	4	7
Prawns	3	1	2	2—1.30 and 1.73 grains Boric Acid per pound	..	3
Eggs : Chocolated	3	2	1	1—0.35% Oxide of Iron and 1/100th of a grain of Arsenic per pound	..	3
Sugared	1	1	..	....	..	1

Description of Sample			Number taken	Number Genuine	Number Adulter'd	Results of Analysis	Number of official Samples	Number unofficial Samples
Bread Rusk	..	..	4	4	..	....	..	4
White Pepper	..	..	2	2	..	....	..	2
Margarine	..	..	4	2	2	2—27.30 and 38.50 grains Boric Acid per pound	1	3
Borax	..	..	2	2	..	....	..	2
Ground Ginger	..	..	3	3	..	....	..	3
Cheese	..	..	6	5	1	1—Milk Fat 18.43%* Caseine etc. 35.73% Ash 5.10% Water 40.74% *equal to fat in dry Cheese 31.10%	100.00%	6
Preserved Cream	..	..	9	7	2	2—contained 0.47 grains Boric Acid per pound	2	7
Fresh Cream	..	..	2	2	..	....	..	2
Potted Meat	..	..	1	1	..	....	..	1
Ice Cream	..	..	6	6	..	....	..	6
Condensed Milk	..	..	3	3	..	....	..	3
Banana Cream	..	..	1	1	..	....	..	1
Tinned Peas	..	..	1	1	..	....	..	1
Coffee	..	..	1	1	..	....	1	..
Lard	..	..	1	1	..	....	..	1
Sago	..	..	1	1	..	....	..	1
Tea	..	..	1	1	..	....	..	1
Oatmeal	..	..	1	1	..	....	..	1
Pot Barley	..	..	1	1	..	....	..	1
Cream of Tartar	..	..	1	1	..	....	..	1
Ground Rice	..	..	1	1	..	....	..	1
Salmon Roll	..	..	1	1	..	1—3.92 grains Boric Acid per pound	1	..
Shrimp and Tomato Roll	..	..	1	1	..	1—4.34 grains Boric Acid per pound	1	..
Soda	..	..	2	2	..	These samples did not contain any oxidising or preservative agent	..	2
Camphorated Oil	..	..	4	3	1	Camphor 16.18% Olive Oil 83.82%	4	..
Carbolic Soap	..	..	9	9	..	....	..	9
Mince Meat	..	..	1	1	..	....	1	..
			259	181	78		101	158

There is no Legal Standard as to the quantity of Milk Fats Cheese should contain, but as Cheshire Cheese has often been substituted by the inferior imported product, the Cheshire Cheese Federation have fixed a standard of 45% of Fats in the Dry Matter, and this is the standard of Cheshire Cheese within the Borough.

**ADMINISTRATIVE ACTION REGARDING SAMPLES
NOT REPORTED "GENUINE."**

No.	Nature of Sample and Result of Analysis.	Remarks.
38.	Fresh Butter containing 16.39% water	Official Sample. Vendor Cautioned.
44.	Milk 5% deficient in Fats	Official Sample. Vendor Cautioned.
51.	Milk 4% deficient in Fats with 12.2% added water	Unofficial Sample followed by Official Sample (No. 53) declared Genuine. Vendor Cautioned.
55.	Milk 51.6% deficient in Fats	Official Sample. Summary Proceedings taken. Fined £2 and costs.
65.	Milk 15% deficient in Fats	Official Sample taken in "course of delivery" followed by 68 which was an "appeal to cow" Sample. This deficiency was due to the feeding, so advised Farmer to alter feeding by giving food with a higher Fatty content. In this case Soya Bean was being used extensively, and this has only a Fatty content of 2 to 3% and rich in Albuminoids, say 50 to 55%. Samples taken one week after change in feeding were "Genuine."
68.	Milk 23.3% deficient in Fats	
70.	Milk 6.7% deficient in Fats	These Samples were all from the one Farmer and Afternoons Milk. No. 78 I took Officially and followed up with an "appeal to cow" sample No. 84; the deficiency being so small and the fact of it being Afternoon Milk that was deficient in Fats, as the "appeal to cow" Sample was declared Genuine, indicated that cream was being removed. Told Farmer to lock the Afternoons Milk away from the servants. This was done, with good results.
73.	Milk 6.6% deficient in Fats	
74.	Milk declared Genuine	
78.	Milk 5% deficient in Fats	
79.	Milk 5% deficient in Fats	
84.	Milk declared Genuine	

No.	Nature of Sample and Result of Analysis.	Remarks
82.	Chocolated Eggs containing 0.35% Oxide of Iron and 0.01% Grains Arsenic	Oxide of Iron is often used as a colouring for for such sweetmeats, and Arseneous Oxide is present. In this case the whole of the stocks were immediately withdrawn from sale and wholesale distributor cautioned.
130.	Milk 70% deficient in Fats	These Samples were procured during June. May and June are admitted to be the worst months in the year for Milk, as the cows are just turned out into the pastures from the Winter quarters and the luscious new green grasses are greedily devoured. The Farmer was advised to reject 2 to 3 pints of the first drawn Milk. I am pleased to report that in all such cases they readily consented, and I do not think that a successful result would be obtained in taking Proceedings, as the Farmer has a good defence in pleading that the Milk is as it came from the cow.
131.	Milk 6.6% deficient in Fats	
132.	Milk 20% deficient in Fats	
133.	Milk 24% deficient in Fats	
151.	Milk 15% deficient in Fats	
152.	Milk 3.3% deficient in Fats	
156.	Milk declared Genuine	
153.	Preserved Cream containing 0.47% Boric Acid	Unofficial Sample followed by Official Sample declared to be Genuine. Vendor cautioned.
155.	Preserved Cream containing 0.47% Boric Acid	Unofficial Sample followed by Official Sample declared to be Genuine. Vendor cautioned.
227.	Camphorated Oil deficient 3.82% Camphor by weight	Official Sample. Summary Proceedings taken. Fined £2 and costs.
250.	Whisky containing 1.55% added water	Summary Proceedings. Fined 20/- and costs.
252.	Whisky containing 6.39% added water	Summary Proceedings. Fined 40/- and costs.
256.	Whisky containing 0.20% added water.	Vendor cautioned.

Informal or Test Samples :—

It will be seen from the Tabular Statement that 103 Informal and 156 Formal Samples were taken during the Year, all of which were submitted to the Public Analysts for Analysis.

Informal Samples are in all cases purchased by an agent, and if they are found to be adulterated, Formal Samples are obtained, with a view to Summary Proceedings being taken. It has been found that the obtaining of Informal Samples is, on the whole, a very convenient method of estimating whether vendors are supplying genuine articles and causes no inconvenience to shopkeepers, as when the samples are obtained formally, the latter involves explanation as to why the sample has been purchased, the subsequent division of the sample into three parts and the sealing up of the same, which all take up a considerable time.

Below is a list of the Foodstuffs that were found to be unsound and unfit for human consumption. All were surrendered and destroyed.

			Whole Carcases	Weight Stones				Weight Stones
Beasts	..	..	56	2,147	Pigeons	..	..	5
Sheep	..	..	12	58	Sweet and Chocolates	12 pounds		
Calves	..	..	7	38	Plums	..	..	8
Pigs	..	..	33	397	Mussels	..	..	8
Beef	..	..	..	538	Onions	..	67 crates	
Pork	..	..	..	19	Poultry	..	..	1
Mutton	..	..	..	8½	Cauliflowers	..	12 crates	
Bacon and Ham	..	..	..	39	Pears	..	..	103
Fish	..	..	..	38	Tomatoes	..	..	23
Rabbits and Hares	..	..	..	42	Eggs	..	1,710	
Offal	..	..	..	91				

The total weight of Butchers' Meat and other Foodstuffs surrendered and seized during the year amounted to 3,563 stones, as compared with 3,843 stones in 1925, and 6,338½ stones (including 5,080 stones of Potatoes) 1924.

Of the 3,296½ stones of Butchers' Meat condemned, 2,638 stones were affected with Tuberculosis.

**PARTICULARS OF SURRENDERS AND SEIZURES OF UNSOUND
ANIMALS AND MEAT.**

Number of Voluntary Surrenders of diseased carcasses, or part carcasses or internal organs by butchers to the Chief Sanitary Inspector.

Number of Seizures (with subsequent destruction) of diseased carcasses or part carcasses or internal organs by the Chief Sanitary Inspector.

Year	Tuberculosis	Other Conditions	Tuberculosis	Other Conditions	Total
1926	151	103	2	1	257

NUMBER AND CLASSES OF ANIMALS AFFECTED WITH TUBERCULOSIS.

			Bullocks	Cows	Heifers	Calves	Pigs
Whole Carcasses	..	..	5	33	12	1	24
Part Carcasses	..	..	6	11	4	..	12
Organs Only	..	..	8	18	4	..	15

**NUMBER AND CLASSES OF ANIMALS AFFECTED WITH DISEASE
OR CONDITIONS OTHER THAN TUBERCULOSIS.**

			Number of Animals	Whole Carcasses and Organs Affected	Part Carcasses and Organs Affected	Organs Only Affected
Bullocks	..	..	11	..	3	8
Heifers	..	..	10	1	4	5
Cows	..	..	43	7	19	17
Pigs	..	..	16	9	2	5
Sheep	..	..	15	11	4	..
Calves	..	..	9	5	1	3
Totals	..	..	104	33	33	38

In addition, 65 pieces of Beef, Mutton and Pork, Total Weight 102½ stones, were seized at a Butcher's Shop as unsound and unfit for human consumption.

TUBERCULOSIS ORDER, 1925.

In all cases where Meat affected with Tuberculosis has been condemned within the Borough, the Clerk of the Authority from which the animal came has been notified. 145 such Notifications were sent out during the year.

THE MARGARINE ACT, 1887, AND THE SALE OF FOOD AND DRUGS ACT, 1899.

Number of Manufacturers	Nil
Number of Wholesale Dealers	28
Number of Premises Registered	28

BUTTER AND MARGARINE ACT, 1907.

There are 3 Butter making Factories in the Town. Regular Butter making is not carried on, and only when Milk is surplus at these Dairies is Butter manufactured.

FOOD POISONING.

During the Spring of 1926, there were three instances in which cooked Meats caused illness to a number of persons who had eaten them. These cases were all inquired into and nothing could be detected which could cause the meats to become unwholesome. Specimens were sent to the Government Laboratory for examination. All the affected persons recovered.

MAGISTERIAL PROCEEDINGS, 1926.

Number of Case	Complaint	Result
1.	Failing to comply with Notices served under the Public Health Acts	Case withdrawn upon payment of costs
2.	Selling a Pork Pie unfit for human consumption	Fined £5 and costs
3.	Selling Milk deficient in Fats to extent of 51.6%	Fined 40/- and costs
4.	Contravening Section 73 of Public Health Act, 1925, by giving toys, sweets, etc., in exchange for rags, bones, etc.	Bound over for 12 months
5.	Do. do.	Discharged
6.	Do. do.	Case dismissed
7.	Failing to comply with Manure Regulations by not emptying Manure Pit.	Fined £5 and costs.
8.	Do. do.	Fined £3 and costs.
9.	Do. do.	Fined £1 and costs

Number of Case	Complaint	Result
10.	Exposing 65 pieces of Meat for sale unfit for human consumption	Fined £40 and costs
11.	Opening up drainage without first giving Notice to Local Authority	Fined £2 and costs
12.	Contravening Public Health (Meat) Regulations by exposing Meat in public streets without adequate covering	Fined 20/- and costs
13.	Exposing 52 pieces of Meat for sale unfit for human consumption	Fined £20 and costs
14.	Selling Camphorated Oil deficient in Camphor by weight 3.82 %	Fined £2 and costs

T. P. DIXON,
Chief Sanitary Inspector.

PREVALENCE AND CONTROL OVER INFECTIOUS DISEASES.

During the year 1926, there were 3,845 cases of Infectious Disease notified, this being a large decrease on the previous year.

The mean death rates from the chief Zymotic Diseases during the past five quinquennial periods being :—

1901-1905	..	3.2 per 1,000 population.
1906-1910	..	3.0 "
1911-1915	..	2.8 "
1916-1920	..	1.7 "
1921-1925	..	0.9 "

For the year 1926, the rate was 0.5.

The death rates per 1,000 population in the County Boroughs and Great Towns from certain diseases for 1926, were as follows :—

	Enteric Fever	Small- pox	Measles	Scarlet Fever	Whooping Cough	Diph- theria	Influ- enza
105 County Boroughs and Great Towns ..	0.01	0.00	0.12	0.02	0.10	0.10	0.22
Middlesbrough ..	0.01	0.00	0.03	0.00	0.40	0.03	0.25

With the exception of deaths from Whooping Cough, Middlesbrough compares very favourably with the other County Boroughs.

NOTIFIABLE DISEASES (other than Tuberculosis) during the Year, 1926.

DISEASE	Total Cases Notified	Cases Admitted to Hospital	TOTAL DEATHS													
			AT AGES													
			Under 1 Year	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 35	35 to 45	45 to 65	Over 65 Years	Total Deaths	
Smallpox	9	9	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	386	364	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	75	62	2	..	2	1	..	..	..	..	..	..	..	..	5
Enteric Fever (including Paratyphoid)	5	2	..	..	..	..	..	..	..	..	2	..	..	..	2
Continued Fever	1	..	..	..	..	..	..	1	..	..	..	..	..	..	1
Puerperal Fever	15	..	..	..	..	..	..	..	5	..	..	..	..	..	5
Puerperal Pyrexia	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia	202	..	55	50	14	6	5	12	3	..	17	18	31	23	234	
Other diseases generally notifiable :																
Erysipelas	94	..	..	..	..	..	..	..	..	..	..	1	1	..	2
Ophthalmia Neonatorum	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebrospinal Fever	2	..	..	1	..	..	..	..	..	..	..	..	..	..	1
Encephalitis Lethargica	5	..	..	1	..	..	..	..	..	1	2	..	..	..	4
Other diseases notifiable locally :																
Measles	965	..	3	1	..	..	..	..	..	..	..	..	..	..	4
Chickenpox	1,528	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	3,313	438	60	53	16	7	5	12	3	2	24	20	32	24	258	

CHIEF ZYMOTIC DISEASES, 1926.

DISEASE	No. of Cases	Deaths	Rate per 1,000 Population	
			Mortality	Attack
Smallpox	9	..	..	0.07
Enteric and Continued Fevers	6	3	0.02	0.04
Measles	965	4	0.03	7.23
Diphtheria and Croup	386	..	..	2.89
Diarrhoeas and Enteritis	75	5	0.03	0.56
Whooping Cough .. .. .	..	58	0.43	..
Chickenpox .. .. .	..	54	0.40	..
	1,528	..	..	11.43

**Attack and Mortality Rates per 1,000 population in the Wards
from certain Infectious Diseases during the year 1926.**

WARD		Scarlet Fever	Diphtheria	Measles	Chickenpox	Smallpox	Enteric and Continued Fevers
Ayresome ..	Attack	4.1	0.9	7.9	10.5	..	0.1
	Mort.	..	0.1	..	..	..	..
Acklam	Attack	2.5	0.9	9.2	9.9	..	..
	Mort.	..	..	..	..	..	..
Cannon	Attack	2.6	0.7	8.2	16.8	..	..
	Mort.	..	..	..	..	..	..
Cleveland ..	Attack	2.6	0.2	8.8	11.2	0.09	..
	Mort.	..	..	0.1	..	..	..
Exchange ..	Attack	2.5	0.7	4.4	7.3	0.1	0.1
	Mort.	..	..	..	..	..	..
Grove Hill ..	Attack	3.2	0.3	14.3	13.6	0.07	0.07
	Mort.	..	0.08	0.08	..	..	0.07
Linthorpe ..	Attack	2.0	0.4	13.2	8.7	..	..
	Mort.	..	0.08	..	..	..	..
Newport ..	Attack	3.3	0.3	4.5	11.9	..	0.08
	Mort.	..	..	0.08	..	..	..
Ormesby ..	Attack	3.0	0.8	3.2	15.6	0.4	..
	Mort.	..	0.08	..	..	..	..
St. Hilda's ..	Attack	2.3	0.3	2.4	9.5	0.1	..
	Mort.	..	0.08	..	..	..	..
Vulcan	Attack	3.2	0.5	2.9	9.2	..	0.08
	Mort.	..	..	..	..	..	0.08

Smallpox.

During 1926 there were only 9 cases of the mild type of Smallpox notified in Middlesbrough compared with 901 in the previous year. There were 47 Primary and 77 Re-vaccinations performed by the Medical Officer of Health under the Public Health Smallpox Regulations, 1917.

Scarlet Fever, Diphtheria and Measles.

Cases of Scarlet Fever, Diphtheria and Measles were all less in number than in 1925. There were no deaths from Scarlet Fever, and only 5 deaths from Diphtheria and 4 from Measles.

Enteric and Continued Fever.

Of the six cases notified, one was contracted abroad and one was probably due to eating contaminated mussels.

Cerebro Spinal Fever.

Two cases were notified of which one, an infant, died within a few hours of the onset of the illness.

Encephalitis Lethargica.

Five cases were notified and four were fatal, in addition, one death was registered as being from Encephalitis Lethargica and afterwards withdrawn.

1. Male, age 28. Fatal.
Onset, sudden, pain in chest, coma.
P.M.—Small haemorrhage into brain.
2. Female, age 31. Fatal.
Onset, pains in muscles, lethargy, difficulty in swallowing, rambling speech. Had been subject to Petit Mal. for years.
3. Female, age 33. Removed to Holgate Hospital. Recovered.
Onset, vomiting, paralysis of left leg, dull and lethargic.
Bact. Exam. C.S.P. Contamination bacteria present.
4. Male, age 15. Removed to Holgate Hospital. Fatal.
Onset, violent headache, vomiting and coma. Facial paralysis.
P.M.—Small haemorrhage into brain.
5. Male, age 1½ years. Fatal.
Onset, vomiting.

Report of the Medical Officer of the Fever Hospital, West Lane, for 1926.

Scarlet Fever:

During the year 1926, 416 cases of Scarlet Fever were admitted to West Lane Hospital. On none of these was it deemed expedient to conduct the "Shick" or "Dick" tests. The opportunity was taken, however, of introducing Scarlet Fever Antitoxin as a therapeutic agent. A series of 25 severe cases, 9 males and 16 females were injected with the serum, the dose varying from 10-30 c.c.'s according to the severity of the disease. The injection was made into the vastus externus muscle in each instance.

The results proved very satisfactory. Twenty-three of the patients were suffering from septic Scarlet Fever. In every case there was a rapid fall in temperature, and a marked improvement in the general condition. Complications were not always prevented, as there were four instances of otitis media, four of cervical adenitis, and one of albuminuria. Such complications might have been avoided if the serum had been administered earlier. Early injection, however, was not always possible as sometimes the case did not reach hospital till the fourth day of illness or even later.

In all 25 cases, desquamation was lessened. The average stay in hospital was 43 days. Four cases developed mild urticarial rashes on the 6th, 8th, 8th and 10th days respectively, after the injection.

The results are very encouraging, and compare favourably with a similar series of 25 cases treated in 1925, without serum. In this second series there were five deaths and complications occurred in nearly every instance. The serum used was the concentrated Scarlet Fever Antitoxin of Parke, Davis and Co.

During the year 1926, there were no deaths from Scarlatina, although one patient admitted with a scarlatiniform rash succumbed to shock following burns. There were two return cases due to rhinitis developing after the patient's return home.

Diphtheria:

Sixty-three cases of Diphtheria were admitted to West Lane Hospital during 1926. Out of this number four died. Two patients aged 7 and 8 months respectively succumbed to broncho-pneumonia, while two others aged 2½ and 3 years died from cardiac failure following laryngeal diphtheria. In 26 of the 63 cases diagnosed clinically as diphtheria, the Klebs Loeffler Bacillus was demonstrated on bacteriological examination. The bacteriological examination of the remaining patients failed to reveal the *B. diphtheriae*.

Antitoxin varying in amount from 2,000 to 30,000 units was administered to all cases. In only one instance was there a serum rash. This occurred on the 10th day following the injection.

A boy, aged 5 years, had tracheotomy performed before admission to hospital. Another, aged four years, was operated on in West Lane. Both cases recovered.

Complications included broncho-pneumonia (6 cases), pericarditis (1), myocarditis (7), albuminuria (1), paralysis of palate (1).

Mumps:

Two cases of Mumps were treated in West Lane Hospital during 1926. They were patients removed from ships in the river Tees.

Enteric Fever:

Three Enteric Fever patients were admitted to West Lane Hospital for treatment during 1926. Of these one died. The victim was a woman aged 35 who had contracted the disease through eating shellfish. One patient came from Thornaby. The others were inhabitants of Middlesbrough.

The remaining patients included one suffering from Scarlet Fever and Diphtheria, and one suffering from Scarlet Fever and Chickenpox. One case of Pemphigus, two of Chickenpox, one of Pneumonia, and one of Tonsillitis were also treated. A suspected Enteric proved to be a case of generalised Tuberculosis.

Thirteen Smallpox Contacts were isolated at West Lane during 1926.

W. L. TULLIS, M.D.,
Resident Medical Officer.

Cases of Infectious Disease treated at the Corporation Hospitals during 1926.

DISEASE	Remaining in Hospital December 31st, 1925.	Cases admitted and Deaths per month																									
		January		February		March		April		May		June		July		August		September		October		November		December		Totals	
		Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
West Lane Hospitals—																											
Scarlet Fever ..	49	45	..	36	..	20	..	37	..	32	..	40	..	40	1	28	..	35	..	38	..	34	..	31	..	416	1
Diphtheria ..	5	2	..	5	..	11	..	7	..	5	1	3	..	..	1	6	..	5	..	5	..	10	2	4	..	63	4
Enteric Fever ..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	3	1
Mumps ..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..
Pneumonia ..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Observation (Enteric) ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Chickenpox ..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..
Scarlet and Chickenpox ..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Pemphigus ..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Scarlet and Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..
Tonsillitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..
Smallpox Contacts ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..	4	..	13	..	
Total ..	54	50	1	41	..	32	1	45	..	39	1	43	..	41	2	38	..	40	..	44	..	53	2	39	..	505	7
Tuberculosis Hospital—																											
Male ..	19	5	1	4	..	6	1	6	1	3	..	7	1	2	..	3	1	9	1	5	..	5	..	2	1	57	7
Female ..	9	7	..	7	..	6	1	6	..	6	..	1	1	2	..	2	..	7	..	5	..	6	..	1	..	56	2
Total ..	28	12	1	11	..	12	2	12	1	9	..	8	2	4	..	5	1	16	1	10	..	11	..	3	1	113	9
Hemlington Hospital—																											
Smallpox ..	NIL	68	..	17	..	7	..	..	..	14	..	5	..	2	..	1	..	96	..	62	..	159	..	200	..	631	..
Contacts ..	NIL	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	..	5	..	9	..	
Observation ..	NIL	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	4	..	6	..	
Chickenpox ..	NIL	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	2	..	
Pemphigus ..	NIL	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
Total ..	..	68	..	17	..	7	..	..	..	15	..	5	..	2	..	1	..	97	..	64	..	164	..	209	..	649	..

The undermentioned Cases were admitted from Outside Districts during 1926.

AREA	Scarlet Fever	Diphth- eria	Enteric Fever	Chicken- pox	Mumps	Smallpox	Observa'n for Smallpox	Smallpox Contacts
Stokesley R.D.C. ..	16	2	..	..	..	..	..	..
Thornaby Corporation	30	2	1	..	..	..	..	..
Middlesbrough R.D.C.	6	1	..	..	..	..	..	..
Tees Port S. Authority	..	..	..	1	1	..	..	..
Easington R.D.C. ..	..	..	..	1	..	279	1	5
Hartlepool Corporation	..	..	..	..	..	5	..	..
Sedgefield R.D.C. ..	..	..	..	1	..	171	2	..
West Hartlepool C. B.	..	..	..	..	..	11	..	..
Brandon U.D.C. ..	..	..	..	..	..	166	1	2
TOTAL	52	5	1	3	1	632	4	7

Report of the Tuberculosis Officer for the Year 1926.

The number of persons in the County Borough of Middlesbrough who died of Tuberculosis during the year 1926 was 175.

Of these 143 died from Tuberculosis of the lungs and 32 from Tuberculosis of other organs. These numbers represent a fall in mortality in both sections compared with the number of deaths from Tuberculosis in the two preceding years.

The death rate from Tuberculosis for the year was 13.09 per 10,000 population. The corresponding figures for 1925 and 1924 were 16.29 and 17.53.

It will therefore be seen that there has been a considerable reduction in the death rate from Tuberculosis as compared with the two preceding years.

The death rate from all causes in the Borough also shows an almost similar drop.

INCIDENCE OF TUBERCULOSIS.

The total number of cases in the County Borough of Middlesbrough notified as occurring during the year 1926 was 532, of which 365 were Tuberculosis of the lungs and 167 Tuberculosis of other organs. These figures also indicate a reduction in the incidence of the disease as compared with the two preceding years.

DISPENSARY TREATMENT.

The work of the Dispensary continued during 1926 without any change, with the exception of the addition to the staff of one visiting nurse. The staff consists of the Tuberculosis Medical Officer, three nurses and two clerks. The work of the dispensary has not decreased in any way and at the end of the year a very full statistical report of the work done was forwarded to the Ministry of Health. The premises occupied by the dispensary are completely inadequate for the work to be done. It is gratifying to know that during the coming year the increased accommodation required will be forthcoming.

The lack of dental treatment for patients attending the Dispensary continues to be a drawback to the work done for the patients. I should like to draw the attention

of the Sanatorium Committee to this defect and hope it will be remedied in the near future.

The value of Artificial Sunlight in the treatment of Tuberculosis, especially in surgical diseases of children is becoming more obvious every year. At present, cases are being sent for such treatment to Holgate Hospital, Broomlands, and when they can procure admission, to the North Ormesby Hospital. This has proved quite adequate during the year 1926, and of considerable value in the type of case mentioned.

A Table showing in figures the work of the Dispensary is appended.

RESIDENTIAL TREATMENT.

During the year 141 persons received institutional treatment. The great majority of these patients were accommodated in West Lane Sanatorium. Since the closing of Hemlington Sanatorium to Tuberculosis patients, and its use reserved for Smallpox only, the number of beds available for treatment of Tuberculosis in the Borough is 30, a number insufficient to deal with the cases requiring sanatorium treatment.

It was therefore necessary to send 3 cases to sanatoria outside the borough area. Six beds are also retained for children by the Corporation in Broomlands (Guardians') Hospital, for which no grants in aid are received from the Treasury on the ground that this is a Poor Law Institution. Considering the very adequate treatment received by patients in Broomlands, it is to be hoped that this anomaly will be removed at an early date.

A Table showing the cases who received treatment in West Lane and the results of treatment is appended to the Report.

VOLUNTARY CARE COMMITTEE.

The increasingly valuable work of this Committee has been carried on as in previous years. Established in 1913, many of the original members continue giving their unselfish labours in the interests of the health of the community. During the last few years financial help has been given by annual grants from the Treasury, in addition to which voluntary subscriptions enable the Committee to considerably extend their work mostly in the direction of sending convalescent patients for holidays in the country. It is impossible here to enumerate the many directions in which the work of the Voluntary Care Committee extends. An annual report published yearly shows its many aspects and the work of the Dispensary is greatly assisted by such a body. While the personal

value of the help of the members cannot be too highly assessed, it would considerably aid the Committee in their beneficent work were the public willing to contribute to the Care scheme in more generous fashion.

HOUSING CONDITIONS OF TUBERCULOUS PERSONS IN MIDDLESBROUGH.

Under the above heading a Report was issued to the Council in the earlier part of the year, in order to come to some conclusion as to housing conditions of the Tuberculous section of the population in the Borough, particularly in regard to overcrowding.

A total of 1159 houses were investigated, in each of which lived one or more persons on the Dispensary register suffering from Tuberculosis in some form. These were not all the cases of Tuberculosis in the Borough, but were those in the parts of the town most likely to provide instances of overcrowding and were drawn from ten wards: Cannon, Newport, Cleveland, Acklam, Ayresome, St. Hilda's, Ormesby, Vulcan, Grove Hill and Exchange. In each of these wards the mortality rate from Tuberculosis was stated. In 745 houses there was at least one case of Pulmonary Tuberculosis and in 414 houses one or more cases of non-pulmonary Tuberculosis.

It was estimated that in 769 houses there was a danger of infection spreading to other members of the household on account of the infectious condition of the patient; an important point in considering the likelihood of extension of the disease to healthy inmates of the home.

A total census of the number of persons living in the houses investigated, including the affected people themselves, showed a considerable proportion of the total population of these wards, the number being 7210. In 251 houses more than one family was accommodated.

A Table was provided showing the number of rooms in the series from 1 room per house to 6 rooms or over.

In the case of the 769 houses which sheltered an infectious person only 157 were able to provide a separate bed-room for the sick inmate and in only 396 houses had the patient a separate bed. In the remaining cases the bed was shared by one or more healthy members of the household.

In 97 houses the families of the affected person lived in apartments of houses belonging to other tenants.

In order to form some conception of their conditions as to overcrowding, the ratio of persons to rooms was taken and is of such importance that the Table is given below.

Occupants.				Houses.	Occupants				Houses
—				—	—				—
1	to 1 room	..	..	176	3 $\frac{1}{4}$	to 1 room	..	..	10
1 $\frac{1}{4}$	„	„	..	185	3 $\frac{1}{2}$	„	..	..	11
1 $\frac{1}{2}$	„	„	..	135	3 $\frac{3}{4}$	„	..	..	2
1 $\frac{3}{4}$	„	„	..	196	4	„	..	..	12
2	„	„	..	137	4 $\frac{1}{2}$	„	..	..	2
2 $\frac{1}{4}$	„	„	..	69	5	„	..	..	1
2 $\frac{1}{2}$	„	„	..	69	5 $\frac{3}{4}$	„	..	..	1
2 $\frac{3}{4}$	„	„	..	40	7	„	..	..	1
3	„	„	..	33					

As a matter of some interest it was found that out of the total of 1,159 families, 505 expressed the desire for better accommodation, the difficulty of securing which was almost entirely financial.

In the case of 90 families, the means of sustenance was Parish relief, and in 136 cases the wage-earner was receiving the "dole." These figures were taken out before the commencement of the Coal Strike.

A Table was provided showing in each ward the number of houses per acre and an accompanying figure giving the death rate for 1925 from Tuberculosis. This comparison showed that in those wards with the greatest number of houses per acre the death rate from Tuberculosis was generally higher than in the wards with fewer houses per acre.

The inferences drawn from this census were that there was considerable evidence of overcrowding among the families of Tuberculous persons in the Borough. A comparison of the figures taken out at the same time by the Sanitary department of the Borough in regard to overcrowding among the general population indicated strongly that overcrowding exists in a much greater degree among families one or more members of which is Tuberculous than among the Non-Tuberculous section of the Borough. This might however be looked for without a census being required, as in the first place persons living in the poorer parts of the Borough are financially worse off, their standard of life lower; they therefore being more likely to fall a prey to Tuberculosis; while secondly, infection is most easily spread when areas are over-built and families crowded into small homes with an infectious member of the household.

While, with a census of this kind before us, it is impossible to define in what proportion overcrowding exists as a factor in the cause of the spread of Tuberculosis in a Borough like Middlesbrough, it nevertheless throws some light on the problem by providing figures which indicate that instead of living under conditions of less overcrowding the Tuberculous person exists in an overcrowded environment which is likely to detract from his recovery and as likely to favour the spread of Tuberculosis to the as yet unaffected portion of the household.

F. J. HENRY, M.B., D.P.H., F.R.C.S.,
Tuberculosis Medical Officer.

TUBERCULOSIS.

NEW CASES AND MORTALITY DURING 1926.

Age Periods	New Cases Notified in 1926				Deaths Registered in 1926			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	Male	Female	Male	Female	Male	Female	Male	Female
0—1 year	2	..	3	3	1	1	2	2
1—5 years	16	13	20	13	8	1	6	2
5—10 „	44	35	34	25	2	4	1	4
10—15 „	17	33	16	13	1	7	3	1
15—20 „	13	18	7	6	1	9	6	1
20—25 „	10	14	4	2	7	14	..	2
25—35 „	32	25	3	4	12	14	..	..
35—45 „	33	17	5	7	18	9	..	1
45—55 „	22	10	1	2	15	7	..	1
55—65 „	9	6	..	1	7	3	..	1
Over 65 „	1	2	..	..	..	1	..	..
Total	189	173	93	76	72	70	18	15

The ratio of non-notified Tubercular deaths to total Tubercular deaths is 11.43%.

**PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925,
AND PUBLIC HEALTH ACT, 1925.**

No action has been taken under the above during the past year.

DEATHS FROM TUBERCULOSIS, 1926.

				SEX.		
				AGE PERIOD	MALE	FEMALE
				—	—	—
PULMONARY	..	..	..	Under 15 years	12	12
				—	—	—
				15 to 25 years	10	22
				25 to 35 years	12	14
				35 to 45 years	18	9
				Over 45 years	22	11
				—	—	—
				Total Over 15 years	62	56
				—	—	—
	Insured	..	....		44	14
	Non-Insured	..	....		30	54
				—	—	—
Non-Pulmonary	..	..	..	Under 15 years	12	9
				Over 15 years	6	6
				—	—	—
TOTAL DEATHS :						
	Pulmonary	..	....		74	68
	Non-Pulmonary	..	....		18	15
				—	—	—
TOTAL	..	..	..	....	92	83

INSTITUTIONAL TREATMENT.

West Lane Hospital :—

Pulmonary	..	..	Male	..	70	Female	..	62	Total	132
Non-Pulmonary	..	..	Male	..	6	Female	..	3	Total	9
									Total	141

Conditions of Patients Discharged :—

Quiescent	..	..	..	..	..	..	1
Much Improved	..	..	..	..	..	..	72
No Material Improvement	..	..	..	..	..	..	33
Died in Institution	..	..	..	..	..	..	8
Total							114

Tuberculosis Dispensary :—

Total New Cases examined (excluding Contacts)	559
---	----	----	-----

Diagnosis	..	..	..	..	..	..	463
Notified	..	..	..	..	..	..	82
Pensioners	..	..	..	..	..	..	9
Transfers	..	..	..	..	..	..	Nil
Voluntary	..	..	..	..	..	..	5
Total							559

Attendances, including Contacts	..	..	..	..	11,958
Home Visits	..	..	..	..	7,232
Sputum Examinations	..	..	..	..	397
X-Ray Examinations	..	..	..	..	16
Urine Examinations	..	..	..	..	9

Report of the Venereal Diseases Medical Officer for the Year 1926.

CLINIC.—105, Grange Road West, Middlesbrough.

STAFF.—Medical Officer ; 2 Male Attendants ; 2 Nurses.

HOURS.—MALES : Monday .. 8-30 a.m. and 5-30 p.m.

Friday .. 8-30 a.m. and 5-30 p.m.

FEMALES : Wednesday 5-30 p.m.

IRRIGATION HOURS FOR MALES :—

Monday .. 8-30 a.m. and 5-30 p.m.

Tuesday .. 8-30 a.m. and 5-30 p.m.

Wednesday 8-30 a.m.

Thursday .. 8-30 a.m. and 5-30 p.m.

Friday .. 8-30 a.m. and 5-30 p.m.

Saturday .. 8-30 a.m.

Number of Cases under Observation and Treatment on January 1st, 1926.

Syphilis		Soft Chancre		Gonorrhoea		Other Cases		Total		Total all Cases
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
46	30	2	..	91	4	11	5	150	39	189

Number of Persons and the Diseases they were suffering from, dealt with for the first time during years 1922-26.

Year	Syphilis		Soft Chancre		Gonorrhoea		Other Cases		Total Cases		Grand Total
	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	
1922	141	15	21	..	159	9	161	13	482	37	519
1923	69	29	6	..	206	2	142	16	423	47	470
1924	75	20	7	..	200	7	113	26	395	53	448
1925	79	30	11	..	235	9	129	14	454	53	507
1926	77	32	12	1	246	18	130	14	465	65	530*
Totals	441	126	57	1	1,046	45	675	83	2,219	255	2,474

*MIDDLESBROUGH CASES, 351. SEAMEN, 100. OTHER CASES, 79.

Cases Classified in Age Groups.

DISEASE	Und'r 1 yr.		1-5		5-14		14-16		16-17		17-18		18-19		Over 19		TOTALS		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Syphilis ..	1	4	..	1	1	1	..	..	..	2	..	..	1	..	74	24	77	32	109
Gonorrhoea ..	..	..	..	1	..	..	..	..	1	..	3	..	4	2	238	15	246	18	264
Soft Chancre ..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	10	1	12	1	13
Other Cases ..	..	..	1	..	..	2	..	..	1	..	2	..	2	..	124	12	130	14	144
Total ..	1	4	1	2	1	3	..	..	2	2	7	..	7	2	446	52	465	65	530

Oldest patient—78 years. Youngest patient—14 days.

Occupation and State of Cases for the year 1926.

	MALES.		FEMALES.	
	Single.	Married.	Single	Married.
Seamen ..	68	32	..	..
Labourers ..	68	61	..	..
Railwaymen ..	17	13	..	..
Commercial Travellers ..	2	4	..	..
Iron and Steel Workers ..	55	49	..	..
Tradesmen ..	21	22	..	..
Motor Mechanics ..	10	7	..	..
Actors ..	2	2	..	..
Miscellaneous ..	3	10	..	..
Clerks ..	11	2	2	..
Shop Assistants ..	..	3	5	..
Children ..	3	..	9	..
Domestic Servants ..	..	..	6	..
Teachers ..	..	..	4	..
Housewives ..	..	..	..	39
	260	205	26	39

Nationality of Seamen Treated during the year 1926.

British	..	..	..	..	..	..	71
Lascar	..	..	..	..	..	..	13
Norwegian		..	..	..	..	..	4
Swedish	..	..	..	..	..	..	3
Esthonian		..	..	..	..	..	2
Japanese		..	..	..	..	..	2
Dutch	..	..	..	..	..	..	2
Spanish	..	..	..	..	..	..	1
Polish	..	..	..	..	..	..	1
West African		..	..	..	..	..	1
				Total	..	..	100
			1925	..	..	..	93

Total Attendance of all Persons suffering from :

Syphilis		Soft Chancre		Gonorrhoea		Other Cases		Total		Total all Cases
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
1,204	429	24	4	4,223	123	451	87	5,902	643	6545,

Middlesbrough	5,323
North Riding of York	846
Durham County	376
Total Attendances	6,545

SEX			Number of Sessions	Total Attendance	Average Attendance per Session
MALE	..	..	Morning 105	1,203	11.4
			Evening 105	3,257	31.2
FEMALE	..	..	Evening : 51	643	12.6
IRRIGATION :					
MALE	..	..	314	1,442	4.6

Totals for the year 1926.

Total Number of Injections Administered	1,615
„ „ Irrigations Administered	..	..	..	4,223
„ „ Slides Examined by Medical Officer	..	..	..	725
„ „ Wassermann Reactions	..	..	..	233

			Males	Females
Total Number of patients discharged	..	..	218	29
„ „ transferred to another Centre	..	..	133	14
„ „ uncompleted cases	..	..	53	14
Number of Cases at the end of year 1926, under treatment			211	47

ARTHUR BRYANS,
Medical Officer Treatment Centre.

Report of the Maternity and Child Welfare Medical Officer for the year 1926.

(1)

MIDWIVES.

Forty Midwives, including four untrained, sent in their notification of intention to practise.

Of 3,368 births notified

2,345 were by Midwives,

1,019 were by Doctors,

4 were by other persons.

Percentage of notified cases delivered by Midwives was 69.

Though the notifications were as stated above, nevertheless 73 of the births were found to have been conducted by handy women, without a doctor being present. Final warning letters were sent out to these women in September, quoting Section 1 (2) of the Midwives and Maternity Homes Act, 1926. Whereas there had been an average of 20 deliveries a quarter during the first three quarters of the year, there were only 15 deliveries by handy women during the last quarter.

Of the 2,345 births notified by Midwives, 109 were notified by the poor-law nurses from the district. Out of the remaining 2,236 cases notified by Midwives, medical help under Section 14 of the Midwives Act was called 586 times, that is, in 26% of cases. Of the 586 calls for medical help, 140 were for torn perineum.

Visits of inspection to Midwives numbered 60.

The usual monthly meeting of the Midwives in the Maternity and Child Welfare Office continued through the year with the variation from previous years that stranger lecturers were invited to address the Midwives. Six Doctors in the town gave addresses on the following subjects, viz.:—Venereal Diseases, Ophthalmia Neonatorum, Sepsis, Diseases of Pregnancy, Feeding of the Expectant and Nursing Mother, Sequelae arising from abortion and child-birth. The Assistant Inspector of Midwives gave a report on the Maternity and Child Welfare Conference at Geneva, which she had attended. The remaining addresses were given by the Maternity and Child Welfare Medical Officer, and dealt with Still Births, Maternal Deaths, Ante-natal work, and Breast Feeding.

Municipal Maternity Home.

The Municipal Maternity Home has 21 beds. The number of cases delivered was 279. Of these 67 were delivered by Doctors, making the percentage delivered by Midwives 76. Medical help under Section 14 of the Midwives Act was called 96 times, including 39 for torn perineum. There were 2 maternal deaths, 9 still births, and 9 neo-natal deaths. Number of pupil Midwives who gained their Central Midwives Board Certificate after training at the Home was 3.

Municipal Midwife.

A Municipal Midwife was appointed to the North Ormesby area and put out her plate there in November. The Corporation pays her salary and supplies uniform, and she gives the fees received from her patients to the Corporation. The greatest number of cases attended by handywomen occurs in the North Ormesby area. The appointment of a Municipal Midwife to the north side of the town some years ago was successful in putting down handywomen in that area and it is hoped it will be equally successful in the North Ormesby area. The Municipal Midwife is a member of the local branch of the Midwives' Association and charges the same fees as the other members do.

Midwives and Maternity Homes Act.

Under the Midwives and Maternity Homes Act, five Nursing Homes or Hospitals applied for registration. All were granted as carried on under satisfactory conditions

(2) GENERAL ARRANGEMENTS MADE FOR ATTENDING THE HEALTH OF EXPECTANT AND NURSING MOTHERS AND OF CHILDREN UNDER FIVE YEARS.

Health Visitors.

Number of visits paid were as follows :—

To expectant mothers	..	First Visits,	369	Total Visits	..	985
To infants under 1	..	„	3,321	„	..	7,775
To children 1 to 5	..	Total Visits	2,348			

The number of visits to expectant mothers has gone up, as has also the number of attendants at the ante-natal sessions. The number of visits to infants under 1 has gone down but on the other hand the attendances at each Centre have gone up. The latter fact is an economy of the health visitors' time as the regular Centre attendants

who are found to be thriving do not require visiting at home. The principle of visiting is to get two early visits in to each newly born infant, one on the third or fourth day in respect of the eyes, and one in the third week in respect of breast feeding. Encouragement in breast feeding, and if necessary cocoa or milk for the mother, in the third week has been found of value. Breast feeding is increasing year by year, due to reiterated Centre instructions, due to drinks given to needy mothers in the last month of pregnancy and during lactation if the infant does not gain satisfactorily in weight, and due also to the fact that many of the general practitioners have ceased advising a mother to take her baby off the breast on the least provocation.

Nurses.

A nurse on the Public Health Staff visits cases of measles and nurses them when necessary. The District Nursing Association receives a Municipal Grant in respect of the nursing of expectant and nursing mothers and of children under 5.

Centres.

There is a weekly session at each of 5 Centres, and a session twice a week at the Cannon Centre.

The average attendance of children per session is given below :—

East Centre	..	..	..	..	..	94
Grove Hill Centre	..	..	..	..	..	32
Cannon Centre	..	..	..	..	..	131
American Red Cross Centre	..	..	..	..	..	80
Settlement Centre	..	..	..	..	..	80
North Ormesby Centre	..	..	..	..	..	105

Municipal Children's Hospital.

Two wards (15 cots) are set apart for children on the ground floor of the Municipal Maternity Home. The number of cases admitted was 139, average duration of stay 32 days, number discharged in good health 88, discharged improved 14, discharged with no improvement 37 (including 12 deaths).

The variety of cases admitted is shown below :—

Mal-thriving infants	50
Rickets	35
Domestic reasons (death or sickness of the mother, confinement, etc.)	14
Neglect	9
To re-institute breast feeding	9
Convalescents from whooping cough, measles, etc.	7
Tubercular contacts	5
Miscellaneous	10

Hospitals, other than Municipal.

The North Riding Infirmary, North Ormesby Hospital, Carter Hospital, Holgate (Guardians) all take children. There is also a Children's Hospital—Broomlands (Guardians).

Ante-Natal Work.

Each of the 6 Centres has a monthly ante-natal session.

	Average attendances per session.
East Centre	13.5
Grove Hill Centre	5.25
Cannon Centre	23.0
American Red Cross Centre	21.3
Settlement Centre	21.7
North Ormesby Centre	21.2

These numbers represent the minimum seen by the Medical Officer as a number of expectant mothers come to the office for advice and examination at hours other than the ante-natal session.

Maternal Mortality.

Out of 3,387 registered births 18 maternal deaths were certified. The certified causes of death were as follows :—

Puerperal Sepsis	5
Haemorrhage	6
Eclampsia	3
Pulmonary embolism	2
Sloughing fibroid	1
Shock after precipitate labour	1

Of the septic cases one was an incomplete abortion, no one being present at the delivery.

All the 6 cases of haemorrhage were delivered by a doctor.

Of the 3 cases of eclampsia 2 had not had urine testing.

Though the certified deaths were as stated above, nevertheless there were 7 other maternal deaths, 6 due to pneumonia, occurring on the 2nd, 5th, 7th, 7th, 10th and 15th day of the puerperium respectively, and 1 due to intestinal obstruction on the 16th day.

Infantile Mortality.

The figure was 99 per 1,000 representing 337 deaths.

Still-births.

Of the 3,368 births notified, 124 were still-born, making the still-births 3.6%

Of the 124 stillbirths 5 were illegitimate.

Of the 124 stillbirths 79 had no ante-natal care, 31 had ante-natal care either at the ante-natal clinic or from their private doctor, 16 had urine testing from a midwife.

In 55 cases at least the death was probably intra natal, the mother having felt movements on the day of confinement.

The ascertainable causes, or predisposing causes, of the stillbirth, were as follows :—

1. In the first group the mother volunteered the information that she felt no movements after the occurrence of some mechanical or psychological event such as a fall, scrubbing, severe coughing, excessive vomiting, shock, anxiety, etc.	.. .. .	29
2. Ante-partum haemorrhage accounted for	.. .. .	17
3. In this group the foetus was born before arrival of midwife or doctor. In one case the cord had three loops round the foetus' neck, and in a second the foetus was born inside the membranes		12
4. Forceps delivery, vertex presentation	.. .. .	12
5. Breech presentation with delay in birth of the head	..	10
6. Transverse presentation	.. .. .	6
7. Syphilis	.. .. .	6
8. Prolapsed cord	.. .. .	4
9. Anencephaly	.. .. .	4
10. Hydrocephalus	.. .. .	1
11. Prolonged 2nd stage, vertex presentation, natural delivery		1

12. Albuminuria	1
13. 2nd twin was born dead 3 days after the 1st was born alive	1
14. History of the taking of abortifacients	1

Opportunity for a *post mortem* was afforded in 20 cases :—

Macerated foetus : nothing abnormal found	5
Meningeal haemorrhage (1 natural labour, vertex : 2 forceps, vertex)	3
Diffuse haemorrhage under scalp (1 forceps and 1 natural delivery)	2
Anencephaly	3
Fibroid fatty placenta, foetus macerated : Wassermann on foetal blood negative	3
Signs of asphyxia livida, lips and tongue blue, blood fluid and blue (1 forceps delivery, 1 twin born $\frac{3}{4}$ hour after after 1st living twin, 1 prolapsed cord, and 1 B.B.A.)	4

Neo-natal Deaths.

There were 135 neo-natal deaths. Of 131 in which investigations were made the certified causes of death were as follows :—

Prematurity	68
Atrophy, debility, marasmus, etc.	19
Difficult labour	8
Congenital abnormalities	8
Broncho-pneumonia	6
Convulsions	5
Gastro-enteritis	5
Pemphigus	2
Measles	2
Ruptured liver	1
Congenital Syphilis	1
Meloena	1
Oedema glottidis	1
Asphyxia Neonatorum	1
Erysipelas	1
Atelectasis	1
Jaundice	1

The ascertainable causes or predisposing causes of prematurity were as follows :—

Twins	..	..	..	..	..	..	20
Triplets	..	..	..	..	..	..	3
Ante-partum haemorrhage	..	..	..	..	..	..	11
Continued vomiting or coughing	..	..	..	..	..	..	3
Heavy work	..	..	..	..	..	..	3
Congenital Syphilis	..	..	..	..	..	..	2
Operation in Hospital during pregnancy	..	..	..	..	..	..	2
Taking purgatives	..	..	..	..	..	..	1
Illegitimate children (unwanted)	..	..	..	..	..	..	3
Want of fire and food	..	..	..	..	..	..	18

The ascertainable causes giving rise to death due to atrophy, debility, marasmus, etc., were as follows :—

Artificial feeding	..	..	..	..	..	..	7
Want of completion of changes in the foetal circulation at birth	..	..	..	..	..	..	2
Illegitimate infants, want of care	..	..	..	..	..	..	2
Twin	..	..	..	..	..	..	1
B.B.A., want of care at birth	..	..	..	..	..	..	1
Mother " Ailing all through pregnancy "	..	..	..	..	..	..	1
2nd child in eleven months	..	..	..	..	..	..	1

Of the 8 cases of difficult labour, 7 were instrumental births. In the 8th a doctor was called by a handy woman to deliver the after head of a breech. The doctor certified this death as due to Asphyxia Pallida.

Unmarried Mothers and Illegitimate Children.

The number of illegitimate children born in the year was 156. A register of such children is kept in the office. Each child is visited once a month by a health visitor, and action is taken if the health visitor believes the child is suffering in any way. The same privileges are open to the unmarried mothers as to the married. The number of illegitimate deaths was 29.

Supply of Food and Milk.

Amount of dried milk given	..	..	2,130 lb. packets.
Amount of cocoa and milk given	..	..	896 lb. tins.
			3,026 lbs.

In respect of 1,599 of these lb. gifts, it was found possible to keep accurate records of how the food was used when given for a month at a time. This is shown below.

Expectant mothers	616 lbs.
Nursing mothers	903 lbs.
Infants under 7 months	67 lbs.
Infants over 7 months	13 lbs.
	<hr/>
	1,599 lbs.

The mothers are beginning to understand that it is a more economic way, both in respect of money and of health, to feed themselves rather than to take the baby off the breast.

The amount given in respect of which accurate records as to the use to which it was put are not available was 1,427 lbs. The gifts were given in single packets as circumstances indicated, either to a toddler, to an infant as supplemental or complementary feed, or to a nursing mother to encourage her in breast feeding.

Co-ordination between the Maternity and Child Welfare Department and the School Medical Service.

Once a quarter the Centre cards of children who have reached the age of 5 are passed on to the School Medical Officer.

(3) **INFECTIOUS DISEASES.**

Puerperal Fever.

The cases notified were 15 of whom 5 died. Eight cases were removed to Holgate, three were nursed in their own homes by a district nurse, and four (slight) were nursed by their own friends. In three cases advantage was taken of the arrangement made by the Local Authority for bacteriological examinations by a bacteriologist in the town.

Puerperal Pyrexia.

The number of cases notified was 13. One turned out to be Scarlet Fever. All made a satisfactory recovery.

Ophthalmia Neonatorum.

Of the 12 cases notified 7 were attended to by a nurse from the District Nursing Association. One baby died of marasmus before the eyes had recovered. The 11 others made a complete recovery.

Measles.

Number of cases notified under 5 years of age, 444.

Number of deaths, 4.

All cases were visited by the whole time Measles nurse : 27 cases were nursed.

Poliomyelitis.

One case was notified. The child made a satisfactory recovery.

Pemphigus Neonatorum.

6 cases were notified by Midwives : 1 of a series of 3 by the same midwife died : the other 5 recovered.

Tuberculosis.

Number notified under 5 : Pulmonary Tuberculosis 31 : other forms 34. Number of deaths under 5 : Pulmonary Tuberculosis 11, Meningitis 4, other forms 8.

Tubercular contacts admitted to Municipal Children's Wards, 5. One of the 5 died of Meningitis : the other 4 were discharged thriving.

GRACE H. GIFFEN DUNDAS,

Medical Officer Maternity and
Child Welfare.

**TABLE I.—Vital Statistics of Whole District during 1926
and previous years.**

YEAR	Population estimated to Middle of each Year.	BIRTHS			TOTAL DEATHS REGISTERED IN THE DISTRICT		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT			
		Uncorrected Number	Nett		Number	Rate	Of Non-residents registered in the District	Of Residents not registered in the District	Under 1 Year of Age		At all Ages	
			Number	Rate					Number	Rate per 1,000 Nett Births	Number	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1916	.. For Deaths: 115,548 For Births: 125,718	3,536	3,535	28.12	2,154	18.64	90	25	430	121	2,089	18.07
1917	.. For Deaths: 119,251 For Births: 132,931	3,059	3,062	23.03	2,366	19.84	92	34	465	151	2,308	19.35
1918	.. For Deaths: 115,752 For Births: 129,696	3,331	3,327	25.64	2,741	23.67	150	50	485	145	2,641	22.81
1919	.. For Deaths: 127,142 For Births: 132,444	3,534	3,531	26.66	2,437	19.16	132	34	493	139	2,339	18.39
1920	.. 132,208	4,434	4,431	33.51	2,109	15.95	120	37	602	135	2,026	15.32
1921	.. 133,400	4,240	4,218	31.62	1,967	14.74	106	32	501	118	1,893	14.41
1922	.. 134,800	3,823	3,774	27.99	2,057	15.26	121	24	421	111	1,960	14.50
1923	.. 135,400	3,726	3,728	27.53	1,876	13.85	139	28	321	86	1,765	13.03
1924	.. 136,300	3,607	3,589	26.33	2,372	17.42	136	47	484	135	2,283	16.75
1925	.. 136,200	3,503	3,501	25.70	2,123	15.58	167	28	342	97	1,984	15.56
1926	.. 133,600	3,401	3,387	25.35	1,915	14.33	185	29	337	99	1,759	13.16

TABLE II.—INFANTILE MORTALITY, 1926. Nett Deaths from stated Cause

CAUSE OF DEATH	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks	4 weeks and under 3 months	3-6 months	6-9 months
Measles .. ..	..	..	..	2	2	..	1	..
Whooping-Cough ..	..	..	..	..	..	6	3	10
Diphtheria and Croup ..	..	..	..	..	..	..	..	2
Abdominal Tuberculosis ..	..	..	..	..	..	1	2	..
Other Tuberculous Diseases .. ..	..	..	..	..	..	1	..	1
Meningitis (not Tuberculous) ..	..	..	..	..	..	..	2	1
Convulsions	1	4	1	1	7	3	2	2
Bronchitis .. ..	..	..	..	2	2	9	5	5
Pneumonia (all forms) ..	..	1	1	1	3	9	8	14
Diarrhoea .. ..	..	1	..	..	1	1	3	2
Enteritis	1	..	2	..	3	8	9	8
Gastritis .. ..	..	..	1	..	1	..	..	..
Syphilis	1	..	..	..	1	2	..	..
Suffocation, overlying ..	1	..	..	..	1	..	..	..
Injury at Birth	2	..	..	..	2	..	..	..
Atelectasis	2	..	..	..	2	..	..	..
Congenital Malformations	7	1	1	..	9	4	1	..
Premature Birth	54	10	6	3	73	3	1	..
Atrophy, Debility and Marasmus	12	5	1	3	21	10	6	4
Other Causes	1	5	1	..	7	3	..	5
Total	82	27	14	12	135	60	43	54
NETT BIRTHS IN THE YEAR :—					NETT DEATHS IN THE YEAR OF :—			
Legitimate .. ..	..	3,231	..	..	Legitimate Infants ..	..	308	..
Illegitimate .. ..	..	156	..	..	Illegitimate Infants ..	..	29	..
Total .. ..	..	3,387	..	..	Total .. ..	..	337	..

Various Ages under One Year.

.12 months	Total Deaths under 1 year	Ayresome	Acklam	Cannon	Cleveland	Exchange	Grove Hill	Linthorpe	Newport	Ormesby	St. Hildas	Vulcan	TOTAL
..	3	..	..	1	..	..	1	..	1	..	..	..	3
7	26	1	1	5	3	2	..	1	2	..	6	5	26
..	2	..	..	..	..	..	..	1	..	..	1	..	2
1	4	..	..	1	..	..	..	..	..	1	1	1	4
..	2	1	..	..	..	..	..	..	1	..	..	..	2
..	3	..	..	..	..	..	..	..	1	..	1	1	3
1	15	..	..	2	2	1	1	1	4	1	1	2	15
6	27	..	..	6	2	..	1	1	3	4	5	5	27
21	55	..	3	8	5	3	4	..	10	2	9	11	55
1	8	..	..	1	..	1	..	..	1	1	4	..	8
4	32	..	..	3	3	3	1	3	5	2	7	5	32
..	1	..	..	..	..	..	1	..	..	..	..	..	1
..	3	..	..	..	..	..	..	..	..	..	2	1	3
..	1	1	..	..	..	..	..	..	..	..	..	..	1
..	2	..	..	..	..	..	..	..	1	..	1	..	2
..	2	..	..	..	..	..	..	..	..	..	1	1	2
..	14	2	1	3	..	1	1	3	1	..	1	1	14
..	77	6	..	12	5	6	6	..	7	9	19	7	77
2	43	3	4	7	6	1	2	1	9	2	7	1	43
2	17	2	2	1	1	..	1	1	3	..	3	3	17
45	337	16	11	50	27	18	19	12	49	22	69	44	337
th Rate ..	16.22	18.25	36.10	24.69	16.99	23.50	15.49	31.44	25.31	37.56	27.05	25.35	
. Mort. Rate	68	57	114	95	120	60	64	121	67	142	133	99	

TABLE III. Nett Deaths registered

CAUSE OF DEATHS			AGES AT DEATH														
			At all ages	under one year	1 and under 2 yrs.	2 and under 3 yrs.	3 and under 4 yrs.	4 and under 5 yrs.	5 and under 10 yrs.	10 and under 15 yrs.	15 and under 20 yrs.	20 and under 25 yrs.	25 and under 35 yrs.	35 and under 45 yrs.	45 and under 55 yrs.	55 and under 65 yrs.	65 and over
All Causes	Certified	..	1748	330	108	36	19	18	48	25	39	51	74	137	192	211	46
	Uncertified	..	11	7	..	..	..	..	..	..	..	..	..	..	1	1	..
Enteric Fever	..	..	2	..	..	..	..	..	..	..	..	..	2	..	..	..	..
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	4	3	1	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	54	26	15	5	3	4	1	..	..	..	..	..	..	..	..
Diphtheria and Croup	..	..	5	2	..	2	1	..	..	..	..	..	..	..	..	..	..
Influenza	..	..	34	1	1	1	1	..	1	1	2	6	2	3	3	6	..
Erysipelas	..	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Pulmonary Tuberculosis	..	..	142	2	2	5	1	1	6	8	10	21	26	27	22	10	..
Tuberculous Meningitis	..	..	8	..	1	2	1	..	2	1	..	..	..	..	..	1	..
Other Tuberculous Diseases	..	..	25	4	2	2	..	..	3	3	7	2	..	1	1	..	..
Cancer, Malignant Disease	..	..	167	..	..	..	..	..	..	1	..	2	12	34	46	7	..
Rheumatic Fever	..	..	15	..	..	..	..	..	..	1	1	1	2	1	2	..	..
Meningitis	..	..	17	3	5	1	..	1	2	1	..	..	1	3	..	..	..
Organic Heart Disease	..	..	151	1	..	..	1	..	2	..	..	5	15	22	33	7	..
Bronchitis	..	..	142	24	4	1	..	1	2	..	1	..	2	8	10	20	6
Pneumonia	..	..	91	8	9	3	..	4	4	2	..	6	9	8	15	11	1
„ Broncho	..	..	143	47	41	11	6	1	8	1	..	2	..	10	2	3	1
Other Respiratory Diseases	..	..	21	1	2	..	..	1	1	..	1	..	1	7	4	..	..
Diarrhoea and Enteritis	..	..	58	40	9	1	2	..	1	..	..	..	2	2	1	..	..
Appendicitis and Typhlitis	..	..	7	..	..	..	..	..	1	1	1	..	1	2	..	1	..
Cirrhosis of Liver	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Alcoholism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nephritis and Brights Disease	..	..	42	1	1	..	..	..	3	2	2	2	1	3	9	5	1
Puerperal Fever	..	..	5	..	..	..	..	..	..	..	4	1	..	..	..	..	..
Other Accidents and Diseases of Pregnancy	..	..	13	..	..	..	..	..	..	..	2	4	7	..	..	..	..
Congenital Debility and Malformation, including Premature Birth	..	..	120	120	..	..	..	..	..	..	..	..	..	..	..	..	..
Violent Deaths	..	..	41	1	4	..	2	1	4	..	2	2	5	6	6	6	6
Suicide	..	..	11	..	..	..	..	..	..	..	..	2	..	5	3	1	..
Other Defined Diseases	..	..	422	50	9	2	1	3	7	4	8	3	12	21	53	63	186
Diseases ill-defined or unknown	..	..	2	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Syphilis	..	..	6	3	..	..	..	1	..	1	..	1	..	..	..	..	..
Encephalitis Lethargica	..	..	4	..	1	..	..	..	..	1	..	2	..	..	..	..	..
Tetanus	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Cerebrospinal Fever	1	..	1
Continued Fever	1	1
			1759	337	108	36	19	18	48	25	39	51	74	137	193	212	462

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during the year 1926.

Deaths in Public Institutions	NUMBER OF DEATHS AND DEATH RATE IN EACH WARD IN THE BOROUGH.											
	Ayresome	Acklam	Canton	Cleveland	Exchange	Grove Hill	Linthorpe	Newport	Ormesby	St. Hilda's	Vulcan	Totals
2	..	..	..	..	..	1	..	..	..	..	1	2
..
1	..	..	1	1	..	1	..	1	..	..	..	4
..
1	1	2	10	6	3	3	1	4	2	14	8	54
5	1	..	..	..	..	1	1	..	1	1	..	5
2	2	2	3	5	..	2	3	3	4	3	7	34
2	..	1	..	..	..	..	..	..	..	1	..	2
56	16	6	15	12	9	7	7	20	9	26	15	142
4	1	..	2	2	..	1	..	1	..	..	1	8
18	4	2	2	1	1	..	1	4	2	6	2	25
78	18	9	17	11	6	16	18	12	18	26	16	167
2	4	1	..	1	2	3	..	1	..	2	1	15
4	4	2	..	3	..	..	..	4	..	2	2	17
69	15	17	9	14	10	7	21	15	9	21	13	151
32	7	4	23	16	4	8	11	13	15	28	13	142
32	8	4	13	12	1	11	8	10	7	8	9	91
18	4	7	29	12	5	4	6	27	5	28	16	143
9	2	3	1	4	1	..	2	..	2	3	3	21
14	..	..	5	5	5	3	3	7	8	16	6	58
10	1	..	1	..	1	1	..	1	1	1	..	7
2	..	..	..	..	..	..	1	..	..	..	1	2
..
13	5	2	3	5	5	4	1	5	3	3	6	42
5	..	1	1	..	..	1	..	1	..	1	..	5
9	2	..	1	..	1	..	1	2	1	2	3	13
19	11	5	19	6	8	9	3	14	11	24	10	120
49	6	2	5	3	..	1	4	5	5	7	3	41
..	..	..	..	..	3	2	1	..	2	..	3	11
180	48	35	44	28	21	40	48	38	37	49	34	422
..	..	..	1	..	..	..	1	..	..	..	..	2
3	2	..	..	1	..	..	..	..	..	2	1	6
2	1	..	..	1	..	..	1	..	1	..	..	4
1	..	..	..	..	..	1	..	..	..	..	..	1
..	..	..	..	..	..	1	..	..	..	..	..	1
..	1	..	..	..	..	..	..	..	..	..	..	1
642	164	105	205	149	86	128	143	188	143	274	174	1759

TABLE IV.—Notifications of Infectious Disease received during the Year ending December 31st, 1926.

NOTIFIABLE DISEASE	NUMBER OF CASES NOTIFIED								Total Cases Notified in each Ward of the Borough										Cases Removed			
	At all ages	At Ages							Ayresome	Acklam	Cannon	Cleveland	Exchange	Grove Hill	Linthorpe	Newport	Ormesby	St. Hildas	Vulcan	West Lane Hospital	Hemlington Hospital	
		Under 1 year	1 and under 5 years	5 and under 15 years	15 and under 25 years	25 and under 45 years	45 and under 65 years	65 years and over														
Diphtheria ..	75	6	24	22	15	8	13	10	8	2	6	4	5	6	11	4	4	6	62	..
Erysipelas ..	94	1	4	6	14	21	39	9	17	3	10	13	6	1	10	5	13	9	7	..	..
Scarlet Fever ..	386	3	125	187	51	18	2	..	60	26	31	30	22	43	24	43	39	29	39	364	..	
Small-pox ..	9	..	..	2	2	5	..	..	..	..	..	1	1	1	..	..	5	1	..	..	9
Pneumonia ..	202	12	48	33	30	45	18	16	27	14	24	21	14	20	19	27	10	6	20	..	..
Chickenpox ..	1528	107	528	844	46	3	..	..	153	104	203	128	65	181	105	154	201	122	112	..	..
Measles ..	965	68	382	496	18	1	..	..	114	97	99	101	39	192	159	58	41	30	35	..	..
Pulmonary Tuberculosis:																						
Males ..	190	2	16	61	23	56	31	1	16	7	25	18	6	9	4	35	15	33	22	70	..	
Females ..	175	..	13	68	32	44	16	2	17	10	22	15	11	8	3	34	17	19	19	62	..	
Other forms of Tuberculosis:																						
Males ..	92	3	20	50	11	7	1	..	13	9	8	6	11	9	2	8	9	5	5	12	6	
Females ..	75	3	8	43	8	10	3	..	4	4	11	11	4	5	3	10	4	12	7	3	..	
Enteric Fever ..	5	..	..	..	2	3	..	..	1	..	..	..	1	1	..	1	..	..	1	2	..
Continued Fever ..	1	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever ..	15	..	..	..	7	8	..	..	5	..	2	..	..	..	1	1	2	3	1	..	..
Puerperal Pyrexia ..	13	..	..	..	5	7	1	..	5	1	1	..	..	1	2	2	1	..	..	..	..
Polio-myelitis ..	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum ..	12	12	..	..	..	..	..	..	2	..	1	3	1	1	..	..	..	3	1	..	..
Encephalitis Lethargica ..	5	..	1	..	1	3	..	..	3	..	..	1	..	..	1	..	..	..	..	..	..
Cerebrospinal Fever ..	2	2	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..
Totals ..	3845	219	1170	1812	266	239	111	28	451	285	445	352	187	477	338	384	368	276	282	569	9	

TABLE VI.—Register

YEAR	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897
POPULATION						55934							69255	74156	75280	75541	76876	80300	83399	84962	86991	
CAUSE OF DEATH :—																						
Enteric Fever	35	29	45	20	26	16	28	36	30	18	22	15	12	19	65	57	16	51	23	28	37	2
Smallpox .. ..	..	..	..	..	..	3	..	3	2	1	2	18	5	..	..	..	2	7	4	..	..	..
Measles	5	1	36	1	47	..	29	13	50	92	11	36	18	37	8	27	56	9	48	1	70	1
Scarlet Fever	8	5	47	62	80	22	18	110	73	2	81	12	15	24	11	20	3	5	3	39	28	1
Whooping Cough .. ..	..	15	50	5	38	22	54	8	26	92	17	26	45	30	46	17	20	55	23	33	54	6
Diphtheria and Croup ..	14	17	7	12	15	7	14	9	13	8	16	35	22	21	16	27	21	18	19	19	29	2
Influenza .. ..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	9	37	25	16	17	45	5	2
Erysipelas .. ..	..	..	..	2	3	2	6	7	1	2	..	1	4	4	1	1	..	3	5	4	2	..
Pulmonary Tuberculosis ..	114	75	89	99	82	97	107	121	123	108	126	92	87	122	115	141	123	90	144	123	135	10
Tuberculous Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2
Other Tuberculous Diseases ..	30	23	53	12	70	21	38	40	60	28	45	44	42	60	46	55	54	105	29	33	38	5
Cancer, Malignant Disease ..	..	6	14	17	16	16	28	26	17	29	25	23	19	25	18	33	18	34	35	33	35	3
Rheumatic Fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	3	7	..
Meningitis .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	26	29	..
Organic Heart Disease ..	34	47	55	56	60	68	58	63	62	67	75	57	88	92	85	105	99	66	115	105	95	11
Bronchitis	110	117	121	101	136	103	163	100	100	155	107	119	221	176	198	202	165	119	126	143	154	15
Pneumonia	24	37	61	60	101	87	148	135	92	123	144	148	397	134	297	200	157	154	180	158	275	26
" Broncho .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Respiratory Diseases ..	2	..	3	5	3	3	5	5	7	7	11	8	22	3	7	18	8	4	21	32	29	14
Diarrhoea and Enteritis ..	67	43	97	30	105	63	108	61	98	58	92	100	21	108	124	88	106	181	11	90	82	13
Appendicitis and Typhlitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cirrhosis of Liver	2	8	8	10	4	9	12	9	19	18	12	13	12	16	27	12	19	16	13	13	11	22
Alcoholism .. ..	..	1	..	..	3	1	1	..	..	1	1	1	..	4	1	4	..	1	1	1	5	..
Nephritis and Brights Disease ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	25	16	..
Puerperal Fever .. ..	..	..	..	..	..	..	..	7	..	..	1	..	..	..	..	5	..	..	2	2	2	..
Other Accidents and Diseases of Pregnancy .. ..	..	1	5	8	9	6	17	18	15	8	16	9	10	12	13	8	12	9	5	7	7	..
Congenital Deb'ty and Malform- ation, inc. Premature Birth ..	98	89	110	96	96	81	148	155	147	142	173	133	144	165	157	168	198	180	185	212	186	185
Violent Deaths	49	25	43	27	29	53	52	44	36	25	32	42	50	32	32	49	44	42	39	45	47	60
Suicide .. ..	..	..	..	2	1	..	1	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1
Other defined Diseases ..	315	374	244	278	286	309	341	331	314	295	323	323	442	372	332	421	392	428	330	396	276	371
Diseases ill-defined or unknown ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	9	21	..
Syphilis .. ..	..	..	2	10	5	10	12	11	13	19	16	9	10	11	7	20	4	4	5	9	8	8
Typhus Fever .. ..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
Beri-Beri .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Murder, &c. .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-spinal Fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chickenpox .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Encephalitis Lethargica ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tetanus .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	907	913	1090	913	1215	999	1388	1313	1299	1298	1351	1264	1636	1468	1615	1715	1542	1597	1450	1634	1686	170

Deaths—1876 to 1926 (corrected and brought up-to-date).

	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
	95515	97007	91517	93354	95013	96684	98369	100069	101783	103511	105255	107014	108124	109554	107993	126452	116901	115548	119251	115752	127142	132208	133400	134800	135400	136300	136200	133600
23	17	31	23	24	18	19	15	15	15	21	18	10	10	9	4	6	4	8	10	2	2	1	1	..	..	..	2
68	25	43	10	67	39	71	23	97	99	62	11	76	183	51	64	198	9	159	12	203	43	48	9	78	25	53	4	
13	14	27	42	7	11	11	15	8	5	4	3	8	23	23	36	11	16	3	4	10	6	..	4	18	15	5	..	
41	39	32	31	15	25	43	40	49	7	69	32	79	7	23	60	49	27	39	57	9	24	13	35	..	76	19	54	
14	5	22	63	45	19	43	38	41	38	23	39	28	10	22	55	47	52	28	25	35	12	10	12	10	9	13	5	
19	28	9	8	15	4	5	6	24	14	18	6	7	8	11	13	20	13	11	353	149	16	25	81	18	141	39	34	
3	6	3	5	1	1	3	4	4	3	3	2	3	3	3	3	6	1	3	..	1	3	1	2	2	9	6	5	2
131	158	123	123	120	123	134	116	144	125	135	100	119	116	127	169	161	160	172	155	135	142	133	141	156	200	173	142	
20	16	20	28	28	25	20	14	17	19	27	14	15	21	16	17	25	14	7	19	8	10	4	11	16	7	15	8	
64	73	82	53	61	70	68	40	51	52	41	39	50	35	32	37	44	30	49	43	24	26	25	18	18	32	34	25	
51	67	53	42	55	69	68	70	85	68	88	76	76	72	94	92	100	79	103	97	111	105	114	126	153	137	131	167	
6	4	8	7	5	1	8	10	9	11	7	6	5	3	8	8	4	1	5	3	3	18	11	24	15	11	7	15	
..	..	..	..	..	..	..	..	..	..	..	..	..	29	37	41	51	44	25	34	13	19	24	15	20	18	14	17
136	147	134	125	137	131	143	157	156	136	143	109	134	132	133	152	146	125	109	100	122	114	123	114	120	142	164	151	
134	158	117	87	110	109	119	109	119	110	140	125	139	141	147	186	173	151	162	162	182	159	165	178	119	210	167	142	
397	543	285	306	346	265	371	316	435	353	402	351	214	196	172	260	488	365	390	634	207	178	155	172	127	141	135	91	
..	..	..	..	..	..	..	..	..	..	..	..	195	105	133	135	..	..	..	..	207	161	140	211	126	338	198	143
16	31	19	19	22	30	27	24	25	23	20	24	24	29	24	46	29	25	37	33	40	36	34	24	18	28	23	21	
166	182	188	109	160	197	148	229	92	226	110	155	160	50	119	193	144	114	124	112	108	125	121	53	53	57	39	58	
..	..	..	..	..	..	..	..	..	..	..	..	..	6	6	7	2	2	3	..	8	5	4	6	7	5	11	7
15	11	8	11	14	11	11	18	18	10	10	12	6	11	15	9	6	6	4	4	4	5	3	5	2	1	8	2	
13	11	5	6	6	5	2	2	3	..	..	3	2	3	2	3	2	4	..	1	1	4	1	4	..	..	..	..
29	24	28	24	20	29	15	29	29	19	36	27	24	30	56	43	48	45	41	24	25	29	34	33	34	32	35	42	
2	3	2	1	5	4	1	3	2	..	..	4	1	..	3	2	2	2	2	1	4	7	4	5	1	3	3	5
8	11	12	10	22	13	16	16	13	8	10	9	6	11	15	9	12	12	16	10	4	7	8	7	11	9	13	13	
195	231	219	242	222	194	189	235	200	202	232	187	178	196	182	240	195	177	163	158	165	179	128	118	136	150	124	120	
59	70	78	72	59	50	59	55	63	52	46	48	47	60	57	66	57	83	59	64	65	55	59	60	63	55	64	41	
..	2	4	6	4	3	5	4	2	9	4	12	2	5	13	6	9	4	2	3	2	4	13	12	3	6	12	11	
401	483	412	422	457	447	446	428	382	418	383	370	448	346	392	504	538	477	550	502	469	509	468	446	415	408	442	422	
27	40	22	27	36	18	9	35	14	26	25	25	26	21	21	23	15	39	32	25	20	6	10	20	5	8	26	2	
6	7	9	10	8	17	12	21	6	15	10	6	4	9	6	11	..	..	..	..	..	13	9	12	11	4	4	6
..	
..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
1	..	..	..	..	..	..	3	..	2	3	1	1	2	2	..	..	..	..	..	..	2	2	1	1	..	1	..
..	1	..	..	..	..	..	..	..	5	5	1	..	..	..	..	4	2	3	3	1	..	..	..	1	..	1	1
..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	..	2	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	4	3	4
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
3	2058	2407	1995	1913	2072	1928	2066	2075	2103	2077	2068	1807	2087	1873	1949	2504	2585	2089	2308	2641	2339	2026	1893	1960	1765	2283	1984	1759

*

* Nett Deaths from this year onwards.

TABLE VII.—Birth-rate, Death-rate, and Analysis of Mortality during the year 1926.

(Provisional figures. The rates for England and Wales have been calculated on a population estimated to the middle of 1926, while those for the towns have been calculated on populations estimated to the middle of 1925. The mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of towns).

	BIRTH-RATE PER 1,000 TOTAL POPULA- TION	ANNUAL DEATH-RATE PER 1,000 POPULATION.										RATE PER 1,000 BIRTHS.		PERCENTAGE OF TOTAL DEATHS.		
		All Causes	Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis (under Two years)	Total Deaths under One year	Causes of Death Registered by Medical Practitioners	Inquest Cases	Uncertified Causes of Death	
England and Wales	17.8	11.6	0.01	0.00	0.09	0.02	0.10	0.07	0.22	0.47	8.7	70	91.8	7.2	1.0	
105 County Boroughs and Great Towns, including London ..	18.2	11.6	0.01	0.00	0.12	0.02	0.10	0.10	0.22	0.43	11.8	73	92.0	7.5	0.5	
158† Smaller Towns (1921 Adjusted Populations 20,000-50,000) ..	17.6	10.6	0.01	0.00	0.07	0.02	0.11	6.06	0.23	0.40	6.6	67	92.6	6.3	1.1	
London	17.1	11.6	0.01	0.00	0.20	0.02	0.06	0.12	0.17	0.48	11.8	64	90.6	9.4	0.0	
Middlesbrough	23.35	13.16	0.01	0.00	0.03	0.00	0.40	0.03	0.25	0.39	14.4	99	91.76	7.61	0.63	

† Hanwell U.D. having been added to Baling M.B. on the 1st October, 1926, the figures relate to 168 towns for the first nine months and to 157 towns for the rest of the year.