

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

Contributors

Blyth (Northumberland, England). Borough Council.

Publication/Creation

1947

Persistent URL

<https://wellcomecollection.org/works/wp56ndmk>

License and attribution

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

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

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



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

LIBRARY



BOROUGH OF BLYTH

REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1947

A. G. NEWELL, M.D.; C.M.; L.M.; D.P.H.

PUBLIC HEALTH DEPARTMENT,
"DINSDALE,"
MARINE TERRACE,
BLYTH,
NORTHUMBERLAND.
March, 1948.





BOROUGH OF BLYTH

REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1947

A. G. NEWELL, M.D.; C.M.; L.M.; D.P.H.

PUBLIC HEALTH DEPARTMENT,
"DINSDALE,"
MARINE TERRACE,
BLYTH,
NORTHUMBERLAND.

March, 1948.

CONTENTS.

	PAGE.
Members of Committees	6
Forwarding letter to Council	8
Summary of Remarks on Statistics	9
Summary of Work for last Four Years	13

SECTION A.

Population and Vital Statistics	14
Principal causes of Infant Deaths	15
Principal causes of all Deaths	15
Cancer Deaths	16
Table—Causes and Age Distribution of Deaths	18
Return of Infectious Diseases for six years.....	19
„ „ Diphtheria cases and Deaths for seven years	19
Table of Diphtheria Immunisation for 1947 per ages	19
„ „ Summary of Diphtheria among Immunised	20
„ „ Summary Age Distribution of Cases of Diphtheria	20
„ „ Cases treated in Hospital.....	20
„ „ Tuberculosis 1944-47	21
„ „ „ (All Forms) 1938-1947	21
„ „ „ Cases on Register	22
„ „ „ Age Distribution	23
„ „ „ per Ward	23
„ „ Infectious Diseases—Age and Sex Distribution	24
„ „ „ „ —Age Distribution only	26
Scabies	27
V.D. Clinic cases for the year	28

SECTION B.

Health Visitors Services	29
Minor Ailments of Infants and Pre-school Children	30
Sun-ray, Ophthalmic, Orthopaedic and Dental Clinics.....	30
Infant Clinics and Conditions.....	32
Milk Supplies	33
Toddlers Clinics and conditions found.....	33
Vitamin Distribution	34
Infant Welfare Clinics and notes	35
Visits on Babies.....	35
Notes re Infant Welfare Combined Whooping Cough and Diphtheria.....	38
B.C.G. Vaccine	38
Total Attendances at Clinics.....	39
Toxaemia among Maternity Cases	40
Premature Babies	40
Skin and some of its Manifestations.....	41

SECTION C.

Table—Ante-Natal Clinics	44
Some points re Ante-Natal Clinics	44
Blyth Nursing Association.....	45
Maternity Homes and Hospitals—Babies born in Hospital.....	46
Toxaemia	46
Cost of Maternity Expenditure.....	47
Rh. Factor	47
Newcastle Obstetric Emergency Service	49
Gynaecological Clinic	51

SECTION D.

Housing	52
Table re Surveys and Condemned Areas.....	54
Population in Condemned Areas.....	54
Permanent Houses in Blyth.....	55
Number of persons granted Houses	56
“ Points ” Scheme	56
Water Supply	57
Factories Act	57

SECTION E. (EDUCATIONAL).

Nutrition	58
Iron Deficiency—Vitamins and foods containing iron	64
Infection by Food.....	65

SECTION F.

Ice Cream	66
Sanitary Inspectors'—Survey of Work	67
Milk tests and tests of Pasteurisation.....	70
Destruction of Cats & Dogs.....	71
Postage Costs of Department	71

BOROUGH OF BLYTH

CLINICS (Time Tables).

MONDAY.	A.M.	9.0	Office	M.O.H.	Beulah House	H.V.
		9.30	Special Examinations of School Children.	M.O.H.	{ Sun Ray Visiting	1 H.V. 1 H.V.
	P.M.	2.0	Diph. Imm.	M.O.H.	{ Diph. Imm. Visiting	1 H.V. 1 H.V.
		3.0	Office.	M.O.H.	Ante Natal	(Matron Scott).
TUESDAY	A.M.	9.0	Office	M.O.H.	Beulah House	H.V.
		9.30	School Med. Insp.	M.O.H.	Visiting	H.V.
	P.M.	2.0	M. & C.W.	M.O.H.	M. & C.W.	2 H.V.
		3.30	Office	M.O.H.	Beulah House	H.V.
WEDNESDAY	A.M.	9.0	Office	M.O.H.	Beulah House	H.V.
		9.30	School Med. Insp.	M.O.H.	Visiting	H.V.
	Week 1st P.M.	2.0	Office	M.O.H.	{ Women's Adv. Visiting	1 H.V. 1 H.V.
	,, 2nd	2.0	New Delaval M. & C.W.	M.O.H.	{ New Delaval M. & C.W.	1 H.V.
		4.0	Office	M.O.H.	{ Dental	1 H.V.
	,, 3rd	2.0	Toddlers	M.O.H.	{ Toddlers	1 H.V.
		4.0	Office	M.O.H.	{ Women's Adv.	1 H.V.
	,, 4th	2.0	New Delaval M. & C.W.	M.O.H.	{ New Delaval M. & C.W.	1 H.V.
		4.0	Office	M.O.H.	{ Visiting	1 H.V.
	THURSDAY A.M.	9.0	Office	M.O.H.	Beulah House	H.V.
		9.30	School Med. Insp.	M.O.H.	{ Sun Ray Visiting	1 H.V. 1 H.V.
	P.M.	2.0	M. & C.W.	M.O.H.	M. & C.W.	2 H.V.
		3.30	Office	M.O.H.	Beulah House Ante-Natal	H.V. (Matron Scott).
FRIDAY	A.M.	9.0	Office	M.O.H.	Beulah House	H.V.
		9.30	School Med. Insp. or San. Insp.	M.O.H.	Visiting	H.V.
	Week 1st P.M.	2.0	Bebside M. & C.W.	M.O.H.	{ Bebside M. & C.W.	1 H.V.
		4.0	Office	M.O.H.	{ Visiting	1 H.V.
	,, 2nd	2.0 to 5	Maternity Cases & Office	M.O.H.	Visiting	H.V.
	,, 3rd	2.0	Bebside M. & C.W.	M.O.H.	{ Bebside M. & C.W.	1 H.V.
					{ Visiting	1 H.V.
	,, 4th	2.0 to 5	Maternity Cases and Office	M.O.H.	Visiting	H.V.
	SATURDAY 9—NOON.		Office		(Eye Clinic when required).	1 H.V.

MEMBERS OF THE HEALTH COMMITTEE.

Chairman.....ALDERMAN H. DONNACHIE.

Vice-Chairman.....ALDERMAN J. MITCHELL.

THE MAYOR.

ALDERMAN DONNACHIE.

„ MITCHELL.

„ MURDY.

COUNCILLOR ALLEN.

„ ALLISON.

„ G. W. BARKER.

„ BREADIN.

„ CARR.

„ W. G. HEATLEY.

COUNCILLOR KAY.

„ KINSMAN.

„ RHODES.

„ RYDER.

„ SEARLE.

„ SHEWAN.

„ SMITH.

„ SOULSBY.

„ SUMMERS.

„ WATERS.

MEMBERS OF THE MATERNITY AND CHILD WELFARE COMMITTEE.

Chairman.....COUNCILLOR MRS. M. L. SUMMERS.

Vice-Chairman.....COUNCILLOR MRS. J. G. ALLISON.

Chairman, Vice-Chairman and Members of the Health Committee.

Plus :

Co-opted Members :—

MRS. COLEMAN.

MRS. DARLING.

MRS. HENSON.

MRS. LEVY.

MRS. MITCHELL.

MRS. PATIENCE.

MRS. ROUTLEDGE.

MRS. ROBINSON.

MRS. SEARLE.

MRS. WILKINSON.

STAFF OF THE PUBLIC HEALTH AND MATERNITY AND CHILD WELFARE DEPARTMENTS, 1947.

Medical Officer of Health.....
Medical Officer, M. & C.W......
Authority
Assistant School Medical Officer.....
and Port Medical Officer

{ A. G. NEWELL, M.D. ; C.M. ; L.M. ;
 D.P.H.

Ophthalmic Surgeon A. T. PATERSON, M.D. ; F.R.C.S.
 (Edin.) ; D.P.H.

Women's Advisory Clinic MRS. D. SINTON, D.B. ; CH.B.

Ante-Natal Clinic Medical Officer provided by the County
 Council.

Obstetric Emergency Service

{ PROFESSOR E. F. MURRAY, M.D. ;
 F.R.C.S. ; F.R.C.O.G.
 H. H. EVERS, M.B. ; M.S. ; F.R.C.S. ;
 F.R.C.O.G.
 F. STABLER, M.D. ; F.R.C.S. ;
 M.R.C.O.G.
 W. HUNTER, M.D. ; B.S. ; M.R.C.O.G.
 MR. ARTHUR, F.R.C.S. ; M.R.C.O.G.

Dental Surgeon H. O. J. BEDGOOD, L.D.S.

Senior Sanitary Inspector G. A. GILL, M.I.S.A.—from 1st March,
 1947.

Deputy Senior Sanitary Inspector J. G. SIMPSON, M.S.I.A.

Health Visitors

{ MISS R. M. FINLAY, S.R.N. ; S.C.M.
 MISS D. ROBSON, S.R.N. ; S.C.M.
 MISS M. MURRAY, S.R.N. ; S.C.M.—
 to end of August, 1947.

Temporary Clerk C. FELLOWS.

BOROUGH OF BLYTH.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1947.

1st March, 1948.

Your Worship, Ladies and Gentlemen,

I have the honour to present to you my report on the Public Health and Sanitary conditions in the Borough of Blyth during the year 1947.

A Summary of the main Public Health aspects, comments, and suggestions will be found on the first two pages.

I feel grateful for the support given in my endeavours for the benefit of the Public.

To my brother officers, I offer my thanks in appreciation of their co-operation, as well as to all others who have helped me. I also greatly appreciate the help of the lady helpers who voluntarily gave their time at the Welfare Clinic.

I extend to Dr. Messer our thanks for the trouble he has taken over the pathological and other tests.

I remain,

Your Worship, Ladies and Gentlemen,

Your Obedient Servant,

A. G. NEWELL,
Medical Officer of Health.

To the Mayor, Aldermen, and
Councillors of the Borough
of Blyth.

SUMMARY OF STATISTICS AND REMARKS.

Deaths.

The death rate, owing to the severe winter, is a little over last year, viz., 13.8 per 1,000 population. Of 469 deaths during the year 61.9% of these was in those over 55 years of age. Nearly half of the totals were among those over the age of 65. Only eight deaths were recorded between 1 and 5 years of age. The deaths among infants under one year was 45 which is a little more than the combined totals of those at age of 5-25 and 25-35, (See Tables), and calls for constant supervision in the homes of these infants. There was an improvement in the Infantile Mortality Rate. Of 45 deaths of infants under one year of age, no less than 27 were Neo-natal (under 1 month).

There were 54 cases of death from cancer, mostly of the stomach.

Births.

Total births 827 gives an excess of 86 over last year. Of these 357 were born in Maternity Homes under the Councils' scheme.

Infectious Diseases.

Total notifications was 564. During 1947 there were 256 cases of Measles notified equally among the two sexes of children, and with the exception of 7 cases all others were among the ages of 5 and under. Whooping Cough cases numbered 122, and peculiarly enough here too the two sexes of children were equally affected in numbers. 25 cases of Scarlet Fever, 21 Diphtheria cases and 50 notifications of Acute Pneumonia summarises the larger affections. As so many types of pneumonia exist their notifications have no special significance nor can any public health action be taken against the disease. Of the age distribution of notifications it is interesting to note that Scarlet Fever was mainly between the ages of 5 and 25, and Diphtheria likewise was mainly also among the same age distribution. The age period most affected by notified diseases was that of 5 to 10, and owing to Measles and Whooping Cough the period of 2 to 3 follows close on the former period. Total cases of Tuberculosis were 58 of which 47 were pulmonary cases.

Tuberculosis.

It is most important to prevent primary infection of a child since the younger the child the greater the chance of a fatal issue. Precautions can be taken by (a) pasteurisation of milk, (b) avoidance of contact with a case of pulmonary tuberculosis anywhere. For prognosis and settlement of infectivity an X-ray film must be interpreted *along with* clinical signs—without the latter it is wrong practice. It is often difficult or impossible to say on an X-ray film whether it indicates active or healed disease. There may be foci of active disease hidden by a heart or other shadow. Thus a small focus may be a source of infection to others. There may be an extensive infiltration around the focus and even its glandular component, and this “epituberculosis,” as it is called, may take months to heal, and even when X-ray apparently shows healing there may be a weak spot so that no one can guarantee freedom from infectivity.

In Sir Robert Philip's words in tuberculosis of the lung we are dealing with “a late Visceral Manifestation” of a widespread infection.

Of nineteen cases of Tuberculosis notified by the Tuberculosis Officer between the 6th March to the 30th December, 1947, fourteen of them had sputum reported on. In the case of these fourteen no less than ten were notified as Tuberculosis after the positive result was received.

Of the total of 431 sputa examined from all doctors no less than 320 gave negative results. All negative are not necessarily non-Tubercular cases.

The stethoscope can be of more importance than only a radiograph in the absence of the finding of tubercle bacilli. We must think first of the prevention among the community and the individual next according the stage of his disease.

Mass Miniature Radiography by the County Council :
A total of 10,448 people in Northumberland reported for X-ray and of these 525 showed some doubtful lesion on the miniature film. These individuals were brought back for re-X-ray, this time using a large film. Many of these latter cases were from areas outside the county and, in view of the confidential nature of this examination, it is assumed that a certain proportion would not have attended the dispensary. Of those who attended dispensaries under the auspices of this county council, 87% were found to be definitely suffering from pulmonary tuberculosis and of these 64% have been admitted to sanatorium or hospital. For

every 1,000 people examined in this survey five county residents were proved to be suffering from tuberculosis and 3.2 required institutional treatment. Many of those cases who were found to be suffering from tuberculosis felt quite fit and were carrying on their normal work without any difficulty.

Prevention and Control of Tuberculosis : So as to prevent the risk of B.C.G. being used on an already infected person, Calmette taught that it should be used on newly born infants. It is quite clear that B.C.G. could never completely prevent tuberculosis in this country.

B.C.G. Vaccine : B.C.G. cannot produce immunity to Tuberculosis ; what the vaccine does is that it markedly raises the body's resistance. About 500 people die from Tuberculosis every week in Britain so every measure to reduce it is worth consideration and testing. The method cannot be rushed in this country as conditions here differ from those in Scandinavia as to strain of the bacillus, climate, natural resistance of the people, housing, environment, etc. The method too is not entirely free of danger. It produces a local tuberculosis ulcer which may be difficult to heal.

Poliomyelitis : Between 15th May and 15th September, 1947, I was informed of ten persons who had been in contact with suspected cases, but in none of these—all of whom were visited or seen by me—was there any case. Of two local cases regarded as such, one certainly was as suspicious as any, and the case was sent to the Infectious Diseases Hospital.

Venereal Disease.

Regulation 33B came to an end on the 31st December, 1947.

Pleasing Features of 1947 statistics are :

(a) The percentage of infant deaths of the total deaths is the least for the last four years.

(b) The total births is the greatest for the last four years.

(c) That the excess of births (386) over deaths was still favourably maintained.

(d) The infantile death rate considerably fell and was lowest of those in the last four years.

(e) The total infectious diseases notified was the lowest during the last four years.

(f) The number of notifications of Diphtheria have gone down, by means of steady immunisation, to only 23 against 116 in 1944, and there has been no deaths of Blyth children from the disease.

(g) That nearly half the total deaths is among those over 65 years of age.

(h) There has been no maternal deaths.

(i) The deaths from cancer were the least for the last four years.

Thus we have reason to be well satisfied for the health of the people and for the progress made in the last four years.

The only adverse figures for 1947 are :

(a) A slight increase in premature babies.

(b) A higher number of tuberculosis cases on our Register.

(c) A Whooping Cough epidemic.

Home Helps.

Owing to the absence practically of Home Helps, I suggest the Council might consider the delivery of meals to invalids as certified by a doctor. The meals can be arranged for at any restaurant or caterer and the only business of the Council would be to deliver, free of charge, the meal at the bedside.

STATISTICAL SUMMARY FOR FOUR YEARS.

	1944	1945	1946	1947
Total Deaths	377	367	395	469
(a) Over 65 years	47%	55%	48%	61.9%
(b) Infants	13%	10.4%	12%	9%
Death Rate per 1,000 population ...	12.32	12.0	12.7	13.8
Birth Rate per 1,000 population	23.5	20.5	23.8	23.8
Excess births over deaths	342	260	346	339
Infantile Death Rate per 1,000 Live Births	69.5	61.8	64.7	49.5
Neo-Natal Death Rate per 1,000 Live Births.....	27.9	22.8	22.9	33.4
Still Births per 1,000 Live & Still Births	18.1	20.7	23.7	22.9
Babies born in Hospital			271	357
Babies born at home			470	470
Premature babies		17	27	34
Total Maternity Death Rate	Nil.	3.2%	Nil.	Nil.
*Total Infectious Diseases Notified...	1242	475	946	564
Total Tuberculosis Notified	74	64	82	58
Tuberculosis Deaths per cent of notifications	40.5%	37.5%	61.3%	63.8%
Number of Tuberculosis cases on Register	247	254	263	275
Death Rate per 1,000 Tuberculosis ...	0.9	0.7	1.2	1.1
Total Number of infants examined by M.O.H.	614	432	615	827
Total staff medically examined by M.O.H.	9	20	13	12
Total Immunisation by M.O.H.—				
(a) against Diphtheria	585 (71.33%)	812 (75.11%)	540 (77.66%)	504
(b) combined vaccine against Diphtheria and Whooping Cough	—	—	—	54
<i>Re Schools :</i>				
Total Medical Inspections of children by M.O.H.	6629	2301	778	1324
(a) Total Special Inspections ...	1764	(excluding b & c) 1275	974	537
(b) Minor Ailments (attended by nurses)	178	812	372	301
(c) Scabies, seen by M.O.H. ...	303	165	80	46
*Measles	723	67	641	256
Whooping Cough	156	35	67	122
Diphtheria	116	108	45	23
Age Distribution of all Infectious Diseases, between 5 and 10 years	406	133	364	103
Deaths from Diphtheria	Nil.	3	1	Nil.

Section A.

Statistics and Social Conditions of the Area.

Area.—No change in the Borough Area took place in 1947, and the acreage remains as formerly at 6,487.

Population.—(Registrar-General's estimate for year 1947) 33,920

Rateable Value £173,815

Sum Represented by a Penny Rate £664

Extracts from Vital Statistics.

		<i>Against 1946.</i>
The Birth Rate per 1,000 population	24.3	23.8
The Death Rate per 1,000 population	13.8	12.7
The Infant Mortality Rate per 1,000 Live Births	48.3	64.7
The Neo-natal Mortality Rate (dying in 4 weeks) per 1,000 Live Births	33.4	22.9
The Still Birth Rate per 1,000 Live and Still Births	22.4	23.7
Tuberculosis Death Rate (per 1,000 population)	1.1	1.2
Maternal Mortality	Nil.	Nil.

<i>Infectious Diseases.</i>	<i>Fatality Rate.</i>	<i>Case Mortality.</i>
Pneumonia . . . . .	.44 per 1,000 population	30.0

	1944	1945	1946	1947
Number of Births (Live)	719	627	741	808
Number of Deaths	377	367	395	469
Number of Births in excess of Deaths	342	260	346	339

The principal causes of Infant Deaths were as follows :—

Broncho Pneumonia (1 Neo-Natal)	4
Acute Bronchitis	5
Convulsions	2
Prematurity (15 Neo-Natal).....	16
Congenital	1
Pemphigus Neonatorum (1 Neo-Natal)	1
Gastro-Enteritis (2 Neo-Natal)	6
Spina-Bifida (1 Neo-Natal)	1
Neo-Natal Septicaemia (1 Neo-Natal)	1
Marasmus	1
Intussusception	1
Staphylococcal Septicaemia (1 Neo-Natal)	1
Cerebral Haemorrhage (2 Neo-Natal)	2
Neo-Natal Hip Infection (1 Neo-Natal)	1
Debility (1 Neo-Natal)	1
Asphyxia (1 Neo-Natal)	1
<hr/>	
(27 Neo-Natal)	45
<hr/>	

Neo-Natal Deaths = (Infants who died within 4 weeks).

The Principal causes of death (of all ages) were as follows :—

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Heart Disease	103	78	181
Brain Disease.....	24	21	45
Lung Disease	11	10	21
Kidney Disease	8	4	12
<i>Notifiable Diseases :—</i>			
(a) Pneumonia	6	9	15
(b) Cerebro Spinal Meningitis	1	—	1
Cancer	30	24	54
Senility	7	11	18
<i>Violence :—</i>			
(a) Suicide	6	—	6
(b) Road Accidents	3	1	4
(c) Drowned	1	—	1
(d) Other causes	7	4	11
Tuberculosis Pul.	18	12	30
Tuberculosis Other	4	3	7
Prematurity	12	4	16

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Influenza	1	1	2
Gastro-Enteritis	4	3	7
Malignant Growths	3	3	6
Other Causes	18	14	32

Totals	267	202	469
--------------	-----	-----	-----

232 of all deaths were in persons 65 years and over—49%.

46 of all deaths were among infants under 1 year—9%.

Cancer Deaths in 1947—Situation of Disease.

Age Group in Years.

SITE.	35—45		45—55		55—65		65—75		Over 75		Totals.		Grand Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Buccal Cavity.													
Tongue	—	—	—	—	—	—	—	—	1	1	1	1	2
Mouth	—	—	—	—	—	—	—	—	1	—	1	—	1
Digestive Tract.													
Colon	—	—	—	—	—	—	3	—	3	2	6	2	8
Stomach ...	—	—	2	—	1	—	3	2	1	2	7	4	11
Rectum ...	—	—	—	—	3	—	1	—	—	—	4	—	4
Liver	—	1	—	—	—	1	—	—	—	1	—	3	3
Pancreas ...	—	—	—	—	—	1	—	—	—	—	—	1	1
Oesophagus	—	—	1	—	1	—	—	—	—	1	2	1	3
Bowel	—	—	—	—	—	—	1	—	—	—	1	—	1
Respiratory System.													
Lung	—	—	—	—	1	—	2	1	—	—	3	1	4
Bronchi ...	—	—	2	—	2	1	1	—	—	—	5	1	6
Genito-Urinary System													
Bladder.....	—	—	—	—	—	1	—	—	—	—	—	1	1
Uterus	—	2	—	3	—	—	—	1	—	1	—	7	7
Other Organs.													
Breast	—	—	—	—	—	1	—	—	—	1	—	2	2
Totals ...	—	3	5	3	8	5	11	4	6	9	30	24	54

Laboratory Facilities.

Bacteriological (County Council Laboratory, Newburn).

A. Pathological.

(1) Throat, Nose and Ear Swabs.

Corynebacterium	Diphtheria Present	31	
"	" Not found	461	492
Virulent Corynebacterium	Diphtheria Present	8	
"	" Not found	2	10
Haemolytic Streptococci	Diphtheria Present	8	
"	" Not found	26	34
Meningococci	" "	5	5

(2) <i>Sputum</i> .			
B. Tuberculosis	Present	111	
" "	Not found	320	
" "	Insufficient material	2—	433
(3) Pleural Fluid (Tuberculosis) Not found.....			4— 4
(4) Blood (Widal). No reaction			3— 3
(5) Faeces (Pathogenic) no organisms found			6
Faeces (Pathogenic) specimens inadequate			1— 7
(6) Skin (Staphylococci) moderate growth			1— 1
(7) Cerebro-Spinal Fluid—no organisms found			1— 1
(8) Other specimens—no organisms found.....			1— 1
B. <i>Milk, Water, Etc.</i>			
(1) Water Samples (various sources).....			38
(2) <i>Milk Samples :</i>			
(a) For B. Tuberculosis		50	
" " " tests not carried out		12—	62
(b) For Methylene Blue		54	
(c) Pasteurised Milk (Methylene Blue Test)		38	
(d) " " (Phosphatase Test)		44	
(e) " " (B. Tuberculosis)		8	
(f) Sterility (Milk Bottles)		20—	164
<i>Composite Bulk Samples :</i>			
(a) Methylene Blue		3	
(b) B. Tuberculosis		1—	4

Registrar's Return. Deaths (All Causes) and Age Distribution—1947.

CAUSE OF DEATH.	0-1		1-2		2-5		5-15		15-20		20-25		25-35		35-45		45-55		55-65		65-75		Over 75		F.	M.	TOTALS.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Heart Disease	1	-	1	-	-	-	1	1	-	1	-	-	-	-	6	4	11	4	12	15	38	18	33	34	104	77	181
Brain	3	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	5	1	1	6	8	8	6	5	24	21	45
Lung	-	4	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	1	4	1	2	1	2	3	11	10	21
Kidney	-	-	-	-	-	-	1	1	-	-	-	-	-	-	1	-	-	-	1	2	3	-	2	1	8	4	12
<i>Zymotic Diseases:</i>																											
(a) Pneumonia	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1	2	2	-	2	2	6	9	15
(b) Cerebro Spinal Meningitis	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Cancer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	6	4	7	4	11	4	6	9	30	24	54
Senility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	11	7	11	18
<i>Violence:</i>																											
(a) Suicide	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	2	-	1	-	1	-	-	-	6	-	6
(b) Road Accidents	-	-	-	-	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2	2	4
(c) Drowned	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
(d) Other causes	1	1	-	-	-	-	2	-	-	-	1	-	1	1	1	1	1	-	1	-	-	1	-	-	7	4	11
Tuberculosis Pul.	-	-	-	-	-	-	1	1	-	4	-	3	1	5	1	1	3	1	4	-	2	-	-	-	18	12	30
" Other	-	-	-	-	-	-	1	1	2	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	4	3	7
Prematurity	12	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	4	16
Influenza	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2
Gastro Enteritis	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	3	7
Malignant Growths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2
Other causes	7	2	-	-	-	1	-	-	-	-	1	1	-	-	1	-	2	1	2	-	4	2	1	1	3	3	6
	29	17	1	3	2	2	11	5	2	5	3	5	5	8	16	10	33	14	34	32	71	34	60	67	267	202	469
	46		8				23					21			73				171				127				

Annual Returns for Six Years of Notified Cases of Infectious Diseases.

Year	Scarlet Fever	Diphtheria	Erysipelas	Pneumonia	Puerperal Pyrexia	Cerebro-Spinal Fever	Dysentery	Oph. Neonatorum	Tuberculosis Pul.	Tuberculosis Other	Whooping Cough	Measles	Malaria	Para. Typhoid Fever	Polio-Myelitis
1942	65	145	7	55	4	3	1	5	38	8	79	912	—	—	—
1943	123	98	13	82	6	1	4	2	57	8	90	80	—	—	—
1944	116	116	12	39	3	1	2	Nil.	57	17	156	723	—	—	—
1945	69	108	6	35	3	9	10	3	56	8	79	87	1	1	—
1946	44	51	13	58	2	3	1	Nil.	55	7	67	641	2	1	1
1947	29	23	13	50	1	8	Nil.	2	47	11	122	256	1	Nil.	1

Diphtheria.

Year.	Cases.	Deaths.	Remarks.
1941	300	20	Not Immunised.
1942	145	5	" "
1943	98	3	" "
1944	116	6	" "
1945	108	3	One Immunised (Dec., 1942).
1946	51	1	Not Immunised.
1947	23	Nil.	

Diphtheria Immunisation. Year ended 31st December, 1947.

	Under 5 Years.	5-15 years.	Total.
Total number of children immunised at end of previous year	1658	4625	
Add :			
Immunised at Clinic	431	18	
Immunised by Private Doctor or by adjoining authorities	51	4	
Immunised away and moved into Blyth	14	Nil.	
	<u>2154</u>	<u>4647</u>	<u>6801</u>
	Add : Children now 5 yrs. old ...	439	
		<u>5086</u>	
Deduct :	Deduct : Those over 15 yrs.	473	
Children now 5 yrs. old		<u>4613</u>	<u>6328</u>
Total at end of year			
Children completely re-immunised during the year	62	65	127

Summary of Diphtheria among the Immunised in 1947.

Period Elapsed.	No. of Cases.
Up to 6 months	—
6 months to 1 year	1
1 year to 2 years	2
2 years to 3 years	—
3 years to 4 years	1
4 years to 5 years	7
5 years to 6 years	1
6 years to 7 years	1
10 years to 11 years	—
No record of date of immunisation	—
TOTAL	13

Table Recording the Age-Groups of Cases of Diphtheria during 1947.

Age-Groups.	No. of Cases.	No. of Deaths.	Fatality Rate.
0-1 years	—		
1-2 years	1		
2-3 years	2		
3-4 years	—		
4-5 years	—		
5-10 years	10		
10-15 years	4		
Over 15	6		
TOTALS	23	Nil.	Nil.

	Treated in hospital.	Treated at home.	Total.
Diphtheria Cases	21	2	23
Convalescent Carriers V.T. positive	3	—	3
Healthy carriers V.T. positive	3	—	3

Tuberculosis.

Increase in Tuberculosis in this country :

	1939	1940	1941	1942	1943	1944
Notifications	25,355	26,260	28,966	29,560	30,121	30,044
Not notified before death but died of Tuberculosis	2,901	3,395	4,383	3,971	3,780	3,468
Blyth :						
Notifications	62	49	57	48	65	74
Deaths	31	30	20	31	20	30
	1945	1946	1947			
Blyth :						
Notifications	64	62	58			
Deaths	24	38	37			

Tuberculosis 1944—1947.

NOTIFICATIONS.

DEATHS.

1944 Totals	Males.		Females.		Males.		Females.	
	Pul.	Non-Pul.	Pul.	Non-Pul.	Pul.	Non-Pul.	Pul.	Non-Pul.
	28	12	29	5	16*	2	10	2
"	40		34		18		12	
Grand Totals	74				30			

* Includes Non-notified T.B. Cases—2 Deaths.

1945								
Totals	35	4	21	4	10	2	10*	2*
"	39		25		12		12	
Grand								
Totals	64				24			

* Includes Non-notified T.B. Cases—4 Deaths.

1946								
Totals	40	5	15	2	22	11	5*	Nil.
"	45		17		33		5	
Grand								
Totals	62				38			

* Includes Non-notified T.B. Cases—2 Deaths.

1947								
Totals	28	7	19	4	18*	4	12	3*
"	35		23		22		15	
Grand								
Totals	58				37			

* Includes Non-notified T.B. cases—3 Deaths.

Tuberculosis 1938—1947.

Year.	All forms of Tuberculosis notifications per year.	Number of Deaths, per year.	Death Rate per 1,000 population.
1938	48	25	0.7
1939	62	31	1.0
1940	49	30	1.1
1941	57	20	0.6
1942	48	31	0.9
1943	65	20	0.6
1944	74	30	0.9
1945	64	24	0.7
1946	62	38	1.2
1947	58	37	1.0

TUBERCULOSIS.

Statement of Tuberculosis Cases—1947 (as per Register).

	MALES.		FEMALES.		TOTAL.
	Pul.	Non-Pul.	Pul.	Non-Pul.	
(a) Number of cases of Tuberculosis on Register at commencement of year	128	25	88	22	263
(b) Number of new cases notified under the " Regulations of 1930 " for the first time during the year	28	7	18	4	57
(c) Number of cases restored to Register having been removed previous to 1936	1	—	—	—	1
(d) Number of cases added to Register and brought to notice otherwise than by formal notification	3	—	3	1	7
(e) Number of cases removed from the Register during the year...	22	6	21	4	53
(f) Number of cases remaining on the Register at the end of the year	138	26	88	23	275

TUBERCULOSIS—1947.

Summary of information extracted from Records Department, relating to cases removed from the Tuberculosis Register of the Borough during 1947.

	DEATHS.				Grand Total.	
	Pulmonary.		Non-Pulmonary.			
	Males.	Females.	Males.	Females.		
	18	12	4	3		
Total	30		7		37	
	RECOVERED.					
	5	5	2	1		
	10		3			13
	Total	10		3		13
	REMOVED FROM DISTRICT.					
	Nil.	4	Nil.	Nil.		
	4		Nil.			4
	Total	4		Nil.		4
					54	

TUBERCULOSIS, 1947.

Age Groups	NEW CASES.				DEATHS.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-pulmonary.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
0-1	—	—	—	—	—	—	—	—
1-5	—	1	—	—	—	1	—	—
5-15	2	2	4	2	1	1	1	1
15-25	9	8	2	—	—	7	2	—
25-35	4	1	—	1	3	1	—	2
35-45	6	3	—	—	5	1	1	—
45-55	5	3	—	1	3	1	—	—
55-65	1	1	—	—	4	—	—	—
Over 65	1	—	1	—	2	—	—	—
Totals	28	19	7	4	18	12	4	3
Grand Totals	47		11		30		7	

TUBERCULOSIS—1947.

Ward Distribution of Notifications and Deaths.

Ward.	Notifications.	Deaths.
Bebside	7	4
Croft	13	6
Delaval.....	5	5
Plessey	8	10
Ridley	6	6
Waterloo	19	6
Totals	58	37

INFECTIOUS DISEASES AND AGE DISTRIBUTION.

Number of Cases of Infectious Diseases originally notified during the year 1947 and of the Final numbers according to Age and Sex, after corrections subsequently made either by the Notifying Medical Practitioner or by the Medical Superintendent of the Infectious Diseases Hospital.

Ages, etc., N.K. — Age unknown Numbers originally notified	Scarlet Fever.		Diphtheria.		Whooping Cough.		Measles.		Acute Pneumonia.		Cerebro- Spinal Fever.		Erysipelas.		Acute Polio- myelitis.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Civilians (All Ages)	10	19	14	9	60	61	129	128	34	16	4	4	4	9	1	—
Non-Civilians (All Ages)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GRAND TOTALS	29	—	23	—	121	—	257	—	50	—	8	—	13	—	1	—
Final numbers after correction :—																
0—	—	—	—	—	6	14	12	11	3	6	2	1	—	—	—	—
1—	—	—	1	—	20	25	46	48	—	—	—	—	—	—	—	—
3—	2	4	—	—	15	13	50	49	—	—	—	—	—	—	—	—
5—	3	4	5	5	19	8	18	15	5	1	1	2	—	—	—	—
Civilians — 10—	4	7	2	2	1	—	1	—	—	—	—	—	—	—	—	—
15—	1	3	3	1	—	—	1	4	14	6	—	1	1	3	—	—
25—45	—	1	1	1	—	—	—	1	8	—	—	—	3	4	—	—
65 and over	—	—	—	—	—	1	—	—	4	3	—	—	—	2	—	—
Total Civilians	10	19	12	9	61	61	128	128	34	16	3	4	4	9	—	—
GRAND TOTALS	29	—	21	—	122	—	256	—	50	—	7	—	13	—	—	—
Non-civilians 15—45 and over or N.K.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Notifiable diseases.	Corrected notifications :— 1 Measles to Whooping Cough. 1 Diphtheria rediagnosed as Tonsillitis. 1 Diphtheria rediagnosed as Post Tonsillar Abscess. E.C.S.M. rediagnosed as Fibrositis of Neck. Polio-myelitis — notification withdrawn.															
Civilians.																
Puerperal Pyrexia	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Oph. Neonatorum	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria (contracted abroad)	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—

Corrected notifications :—
 1 Measles to Whooping Cough.
 1 Diphtheria rediagnosed as Tonsillitis.
 1 Diphtheria rediagnosed as Post Tonsillar Abscess.
 E.C.S.M. rediagnosed as Fibrositis of Neck.
 Polio-myelitis — notification withdrawn.

WHOOPING COUGH NOTIFICATIONS.

	1941	1942	1943	1944	1945	1946	1947
January	17	6	18	1	23	4	3
February	18	2	13	1	14	2	7
March	17	4	17	4	8	1	17
April	20	8	19	3	4	3	15
May	30	5	5	Nil.	4	4	13
June	33	7	5	3	1	5	10
July	44	2	3	4	5	5	17
August	31	4	3	10	6	10	20
September	21	7	2	8	2	8	8
October	16	7	3	32	3	8	7
November.....	25	14	Nil.	51	3	9	Nil.
December	27	13	2	39	6	8	5
	<u>299</u>	79	90	<u>156</u>	79	67	<u>122</u>

NOTIFIABLE DISEASES, 1947.

DISEASES.	Under											Over										Total.
	1 year.	1—2	2—3	3—4	4—5	5—10	10—15	15—25	25—35	35—45	45—55	55—65	65 yrs.									
Scarlet Fever	—	—	—	1	5	9	9	4	1	—	—	—	—	—	—	—	—	—	—	29		
Enteric	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Diphtheria	—	1	2	—	—	10	4	4	1	1	—	—	—	—	—	—	—	—	—	23		
Erysipelas	—	—	—	—	—	—	—	2	2	—	2	5	—	—	—	—	—	—	—	13		
Tuberculosis. Pul.	—	—	1	—	—	—	4	17	5	9	8	3	—	—	—	—	—	—	—	47		
Tuberculosis. Other	—	—	—	—	—	2	4	2	1	—	1	—	—	—	—	—	—	—	—	11		
Pneumonia	6	—	1	1	1	5	1	4	3	13	6	2	7	—	—	—	—	—	—	50		
Enceph-Letharg	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Oph-Neonatorum	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2		
Puerperal Pyrexia	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1		
E.C.S.M.	—	—	2	—	1	2	1	1	1	—	—	—	—	—	—	—	—	—	—	8		
Whooping Cough	20	22	23	15	13	27	1	—	—	—	—	—	—	—	—	—	—	—	—	122		
Measles	23	41	42	62	37	34	1	5	1	—	—	—	—	—	—	—	—	—	—	256		
Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Polio-Enceph'tis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Polio-Myelitis	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1		
Malaria	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1		
	51	65	81	79	57	89	25	40	16	23	17	10	11	—	—	—	—	—	—	564		

Note: The notification re Polio-myelitis was withdrawn, 1 E.C.S.M. re-diagnosed as Fibrositis of Neck and 2 cases of Diphtheria were re-diagnosed (1 as Tonsillitis and 1 as Post Tonsillar Abscess).

SCABIES REPORT FOR 1947.

School Children.

Number of Patients	46
„ „ Examinations by M.O.H.	46
„ „ Dressings	25
„ „ Baths given	124
„ „ Adult contacts	47
„ „ Adult contacts treated	3

Maternity & Child Welfare.

Number of Patients	7
„ „ Examinations by M.O.H.	5
„ „ Dressings	—
„ „ Baths given	11

**Summary of Blyth Residents who were treated at Blyth V.D.
Clinic during the Year ended 31st December, 1947.**

	Syphilis.		Gonorrhoea.		Non-venereal or undiag- nosed conditions.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.
1. Number of cases under Treatment or observation on 1st January, 1947	13	46	8	10	2	3	23	59
2. Number of cases (defaulters) removed from the register during any previous year which returned during the year for treatment or observation of the same infection	1	3	—	—	—	—	1	3
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) ...	9	10	15	11	22	12	46	33
4. Transfers from other areas	4	5	2	3	1	—	7	8
TOTAL	27	64	25	24	25	15	77	103
5. Number of cases discharged after completion of treatment and final tests of cure or after diagnosis as non-venereal	3	—	6	16	20	14	29	30
6. Number of cases which ceased to attend before completion of treatment	1	7	1	1	—	—	2	8
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	2	5	1	1	—	—	3	6
8. Transfers to other areas	5	3	9	2	5	—	19	5
9. Number of cases remaining under treatment or observation on 31st December, 1947	16	49	8	4	—	1	24	54
TOTAL	27	64	25	24	25	15	77	103

Section B.

HEALTH VISITING SERVICES.

YEAR.	First Visits to infants.	Re-visits to infants under 1 year.	Visits to children 1-5 years.	Ante-Natal Visits. First Visits.
1941	745	870	1689	87
1942	459	1040	2140	50
1943	469	984	2280	43
1944	664	1318	2620	19
1945	653	747	2548	22
1946	731	556	2110	68
1947	784	724	1988	130

The total 1st visits made during 1947 gives 6 visits per week for each of three Health Visitors, which is not high.

Health Visitors.

In the existing shortage of Health Visitors it is a matter for consideration as to how best to utilise the services of such, and how far the need of trained nurses are required owing to the existing shortage of nurses leading to closing of beds. A corollary from these has arisen the question of the future training of Health Visitors and the curtailment of their training to meet the demand. At certain clinics the trained nurse is not essential. Before a person can even treat the sick she must know the healthy state and the need of teaching Hygiene and all that is included in its expanded meaning. Their primary duty is to carry the message of health to the houses. A trained nurse is not an essential at every clinic and I agree with Dr. Morley Fletcher and another lady that recruits could be trained specifically for the duties of a Health Visitor. At local Health Centres Health Visitors, and not trained nurses, will be mainly required. The Chairman of the Women's Public Health Association agrees in this in her letter to 'THE TIMES.' The Chairman of the Public Health Section of the Royal College of Nursing also asserts that the Health Visitor's primary responsibility is to promote the health of the people. Our Health Visitors have done their best with the shortage in numbers. Some girls may be willing to be trained for as a Health Visitor but not willing to become a trained nurse.

NOTIFICATION AND REGISTRATION OF BIRTHS.

YEAR.	Notified Births.		TOTAL.
	Live.	Still.	
1941	573	19	592
1942	539	15	554
1943	604	13	617
1944	719	13	732
1945	628	23	651
1946	741	18	759
1947	808	19	827

Treatment of Infants and Pre-School Children.

Minor Ailments Clinic.

	No. of Cases.	Total Attendances.
<i>Diseases of the Skin :—</i>		
Scabies	1	3
Impetigo	16	40
Eczema	2	12
Dermatitis	1	2
Others	30	52
<i>Minor Eye Defects :—</i>		
Ophthalmia	1	12
Conjunctivitis	18	110
<i>Minor Ear Defects :—</i>		
Otorrhoea	4	30
Others	8	9
<i>Miscellaneous :—</i>		
Minor Injuries	3	18
Ringworm	2	11
TOTALS	86	299

Sub-Ray Clinic.

	Between 1 and 5 years.	
	Male.	Female.
Number of Children	20	13
Attendances	446	
	Over 5 years.	
	Male.	Female.
Number of Children	11	21
Attendances	436	

22 children under five years, were treated for the following complaints :—

Debility	12
Glands.....	2
Coryza.....	2
Post Pertussis	1
Catarrh	3
Pink Disease	2

In addition to the above, 11 children received Sun-Ray Treatment as a tonic.

17 children over 5 years were treated for the following complaints :—

Boils	1
Debility	7
Coryza.....	4
Alopecia	1
Glands.....	4

15 other children received Sun-Ray Treatment as a tonic.

Dental Clinic.

	Extractions.	Number of Cases.
Children under 5 years	62	30

Ophthalmic Clinic.

Number of new patients	26
Number of old patients.....	22
Spectacles prescribed	37
Spectacles not prescribed.....	12

Throat, Nose and Ear Clinic.

Operations for removal of Tonsils and Adenoids : 2.

Orthopaedic Defects.

Number of children with Orthopaedic defects : 19.

Maternity & Child Welfare Services.

Home Visiting by Health Visitors.

Visits to Infants under 1 year	784	
Number of re-visits under 1 year	724	
Number of women visited who had " Still- births "	19	
	—	1527
Visits to children 1-5 years	1988	
Visits to expectant mothers (first visits) ..	130	
	—	2118
Total		3645

Miscellaneous Visits.

	First Visits.	Re-visits.	Total.
Puerperal Disease	1	—	1

Infant Welfare Clinic.

Table A.

No. of Sessions.	First Attendances.	Re- attendances.	First Attendances.	Re- attendances.
	0-1 year.	0-1 year.	1-5 years.	1-5 years.
111	452	4,223	46	284

Table B.

Total No. of Attendances.	Average No. of Attendances.	Number Average at M.O.'s sessions.
4,507	40.67	9.53

Total number of children under 5 years who attended the Clinic :—613.

Total Pre-school children seen in 1947 by the Medical Officer of Health :—

At Toddlers Clinic	99
At Baby Clinic	827
Immunisation completed	482
Total	1408

The total quantity of milk supplied by the Council at the Clinic to young children was 5,480 lbs. of Dried Milk.

The following conditions were noted among infants under 1 year of age :—

Congenital Malformations :—

Phimosis	24
Umbilical Hernia	12
Talipes	2
Pyloric Stenosis	1
Pink Disease	2

Diseases of the Digestive System :—

Feeding Dyspepsia	17
Vomitting and Diarrhoea	5
Constipation	22

Diseases of the Respiratory System :—

Bronchitis and Bronchial Catarrh	14
Coryza	11

Diseases of the Skin :—

Infantile Eczema	3
Impetigo	5
Dermatitis	9
Other Sores	20

Diseases of the Eye :—

Conjunctivitis	15
Blepharitis	1
Ophthalmia	2

Diseases of the Throat, Nose and Ear :—

Otorrhoea	3
Otitis	2

Other Diseases :—

Stye	1
Tongue Tie	9
Naevi	10

Toddlers' Clinic.

Special Sessions were held, when necessary, for children between the ages of 2 and 5 years.

No. of Sessions.	Average Attendances.	Examinations by M.O.	Total Attendances.
9	11.0	99	99

At these Sessions, the following conditions were found :—

Congenital Malformations :—

Heart Disease 2

Diseases of the Respiratory Tract :—

Bronchitis and Bronchical Catarrh 3

Bronchitis and Nasal Catarrh 2

Diseases of the Neck and Glands :—

Dental Defects 2

Cervical Glands 1

Diseases of the Skin :—

Impetigo 2

Diseases of the Throat, Nose and Ear :—

Enlarged Tonsils and Adenoids .. 6

Other Diseases :—

Pes Planus 3

Genu Valgum 3

Minor Injuries 3

Vitamin Product Scheme :—

The above scheme was still in operation during 1947, at the following centres :—

Ante-Natal Clinic—Beulah House.

Municipal Clinic—Beulah House.

Bebside Senior School.

Newsham Junior.

Attendances reached the following figures for 1947 :—

<i>Ante-Natal Clinic.</i>	<i>Municipal Clinic.</i>	<i>Bebside.</i>	<i>Newsham.</i>
630	596	58	439

Much of the Vitamin Product is now issued at the Food Office. With the Clinic at New Delaval the Vitamin products will be given out there and not at the School.

Infant Welfare Clinic.

Branch clinics for infants have now been arranged for New Delaval and Bebside areas. I have been fortunate in having the voluntary co-operation of nine ladies to help at the Beulah House Clinic, two at Delaval and three at Bebside. In my opinion this co-operation should be encouraged everywhere. Health Visitors are primarily engaged for carrying the message of health to those in the homes and not attendants at clinics.

Total number of children under 5 years of age who *first* attended the Clinic during the year :

Under 1 year of age : 452. Over 1 year of age : 77.

Total number of children under 5 years of age who attended the Clinic during the year :

Under 1 year of age : 355. Over 1 year of age : 283.

Some Important facts re Welfare of Children.

1. *Domiciliary Visits* : The young mother with her first baby requires special continuous visits for the first month (4 weeks) as this is the most critical period of infant feeding. Domestic teaching is also required before malnutrition is conquered. It is not enough to sell or give a cheap booklet.

2. *The Unmarried Mother and the illegitimate child* need special recognition by the health visitor.

3. Future positive health among the oncoming population depends on the greater frequency of visits by the health visitor. One incapable of going about is not fit to undertake the essential duties of a health visitor. By her visits she can prevent illness. The future services require additional outdoor duties by the health visitor.

Visits on Babies.

Number of visits required per annum.

	<i>Number.</i>		<i>Total Visits.</i>
Under 1 year	827	4 visits each	3308
1 to 2 years	741	3 visits each	2223
2 to 5 years	1950	Yearly	1950

Total children to be visited	3518	Total visits to be done	7481
		Actual visits done ..	3496
		Deficit in work	3985
First visits made	784	Total to be done 1-5 years	4173
Revisits	724	Less visits done ..	1988
Total on under 1 year	1508	Gross deficit on 1-5 years	2185
Total 1st visits	784	Total for 1st year to be done	3308
Total 2nd visits	724	Actual done	784
Visits 1-5 years	1988	Deficit	2524
	3496		

1st Visits—261 per year for each of 3 Health Visitors—5 per week.

Revisits—241 per year for each of 3 Health Visitors—5 per week.

Visits 1-5 years—662 per year for each of 3 Health Visitors—13 per week.

Care of children—Curtis Report: After years of investigation this report has been published and to the credit of the Labour Government, has been rapidly acted on. The wandering, wavering feet of the unwanted child will now have a loving hand to direct its life through the world's troubles; and thus a new light shines on a past shame of this country.

Circumcision: Abraham made a compact with his Arabian wife that all their males would be circumcised on the 8th day, and he at his age of 99 underwent the operation at the same time as his son Ishmael aged thirteen (probably gave rise to this Arab custom at that age). The Jews have since practised this as a ritual. There is no sound foundation for the operation except in the existence of some malformation. Before ten days the prepuce should be retracted and then the mother taught how to cleanse the

glans, and she in her turn tell the son later. In the absence of retraction natural secretion is hemmed in and the fore skin's mucous membrane may become attached to the glans. Circumcision gives the following: (a) Removes a natural covering (b) causes the natural delicate surface cells of the glans to become hard like skin (c) produces a wound which gives entrance to the Tuberculosis germ (d) may be one reason why in later life cancer developes there. Over 90% of prepuces can be retracted.

Infants are born with some immunity to infections and these are those to which the mother is immune to. Neither the mother nor the infant is immune to the infections of another woman or infant, and so the danger of such in a maternity ward or infant nursery demands measures of precaution and scrupulous aseptic methods by the staff.

Acrodynia (Pink Disease): Exclusively in young children. The child is listless, irritable, with contracted eyelids. The skin is cold and sweating which gives rise to thirst and causes the skin eruptions, chiefly papules; and because the skin between the papules may be blueish or red it got its name Pink Disease. The hands and feet may show a pink erythema. Papules peel and there is itching, and often pulling at the hair. It is regarded as an infection of the autonomic nervous system. Cases treated by Vitamin B seem to improve. Recovery is the rule. The child wants nursing and little handling. Being liable to infections it should not be in a hospital nor never with other children (out patients department).

Taking out tonsils can alter a child's personality and result in a permanent nasal accent, according to Dr. James S. Greene, medical director of the National Hospital for Speech Disorders in New York. It was a mistake to regard the removal of tonsils as a minor operation. Muscular weakness in the throat was increased by the operation, and the air flow into the nose while speaking could not be properly controlled. "If too much tissue is removed when the operation is performed the child's whole personality may be altered by the effect on voice and speech," said Dr. Greene. "Results may be disastrous, sometimes unavoidably, but too often because the operator has not had in mind the possible effects of his procedure on voice and speech." Rarely does a child under seven need removal of Tonsils. STATISTICS URGE CONSERVATION.

Combined Vaccine against Diphtheria and Whooping Cough.

I have been trying the effect of such a vaccine on infants between three and six months only, whose parents are willing.

The Glaxo "combined antigene" contains

each c.c. of Diphtheria and Whooping Cough combined vaccine.	} consists of	{ 0.5 c.c. Diphtheria A.P.T. and 0.5 c.c. Pertussis alum precipitated vaccine containing 20,000 organisms.
--	------------------	---

Immunity is said to last a few years and if effected at six months, is wisely repeated at the third year and again on entrance to school.

Dosage : Three : 0.5 c.c., 0.5 c.c. and 1.0 c.c. at one month intervals. Wash the site with spirit then liq. sap. antisepticus (B.P.C.).

Site : Intra-muscularly in vastus externus or buttock—1st on left thigh, 2nd on right thigh and 3rd in upper outer quadrant of gluteus muscle.

Cost : A 5.0 c.c. bottle works out at $1/1\frac{3}{4}$ d. per c.c.

B.C.G. Vaccine : A strain has been grown from a bovine bacillus which was in 1908 of normal virulence. Since then it has been grown and transplanted every fifteen days so that it has become less virulent and after four years found non-pathogenic to cattle and guinea pigs but caused the disease in rabbits and horses. Then after thirteen years and 230 transplantations it was found incapable of forming reinoculable tubercles.

In animals, tuberculous lesions were produced but they retrogressed. The weight of experiments showed B.C.G. to be an attenuated bacillus which will not produce progressive disease. In 1921 it was first used to vaccinate new born babies by the mouth. All reliable workers have shown B.C.G. to increase immunity but consider its use should be limited to children in slum areas, or to those particularly exposed to the risk of Tuberculosis re-infection.

Tuberculous Meningitis is usually due to the human strain of tubercle bacillus and this is not spread by milk (except in the rare case of a human spreader infecting the milk).

Total Attendances at Clinics.

	I.W.C.	T.C.	D.C.		Eye C.	S. Clinic	U.V.R.		A.N.	Min. Ail.	Total.
			(C)	(M)			In.	Sc.C.			
1st Quarter	816	18	4	9	14	47	135	145	787	58	2033
2nd "	1208	26	9	3	15	73	166	105	915	115	2635
3rd "	1325	29	10	10	9	45	53	84	824	83	2472
4th "	1158	26	7	13	10	62	92	102	834	43	2347
	4507	99	30	35	48	227	446	436	3360	299	9487

I.W.C.	—	Infant Welfare Clinic.	U.V.R.	—	Ultra Violet Ray.
T.C.	—	Toddlers Clinic.	In.	—	Infants.
D.C.	—	Dental Clinic.	Sc. C.	—	School Children.
(C)	—	Children.	A.N.	—	Ante-Natal Clinic.
(M)	—	Mothers.	Min. Ail.	—	Minor Ailments Clinic.
Eye C.	—	Eye Clinic.			
S. Clinic.	—	Scabies Clinic.			

Toxaemia Cases among Maternity Cases.

No. of Cases.	Toxaemia.	Complications.	Days in Hospital.
1947.			
March— 2	2	1 Breech Delivery.	22. 17.
April— 2	2	1 Surgical Induction.	14. 36.
May— 3	3	1 Anaemia—Blood Transfusion. Surgical Induction	20. 26. 18.
June— 2	2	1 " " 1 Disproportion. Lower Segment Caesarian Section.	19. 12.
August—1	1	Rh. Negative	11.
10	10	6	

The total number of premature babies notified during 1947 who were born :—

- (1) at home 15
- (2) in hospital or nursing home .. 19

The number of those born at home :—

- (1) who were nursed entirely at home : 15.
- (2) who died during the first 24 hours : 4 and 1 stillbirth.
- (3) who survived at the end of one month : 9
(1 died at 3 weeks).

The number of those born in hospital or nursing home :—

- (1) who died during the first 24 hours : 3.
- (2) who survived at the end of one month : 11.

Health Visitors Reports on Confinements, Infants Born, etc.

MONTH 1947.	Births.	D.*	M.T.*	Others	1st Visits.	Premature.	Still-births.	Number Children Died.	Illegitimate	Breast Fed.	Artificial.	or Part.
Jan.	81	8	6	2	71	6	1	5	3	45	10	24
Feb.	61	13	3	8	55	2	2	5	2	29	3	21
Mar.	90	15	12	8	83	3	2	3	1	69	10	20
April	51	16	4	7	75	2	1	4	2	32	5	12
May	78	28	4	8	50	4	3	3	2	47	7	19
June	62	12	1	6	63	2	2	Nil.	2	40	5	12
July	69	23	7	5	68	4	2	4	2	32	5	25
Aug.	67	24	9	5	73	2	2	5	3	41	7	13
Sept.	69	19	5	6	65	3	—	3	3	39	7	21
Oct.	66	19	4	4	83	2	1	4	2	41	6	16
Nov.	57	24	5	6	38	3	2	5	1	29	5	17
Dec.	76	22	4	5	60	1	1	Nil.	2	44	3	27
	827	223	64	70	784	34	19	41	25	488 = 59%	73	227 300 = 36.2%

(*D.) Dilston Hall Maternity Hospital.
(*M.T.) Mona Taylor Maternity Hospital.

The Skin and Some of its Manifestations.

In 74% of infective lesions of the skin 77% were found to have infected teeth. (Weiner). Dirty fingers cause these.

Infectious diseases of Scarlet Fever, Whooping Cough and Measles have of late years been of a milder type but that does not justify anyone taking risks with them. Scarlet Fever can be serious to the heart, and serious complications of gangrene of the skin and fatal purpura may occur. A dangerous complication that could occur is a cutaneous emphysema. As measles is most contagious about twenty four hours before a diagnosis can be made by the skin eruption, there is the risk of lung complications.

German Measles is known as Rubeola in German literature and as Rubella in England. Enlargement of many glands may be the only sign, and those behind the ear and posterior part of the neck are often enlarged before any rash.

Chicken Pox (Varicella) eruption is most dense on the trunk and this centripetal distribution is of diagnostic importance against the centrifugal distribution of smallpox pustules which are scant on the trunk and crowd on the hands and feet besides the forehead. As the successive 'crops' occur there will be eruption in various stages of development.

Tuberculosis: If the skin of a person who has *not had* Tuberculosis before is infected with tubercle bacilli, then a lesion occurs with rapid ulceration, inflammation and abscess formation. This is best seen from cases of circumcision Tuberculosis or other injury infections and is known as the primary complex of Tuberculosis of the skin. This complex is not so often as its lung counterpart. But removal of the skin infection does not prevent systemic infection. Nevertheless circumcision should be avoided.

The Skin cannot replace the functions of the kidneys. Both daily in normal state excrete about 1300 c.c. of water. The kidneys however can take from the blood thirty times more urea and three times more common salt than the sweat glands.

Deficiency of the thyroid gland (Hypothyroidism): The skin is pale and cold, and such persons feel the cold more than normal persons. The dryness of the palms and arm-pits is striking, and there is desquamation of the skin.

Skin of the newborn babe : The sebaceous and sweat glands assume full function after the 4th or 5th month of extra uterine life, but secretion is present from the 6th month of intrauterine existence. Many vascular naevi disappear. The infantile skin has a great tendency to form blisters as well as that of causing haemorrhage, of which melena neonatorum is the most common. The cause is a deficiency of prothombin (necessary for clotting of blood). This is a result of deficiency of Vitamin K. The human body is unable to make this, which comes from plants, but the newborn is given enough by the mother for the first week of its life. If the infant uses all and there is deficiency, then haemorrhagic disease arises. Vitamin K prevents this. If the mother is given 2 mg. of Vitamin K for two days before delivery then haemorrhagic disease is prevented.

Diabetes : The absence of sugar in the urine does not exclude diabetes—especially with Fethling's test. Blood sugar determination is the important diagnostic procedure. The test can be simple by drinking 100 grams of dextrose in water *after* twelve hours of fasting and then testing for the amount of blood sugar after one-half, one, two, and three hours. Under and overfeeding and other factors influence the result.

Sugar Metabolism in the skin : The skin makes up 16% of the body weight—weighs one-sixth of the body and three times more than the liver—and the normal fasting skin sugar amounts to 58% of the blood sugar. In diabetes the skin sugar/blood sugar ratio is high. The diabetic skin stores sugar for a long time. Normally the skin stores, decomposes, and excretes sugar. The skin contains enzymes splitting carbohydrates with the formation of lactic acid, etc. Sweat and blister serum also contain sugar. In the cases of those intolerant of sugar, the sweat on evaporation can deposit sugar and cause irritation and skin eruptions like those who work with sugar. The use of insulin has reduced the incidence of skin affections. In all skin affections the urine should be tested for sugar. There seems a relationship between diabetes and psoriasis. Even dry skin and chapping of the hands in cold weather might show a latent diabetes. Acne improves on a low carbohydrate diet, and sugar stimulates the sebaceous glands (so test for sugar in seborrhoea).

Vitamin Deficiencies : The fat droplets which contain Vitamin A are highly fluorescent in ultra-violet light, but lose this property in ultra-violet light, and Vitamin A has been found absent from the skin even after feeding with high doses. Deficiency of Vitamin A is shown by night blindness (since the visual purple and visual violet develop from Vitamin A). It seems that Vitamin A is concerned with lipids and so in deficiency of it you get dryness of the skin from the blockage of the oil and sweat glands ; and " toad skin " is also a sign. It is doubtful if it gives any protection against infections.

Cutaneous Sensations : We have warmth spots, cold spots, touch spots, and pain spots in the skin. Warmth spots are most dense on the face and sides of the fingers. The cold spots are more numerous and also of greatest density of the face and on the trunk. About one-third of the body surface, it is said, is unable to perceive warmth. Pain spots are most dense behind the knee and least on the tip of the nose. The touch spots are mostly situated where hair exists. A shaved area is less sensitive to touch than a hairy part.

Section C.

Ante-Natal and Post-Natal Clinics.

Total number of women who attended the Clinics during the Year :

Ante-natal	3,360
Post-natal	9

Some points re Ante-Natal Clinic.

1. Investigations (Gregg, Swan and others) have shown that pregnant women, who in the early stage, suffered from German Measles (Rubella) were liable to have their infants born with some of the following : congenital defects including cataract (on one or both sides), microcephaly (small skull), congenital heart disease, deaf mutism, obliteration of the bile ducts, and mental backwardness. It is therefore for all to see that no pregnant women should be in contact with any such case. Parents of children affected should be seriously warned by general medical practitioners. Given a woman having contracted *German* measles within the first two months of pregnancy then the chance of the infant being born as a congenital defective child is in the region of 100 per cent.

2. If sugar is found in the urine then it has to be investigated whether it is lactose or glucose and to differentiate whether it is diabetic. Urine should be examined by the Benedicts' test.

3. It has been recently shown that the true conjugate diameter of a woman's pelvis is $4\frac{1}{2}$ " and not the shorter measurement believed. If contracted pelvis is suspected then X-ray picture can give all the measurements.

4. Pregnant woman's diet has been put by the League of the Nations Technical Commission as required to be 2,800 calories daily with 100 grammes daily of protein, i.e., 2 grammes (32 grains) per kilo (2.21 lbs.) of body weight. Of the proteins at least half should be from milk, eggs and meat. Sufficient Vitamin D is necessary and also minerals (Calcium, Phosphorus and iron).

5. Milk is the richest source of calcium and a quart (1200 c.c.) given daily will ensure 1.4 grammes of calcium to the pregnant woman providing enough for the mother and foetus.

6. The importance of fat soluble vitamins in the diet of pregnant women is shown by the greater liability to respiratory disease in infants of mothers with a deficiency of such vitamins. Two teaspoonfuls of cod liver oil (or halibut oil) should be given to the pregnant mother throughout pregnancy and during lactation.

7. Vitamin K is necessary for the formation of prothrombin—a necessary factor in blood clotting. In premature infants there is a great deficiency of Vitamin K and so such an infant is liable to Haemorrhages. Thus it has been suggested that this should be given for a month before the termination of labour. Certain anaesthetics and analgesics depress the formation of prothrombin in the liver by damaging the liver in mother and child.

8. Giving sea fish twice weekly during pregnancy and lactation will supply adequate iodine and so prevent simple goitre in the offspring.

9. Foetal and neonatal mortality can be reduced by keeping every case of ante-partum haemorrhage in hospital till the birth of the child.

Blyth and District Nursing Association.

	<i>Blyth.</i>	<i>New Delaval.</i>	<i>Bebside.</i>
Number of Nurses	7	1	1
Number of Maternity cases	74	41	—
Number of Midwifery cases by Midwives...	278	33	48
Number of Medical Cases.....	151	56	3
„ „ Surgical „	147	41	40
„ „ Chronic „	39	3	1
Total Cases	689	174	92
Number of Midwifery visits	—	—	992
Ante-Natal Visits	4062	328	438
Post-Natal Visits	249	102	346
Visits to Maternity cases	6019	1241	—
„ „ Surgical „	7947	1826	961
„ „ Chronic „			
„ „ Medical „			
Number of Casual visits	—	—	537
Total Number of visits	18,277	3497	3274
Number of children nursed under 5 years of age	—	16	—
Nights on duty	227	—	—
Patients booked into hospital	332	—	—

Maternity Home.

The final decision has not been taken as to whether Beulah House (at present in use for the various clinics) should be bought and converted into a Maternity Home. However Ballaratt House will be also purchased and utilised for purposes of clinics. Beulah House even at the heavy expenditure of conversion will not in my opinion give Blyth a suitable Maternity Home and will be a heavy annual cost. The place would be more suitable for a Health centre. Ballaratt House has the better possibilities, in my opinion, for a Maternity Home. Neither place will give a modern type of Maternity Home such as Blyth could be proud of. If the Regional Board converted Knight Memorial Hospital for such a purpose it would be more sensible, and give Blyth an enlarged General Hospital in which the Port Authority could co-operate. In any case since Maternity Homes to which we send cases cannot utilise all their beds for want of staff, I cannot see the proposed Maternity Home advancing without them.

Toxaemia Cases.

There were 10 cases (6 primiparae and 4 multiparae) of toxaemia of those sent to Dilston Maternity Home. All were uncomplicated cases during pregnancy but one was anaemia. Regards the confinement, one was breech presentation, two were surgical inductions (though normal deliveries) and one a lower segment caesarian section. Only two of these cases had slight albumen and none with high blood pressure. One infant was hydrocephalic. The ages of the primiparae were between 19 to 27, and in them the above abnormal deliveries were experienced.

Toxaemia.

This term appearing in connection with Maternity is not easily understood by the lay person. Toxins are commonly classed as poisons and so you may have toxins arising in the body as a result of disease, from something formed by some chemical change in the body secretion, from chemical poisons arising from alimentary dysfunction, from local sepsis, and from the introduction into the blood stream of some organism—and so to the liver or other organ. No one knows the various causes nor the processes of toxaemias—much is pure theory. Renal disease and sepsis in some way are on surer ground in connection with maternal Toxaemia.

Total Cost of Maternity Expenditure, 1947.

Quarter.	Dilston Hall.			Preston Road.			Mona Taylor.			Princess Mary.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
31.3.47	622	17	2	26	5	0	217	17	5	61	10	0
30.6.47	706	8	3	37	8	0	127	2	11	84	14	0
30.9.47	792	17	4	52	9	9	139	19	11	50	10	6
31.12.47	845	14	4	39	9	9	128	11	4	152	13	0
	<u>£2967</u>	<u>17</u>	<u>1</u>	<u>£155</u>	<u>12</u>	<u>6</u>	<u>£613</u>	<u>11</u>	<u>7</u>	<u>£349</u>	<u>7</u>	<u>6</u>

Grand Total.

£	s.	d.
£2967	17	1
155	12	6
613	11	7
349	7	6
<u>£4086</u>	<u>8</u>	<u>8</u>

RH. FACTOR.

Confinements Over.	Positive.	Negative.	Total.
1st Pregnancy	72	22	94
2nd "	52	8	60
3rd "	24	6	30
4th "	9	1	10
5th or over	17	5	22
	<u>174</u>	<u>42</u>	<u>216</u>

Confinements Due in 1948.

1st Pregnancy	67	14	81
2nd "	44	13	57
3rd "	28	3	31
4th "	7	2	9
5th or over	13	3	16
	<u>159</u>	<u>35</u>	<u>194</u>

TRANSFUSIONS.

Confinements over in 1947.

1st Pregnancy	—
2nd "	1
3rd "	2
4th "	—
5th "	—
	<u>3</u>

Confinements due in 1948.

1st Pregnancy	1
2nd "	—
3rd "	1
4th "	—
5th "	—
	<u>2</u>

COMPLICATIONS (Dilston Hall cases only).

	<i>Confinement over.</i>
1st Pregnancy	23
2nd "	7
3rd "	3
4th "	2
5th or over	—
	—
	35
	—

RH. FACTOR.

1. Of 216 cases of pregnancy whose blood was tested, 19.4% were Rh. negative, and over half of those were found in the first pregnancy cases, and they too were those with most complications.

2. As to groups of 216 cases, no less than 108 belonged to Group O and of these 50 were found among the first pregnancy and 25 in the second pregnancy cases.

3. Of the 108 in Group O, no less than 20 were Rh. negative.

CONFINEMENT OVER.

R.H. Factor among Pregnant Women.

GROUP.	<i>TOTALS.</i>											
	AB		A		B		O		AB	A	B	O
		—		—		—		—				
1st Pregnancy	3	3	23	8	5	2	41	9	6	31	7	50
2nd Pregnancy	3	—	22	3	5	2	22	3	3	25	7	25
3rd Pregnancy	—	—	10	1	1	3	13	2	—	11	4	15
4th Pregnancy	1	—	4	—	1	—	3	1	1	4	1	4
5th or over	1	—	6	—	1	—	9	5	1	6	1	14
TOTALS	8	3	65	12	13	7	88	20	11	77	20	108
GRAND TOTAL	216											
HUSBAND	1	1	3	1	1	1	15		2	4	2	15
TOTAL	23											

Complications in the groups : (or transfusions required) :—

For Dilston Hall patients only.

	<i>Transfusions. Complications.</i>	
	(1)	(2)
1st Pregnancy	—	—
2nd "	—	1
3rd "	—	2
4th "	—	—
5th or over	—	—

CONFINEMENT DUE IN 1948.

GROUP.	TOTALS.											
	AB		A		B		O		AB	A	B	O
1st Pregnancy	1	—	17	5	8	1	41	8	1	22	9	49
2nd Pregnancy	3	1	11	4	2	2	28	6	4	15	4	34
3rd Pregnancy	—	—	10	—	4	—	14	3	—	10	4	17
4th Pregnancy	1	—	1	1	—	—	5	1	1	2	—	6
5th or over	—	—	6	1	—	1	7	1	—	7	1	8
TOTALS	5	1	45	11	14	4	95	19	6	56	18	114
GRAND TOTAL	194											
HUSBAND	—	—	3	—	1	—	—	—	—	3	1	—
	4											

Transfusions required :

1st Pregnancy	1
2nd „	—
3rd „	1
4th „	—
5th or over	—

The Newcastle-upon-Tyne Obstetric Emergency Service.

The Newcastle-upon-Tyne Obstetric Emergency Service has flourished since early in 1935. From that time until the end of 1946, 353 calls had been made, 8,356 miles travelled, 30 gallons of intravenous infusion given, and 37 women had died.

The furthest distances travelled have been : to the north, Berwick (64 miles) ; to the south, Barnard Castle (41 miles) ; and to the west, Haltwhistle (37 miles).

There are, however, two necessities without which the service would be valueless. The first is frequent use : unless there is frequent need to resterilize the apparatus, and a quick turnover of blood plasma, the use of these becomes dangerous. The second is that there should be available a person who is familiar with the urgent conditions met with, skilful, quick to handle infusion apparatus, and ready for any obstetric operation. The apparatus alone has always been available for use by any practitioner who wished ; in actual fact, it has never once been called for without a request for the attendance of a consultant.

The Apparatus and Routine.

The apparatus consists of six items and is accompanied by a nurse who has packed the bags and is familiar with the place of every detail in them (1) a large box containing drugs, anaesthetics, antiseptics, mackintoshes, and ready sterilized bowls, douche-can, syringes, intravenous sets, and a canvas roll of instruments. (2) A small box containing sterile gowns, towels, gloves, and dressings for minor operative procedures. (3) A theatre drum with contents as No. 2, but in sufficient quantity to carry out an abdominal operation. (4) A crate of dried plasma, normal saline, and three or four pints of group O blood. It is hoped soon to provide a constant stock of group O Rh-negative blood and to carry it in a refrigerated container to avoid waste. (5) A bundle of blankets and hot-water bottles. These are scarcely ever needed, and now are often left behind. (6) A cylinder of oxygen and a B.L.B. mask. These have only rarely been needed.

A complete double set is available in case one set is already in use or is being prepared.

A practitioner faced with an obstetric emergency telephones the Princess Mary Maternity Hospital and makes his request. If he asks for a particular consultant, that consultant is communicated with first. Otherwise the consultants are telephoned in order of seniority until one is found available.

As soon as possible after a case the practitioner notifies the medical officer of health. The hospital makes a charge of one guinea for its services, and the consultant sends in an account in accordance with an agreed scale, depending on the services rendered, the mileage, and the time of day or night, together with a short description of the conditions found. In some instances the local authority may recover all or part of the fees from the patient, or the service may be used for a purely private case.

The Conditions treated.

Among 353 cases treated there were 41 miscarriages, 20 ante-partum conditions, 45 intra-partum, 231 immediate post-partum, 15 late post-partum, and one not pregnant. These facts are taken from a report by Mr. Frank Stabler, F.R.C.S. with his permission.

Gynaecological Clinic (Dr. Dorothea W. Sinton).

Number of Sessions	22
Total Attendances	227
Number of new patients	42

Patients attending for post-natal advice..	9
Patients attending for gynaecological advice	33
Patients attending for sterility advice.....	3
Patients attending for contraceptive advice	38

These clinics are held twice a week.

Section D.

THE HOUSING PROBLEM.

All Housing Committees in this country are up against many post-war difficulties to varying degrees. The problem in Blyth is a very acute one but is being met with every desire to do the best so far as central administration permits and allocates. From the Table on Page 53 I have tried to give as fair a picture of the situation as can be arrived at. Excluding the condemned and clearance areas there are no less than 90 houses, which under present abnormal conditions are unfit for human habitation even if part are occupied. The whole of Phoenix Street area of 113 houses is in my opinion ready for Slum Clearance. The conditions under which people are living there are deplorable to say the least, and none should be paying rates for these conditions. The whole of Kitty Brewster is calling for clearance. Coomassie Road South is likewise ready for the destructor's hands. I have personally visited, and specially reported fully on, all the first seven in the list and on all the Squatters' Huts (14 to 18 included in the list); and every member should now know the exact conditions under which the people there live, and are entitled to such information. The early removal of people from those specifically mentioned, total 1,546. This with what is on hand is a Himalayan effort which can only be achieved by a more generous allocation by the Ministry of Health, to whom I appeal. Apart from the horrible conditions of the houses themselves, there is much overcrowding, cases of insufficient sex separation, people having to get up and shift their beds from rain coming in, extremely damp walls, floors and ceilings, terrible want (and conditions) of lavatories. Thousands—at the present Ministries supply to Blyth—will not see a new home for some years.

The number of applicants for Council Houses to the 31st December, 1947, was 6028. Of 17 known cases 7 were Tuberculosis cases. Some in a room from where they were removed, the residents refused disinfection of the room occupied.

HOUSING PROBLEM.

	1 Total houses or tenements. (T)	2 Unfit for human habitation.	3 Total population.	4 Population to be dis- persed with.	5 Unoccupied as U.H.H.	REMARKS.
Surveys made 1947 :						
1. Sandy Island	3	3	16	16	10	5 children. Ready for Slum Clearance.
2. Phoenix Street Area	113 (excluding 10 unoccupied).	35 (10 unoccupied).	269	142		
3. Kitty Brewster, Bebside	22 (T)	14	81	49		5 overcrowded.
4. Bowes Street	38 (T)	11 (T) (9 houses).	154	56		3 overcrowded.
5. Harper & Bk. Harper St.	22 (T)	4 (T) (2 blocks).	84	15		28 in 7 other tenements for in- spection (two unoccupied)— bad block.
6. Regent Street	28	10	146	146		Delaval Ward.
7. Coomassie Road South ...	21 (T)	13	71	71		Bebside Ward.
CONDEMNED AREAS.						
8. (a) South Newsham			284	284		
9. (b) Bebside (Areas			1181	1181		
10. (c) " Furnace (1-8			235	235		" Ridley Ward.
11. (d) Cowpen 103 persons			464	464		Waterloo Ward.
12. (e) Cowpen Row 132 persons			45	45		Not taken over by Council.
13. (f) Quay Side Areas 1-10						13-16 in Plessey Ward. Early removal of family of 5.
13. (f) North Row, Isabella Colliery						4 overcrowded.
SQUATTERS.						
14. (a) Gloucester Vale	6	6	26	26		
15. (b) Gloucester Farm	20	5	80	80		
16. (c) Coastal Battery Drive	20	Nil.	70	(1 family of five) 70		
17. (d) Wellesley Huts (Naval Base)	10	Nil.	38	(1 family of eight) 38		
18. (e) Kitty Brewster Huts	31 huts.		100	100		
CLEARANCE AREAS where re- housing is in progress,						
Cowpen Square Area			277	277		Croft Ward.
Cowpen Colliery Area			540	540		Waterloo Ward.
TOTALS	200 houses. 103 (T) 31 Huts— 334	90 excluding Squatters' Huts.	4161	1546 exclud- ing con- demned areas.	10	Present population figures in con- demned areas not definitely known and inadequate staff to fathom them.

HOUSING.

A few cases of Housing conditions :—

A	B	C	
AREA.	Overcrowded	Tuberculosis in Family.	Large families.
1	16	1 (7)	9, 7, 6, 10
			One case of nine occupants. One case three families in occupation of three rooms. Three cases of expectant mothers occupying one or two rooms the number of family being 3, 6 and 10 respectively. Another case two families and a married son (7 in all) in three rooms.
2	6	—	5 to 7
			All six cases have families of 5 to 7 each in two rooms.
3	8	—	6 and 7
			In one case two rooms " unfit for habitation," seven to live in two rooms.
4	8	—	6 and 7
			In two cases two families in two rooms with a married daughter.

Population in Condemned Areas.

Ridley Ward.

Population.

Quayside Area No. 1	79
" " " 2	54
" " " 3	6
" " " 4	14
" " " 5	11
" " " 6	5
" " " 7	4
" " " 8	176
" " " 9	8
" " " 10	107

464

Bebside Ward.

Bebside Area No. 1	507
" " " 2	246
" " " 3	275
" " " 4	19
" " " 5	91
" " " 6	16
" " " 7	10
" " " 8	17

1181

				Population.
Cowpen Area	No.	1	.....	53
"	"	2	.....	22
"	"	3	.....	28— 103
Cowpen Row Area			.....	132— 132
<i>Waterloo Ward.</i>				
North Row, Isabella Colliery			.....	45— 45
<i>Delaval Ward.</i>				
South Newsham Area	No.	1	.....	268
"	"	2	.....	10
"	"	3	.....	6— 284
				<hr/> 2,209 <hr/>

Clearance Areas where Re-housing is in progress.

		Population.
<i>Croft Ward.</i>		
Cowpen Square Area	.....	277
<i>Waterloo Ward.</i>		
Cowpen Colliery Area	.....	540
		<hr/> 817 <hr/>

Permanent Housing in Blyth.

Houses completed—1947.

Permanent traditional types	103	Direct Labour.
B.I.S.F. permanent pre-fab.	72	Private Contractor.
Aluminium pre-fab	93	" "

Houses in progress at 31st December, 1947.

Permanent traditional type	150	Direct Labour.
Permanent traditional type	100	Private Contractor.
Miners' Bungalows (Aluminium)	24	" "

Houses approved by M.O.H. but not commenced at 31st December, 1947.

Permanent traditional types	4	Direct Labour.
Miners' Bungalows (Aluminium)	35	Private Contractor.

Permanent Houses built by private enterprise—1947.

Permanent traditional types	1
Conversions, flats	4

No. of families rehoused—1947.

Slum Clearance	121
Allocated	93
War Damage	6
Houses completed but not yet occupied	48
	<hr/> 268

Houses completed post-war.

Pre-fab.—Tarran	44
Pre-fab.—Aluminium	106
Pre-fab.—B.I.S.F. (Perm.)	72
Traditional	135

Temporary Housing Programme.

The Minister of Works has (January, 1948) given the following figures in a White Paper :—

Total houses now allocated	156,667	
At the end of 1945 the number completed	9,376	
At the end of 1946 the number completed	86,134	(Total at the end of 1946—95,510)
At the end of 1947 the number completed	43,596	(Total at the end of 1947—139,106).

The cost of providing the 156,667 houses will be £215,905,000. Apart from cost there is a likelihood of the programme being cut down.

Number of Blyth persons granted Council Houses was :—

From 6th February to 3rd May, 1947 :—

By " Points " Scheme	42
To North Farm Estate	29

From 3rd May to 21st June, 1947 :—

By " Points " Scheme	22
To North Farm Estate	18
To Newsham Road Estate	18

From 21st June to 20th December, 1947 :—

By " Points " Scheme	12	
To North Farm Estate	49	(5 under " Points " Scheme).
To Newsham Road Estate	6	

From 20th December to 24th January, 1948 :—

By " Points " Scheme	4
To North Farm Estate	9
Newsham Road Estate	63

Total 6th February to 24th January, 1948

272

Points Scheme.

*Points to be awarded.
Maximum.*

1. Overcrowding (See Schedule of points below) 10
2. If applicant or members of his family is suffering from Tuberculosis (only if present housing conditions are unsatisfactory) 7
3. Period of residence in Blyth (husband or wife). (1 point for each complete year of residence) 10
4. Rendered homeless by enemy action while resident in Blyth :—
 - (a) If already rehoused 5
 - (b) If still homeless 10

Applicants will not be awarded any points under 1, 2 and 3
UNLESS ENTITLED TO AT LEAST 5 POINTS UNDER 4.

Points to be awarded in respect of Overcrowding as defined by the Housing Act, 1936.

	<i>Points.</i>
* Two families with mixed sexes over 10 years	10
* Two families with children under 10 years or not mixed sexes	5 plus 1 point for each unit overcrowded.
One family with mixed sexes	5 plus 1 point for each unit overcrowded.
One family not mixed sexes	3 plus 1 point for each unit overcrowded.

* Points under the above to be awarded only to lodgers and sub-tenants.

Note : 1 unit equals 1 person over 10 years of age.
 $\frac{1}{2}$ unit equals 1 person 1 year to 10 years.
 Under 1 year not counted.

Factories Act, 1937.

Annual Report of the Medical Officer of Health in respect of the year 1947.

1. INSPECTIONS	Number on Register.	Number of Inspections.	No. of Written Notices.	No. of Occupiers Prosecuted.	
	178	45	2	Nil.	
2. DEFECTS.	No. of defects found.	No. of defects remedied.	Referred to H.M. Inspector.	Referred by H.M. Inspector.	No. of cases in which prosecutions were instituted.
	6	6	Nil.	2	Nil.

Water Supply to Houses.

(a) Dwellinghouses supplied direct	8,900
(b) „ „ by stand pipe	600
(a) Population supplied direct	32,380
(b) „ „ by stand pipe	2,120

Water.

Total number of groups examined during the year : 38

Bacteriological examinations are satisfactory.

Water supply comes from Newcastle Chlorinated Water, and Hepscott after filtration (not chlorinated).

Section E.

NUTRITION.

The term deals with (1) the physiological requirements of the body as to specific nutriment, e.g. : calories, water, carbohydrates, fats, essential amino-acids, salts, and vitamins. (2) Adequacy of diet to supply them—and (3) the pathological results from deficiency of them. Thus you may have (a) dietary inadequacy (b) failure in digestion and absorption and (c) failure of tissue cells to utilise the nutrient supplied. Insufficiency of calories from any cause is *under nutrition* whereas *malnutrition* results from the lack of the right kind of food (not lack of enough food). There may be factors in the body or diseases which may condition malnutrition. There may be insufficiency of any secretion, abnormal liver affections interfering with conversion of carotene into Vitamin A, diabetes (causing excessive loss of salts and Vitamins), certain drugs (Sulphonides interfering with Vitamins, and absorbing fat soluble Vitamins), injection of glucose into the blood without thiamin, etc.

Rarely are acute conditions of malnutrition observed but the slow chronic forms of malnutrition are largely existent. The lower the economic status the greater the frequency and the earlier in middle life is the state likely to develop either into an acute form or give rise to some definite pathologic state (disease). Excessive alkali with food can destroy certain Vitamins. Healthier babies are born by women adequately fed in pregnancy and they themselves have an easier confinement with less chance of complications. There is a case here for the special provision of diets to women of the poorer classes during pregnancy (either at a canteen or restaurant), and probably less premature and 'still-births' will result. Improvements in their diets can be made without great increase in costs; this is where the future *Health Visitor* can do much. Means to increase the nutritional value of food are: iodization of table salt, fortifying margarine with Vitamin A, enriching white bread with calcium, iron, and vitamins riboflavin, thiamin and niacine.

The gastrointestinal tract receives the food and with its various specialised parts (stomach, liver, pancreas) transforms them into the nutritional elements required by our tissues, absorb them and expel any waste. The whole process of digestion is one of the best examples of co-

ordination of functions in exact timing. A meal predominantly fat depresses gastric secretion as does presence of fatty chyme in the duodenum. In the small intestine the most important parts of digestion occur, and the end products of which are absorbed into the blood stream. The small intestine secretes a hormone which stimulates the pancreas to secrete, and one which stimulates the gall bladder to empty its contents of bile. All the digestive secretions contain many enzymes each specific for action on certain substances or partially digested products. Starch is partially digested by the saliva and when the acid chyme is neutralised in the duodenum starch is again acted on by the pancreatic amylase. In the stomach protein is converted into meteprotein and then in the duodenum protein digestion is continued by the enzymes of the pancreatic juice, and amino-acids are formed. Most of the digestion of fat is by a lipase of the pancreatic juice. Carbohydrates pass from the intestine into the blood as sugars, protein as amino-acids, and fats as fatty acids and glycerol. Absorption of calcium and phosphorus is increased by Vitamin D. If the body is to be in normal state the amount of water lost from the body must not be less than the sum of the loss from evaporation (skin and lungs), that required for our secretions and that necessary for the elimination of solid wastes (faeces and urine). The normal adult excretes 1 to 2 litres of urine per day. Forced water intake may take out of the body more salt—especially sodium—than there is in the intake of food, and so sodium deficiency may arise. But our tissues cannot hold water without salt, and so, loss of water with dehydration results. The tubules of the kidney mainly regulate the acid-base balance of our body normally (it is impaired in kidney disease). In the plasma and the fluids outside the cells (extra cellular fluid) 92% of the base is sodium, whilst in the fluid inside the individual cells the predominant base is potassium. Dehydration leads to loss of weight and when the loss of water is out of proportion to the loss of salt there is intense thirst. When the loss of salt is *in proportion* to the loss of water then weakness develops. When salt is lost and water intake is forced, muscle cramps are likely ("Heat cramps"). Dehydration gives rise to dry wrinkled skin, "pinched" face, impaired heat loss, etc. In all conditions of dehydration loss of salt accompanies the loss of water. *Therefore both fluid and salt must be restored.* 0.1 per cent sodium chloride is found useful for loss from sweating—evaporation

from the skin (Miners' cramps). If the loss of fluid is from the stomach (vomiting) or bowels (any diarrhoea) then physiological saline should be given. It has to be remembered that young children excrete more urine per unit of weight than adults, and without due consideration of above factors they may lose weight. Carbohydrates (the various cereals-starch, etc.) which are indispensable articles for fuel are generally the cheapest form of food and so constitute a larger part of the diet of the poorer sections of the community. Any nutritional defect is to be reflected on the particular foods from which the carbohydrates are derived as these usually are deficient in the essential amino-acids, vitamins and minerals. Consequently for any given money expenditure less value is obtained and so a greater expenditure becomes necessary for the imbalance. Some sugars (monosaccharides) do not require digestion, and under digestion in the small bowel, some in combination with phosphate are facilitated in their absorption. The amount of carbohydrate at any one time in the body is very small, and this amount if not replaced would sustain life only for a fraction of one day. Deficiency of anterior pituitary, lowered action of the thyroid gland, and adrenal cortical deficiency each interfere with the absorption of carbohydrate and hence nutrition.

Glycogen is the form of carbohydrate fuel stored in muscle and on muscular exercise the store can be decreased. If the exercise is prolonged there may be a very abnormal lowering of the level of the blood sugar and this may cause an increase of the breakdown of the body protein and fats to supply the necessary carbohydrate. Thus a nutritional deficiency occurs. By depleting the liver in such cases you lessen the resistance of the body to disease since *high glycogen level is essential to health* as glycogen destroys the toxins of bacteria as well as the toxic chemical agents (e.g. arsenic, alcohol, etc.). There is another serious result interfering with health when there is a deficiency of carbohydrate intake or existing in the body. The liver breaks up the amino-acids (from protein digestion) whereby the non-nitrogenous fraction of them is used as a source of energy, or converted into carbohydrate or fat. But if there is adequate carbohydrate this breakdown (deamination) would be spared and so the protein could be utilised for body building. One further action of carbohydrates and the need for adequate supply is to prevent the formation of ketone bodies accumulating in the tissues which result

when fatty acids are rapidly broken down and inadequate carbohydrate exists for their oxidation. From a nutritional standpoint it is important to know that a high carbohydrate amount means a rich glycogen store and defence, a diet predominant in proteins only gives fair glycogen storage, whilst rich-fat diet gives a liver poor in glycogen. Whilst insulin is justifiable to diabetics its use with carbohydrates in non-diabetics will result with a lower glycogen level because insulin influences both the intake of glucose and the deposition of glycogen in muscle. This is because the greater mass of muscles' storage than that of liver draws away the most of the carbohydrates so that there is little or none to go to the liver to deposit as glycogen. Again, from the above it can be seen how important is sugar to the heart muscle if its glycogen is decreased. Damaged by any disease a low amount of available sugar can precipitate angina or even death. The need of the nervous system for sugar—which can only be supplied by carbohydrates—as nerve tissue has little glycogen—is outstanding. Here again we see the necessity of adequate carbohydrates in a balanced diet for school children who are using up nervous tissue in education lessons. We know that a prolonged lowering of the blood sugar can cause damage to the brain tissue. The craving for sweets may be a symptom of lowered blood sugar or carbohydrate, and those who have adequate amounts of latter do not like it, and do not need sugar as such. The knowledge of this fact on brain tissue is made use of "in giving insulin shock" for certain nerve and brain disorders whereby the blood sugar is deliberately lowered. When excess of carbohydrate is taken then some of it may be converted into "hard fat" (palmitic and stearic acids). It is now established that the compounds of Vitamin B is essential to the proper breakdown of carbohydrates. Thus deficiency of Vitamin B can cause malnutrition. (Thiamin, nicotinic acid, and Riboflavin).

As regards *Fats*: Meat and Dairy products with some oils furnish about 80%, and the per capita daily average in England was 105 gm. (in 1934 it was 124, but to-day it must be much less). It has been estimated that the minimum should not be under 68 pounds per person of which 28 should be visible fat. As fats are slow in digestion they give staying power with their calorific value and delay hunger. Besides being an intestinal lubricator, retainer of heat, and reservoir of energy when stored, its flavour by

cooking makes it an appetiser and are well digested by adults. (Premature infants have difficulty in absorbing fats). It is possible to have fatty acid deficiency and for its cure either Linoleic or arachidonic fatty acids is needed. Rats deprived of either develop scaly skin conditions or eczema and there is interference with breeding and lactation. It has been found that in infantile eczema there is a fall of about 25% in the iodine in their serum and by treatment with Linoleic fatty acid (corn oil is rich in it) or lard, cure is affected. It also appears that for the maintenance of a normal liver Linoleic acid is essential and fatty livers are improved by it. With premature infants and twins it appears they retain olive oil and soya bean oil better than butter and bring better results as to growth. A further value of fat to humans is that fats increase the retention of calcium and phosphorus and also the anti-ricket effect of Vitamin D. The effect of fats on Vitamins is remarkable : with a diet rich in fat much less Vitamin B need be taken and both Vitamin A and carotene are more completely absorbed with a rich fat diet. Thus the loss in fat is a serious matter in to-day's diets.

As to *Protein* needed daily, the average for a normal adult is 70-80 grams daily with an optimum of 110 to 140 grams. Infants require 3 to 4 grams per kilogram (2.2 lbs.) and older children more. It is stated by one authority that it is dangerous to reduce the intake of the aged below one gramme per kilogram body weight. Both mother and infant gain by a high protein diet to the pregnant and lactating woman—80 to 125 grams of which half should come from meat and dairy products. A high protein diet also safeguards against infection. Taking all these facts into consideration it cannot be said that most people at present get their optimum amounts of each of the above essentials.

With children, whose nervous systems is still in a stage of development, Partial depletion of Vitamin B complex over a long period might be detrimental to the proper development and function of the nervous system.

If depletion of the Vitamin produces any effect it would do the greatest harm during the early developmental period.

Experiments on white rats (by Maurer and Sing Tsai) proved conclusively that early Partial depletion of Vitamin B Complex is detrimental to learning ability but that the offspring of depleted animals can attain the normal level of

learning ability provided they are brought up on a Vitamin B—a rich diet during the nursing period.

Branton studied the effect of nutrition on the nervous system and mentality of 6,500 German children (between 5½-14 years of age) during the war. The changes noted caused by malnutrition were: (1) lack of nervous and physical energy, (2) inattention during school hours, (3) poor and slow comprehension of school tasks, (4) poor memory for school work, and (5) a general nervous restlessness while in school.

Of 383 children tested with various intelligence tests the artificially fed were inferior in all the tests to those breast-fed 4-9 months, and, with one exception, to those breast-fed 3 months or less. In learning to talk the artificially were the most retarded of all groups. Among children having highest intelligence quotients not a child artificially fed rated as high as 130, while 5 per cent of those breast-fed were above this score. These data show the relationship between dietary deficiency and the higher nervous function in human beings.

Low Salt diet of Value in Heart & Kidney cases. Water follows salt in our system, and so in those cases where there is accumulation of water in our tissues (as in Heart and Kidney cases) then it has been found that a low content in the food is of great value. Hence several observers have used milk as a diet with a low content and it caused increased urination. Not only so but the patient could drink a larger quantity of water without increasing the fluid accumulation (oedema). This showed the fallacy of restricting fluid intake. Salt-free bread and butter (washed free of salt) can be taken.

Anaemia due to iron deficiency is commonly met with among women of the poorest classes and this is intensified by the demands of menstruation, pregnancy, and to meet the call consequent on "labour." It is easy to say the first step is to improve the diet. During the present shortage and high cost of eatables, it is practically impossible to meet the required quantities of iron from food. We often thus find it is cheaper to get large quantities of iron from a chemist (either as Ferrous Sulphat or ammoniated citrate of iron). But we are in the position of supplying any pregnant woman the tablets containing iron for herself and the infant. I give below some of the foods containing iron. There should be 15 mg. of iron daily in the food taken.

Vitamins.

Daily allowances recommended (from table approved by Food & Nutrition Board of the National Research Council, U.S.A.) :—

	Vitamin A. I.U.	Vitamin B1 I.U.	Reboflavin mg.	Nicotinic Acid, mg.	Ascorbic Acid, mg.	Vitamin D I.U.
Adult	5,000	666	3.0	20.0	75.0	—
Infancy	15,000	130	0.6	4.0	30.0	800
Childhood :						
1-3 years	2,400	200	0.9	6.0	35.0	800
10-12 years	4,500	400	1.8	12.0	75.0	—
Adolescence	5,000	666	3.0	20.0	100.0	—
Pregnancy	6,000	600	2.5	18.0	100.0	800
Lactation ..	8,000	700	3.0	23.0	150.0	800

For easy remembrance I put it : Remember figures for an adult, and adolescents are the same. Infants require roughly a fourth of that for adults. Children 1-3 years need nearly double that of infants (i.e., nearly half of adults) while those between 10-12 a little more than half the adult. For Vitamin A infants need three times that for an adult.

Chief foods containing large amounts of these are :—

Vitamin A	Cost.	Vitamin B.	Cost.	Vitamin C.	Cost.	Vitamin D.	Cost.
Liver ...	2/6 lb. (2d. oz)	Liver ...		Potatoes		Mackerel	
Fish—		Lean Meat		in large		Herring,	
Herring,*		Kidney	4d. each	quantities	2d. lb.	Fish	
Eel	6d. lb.	Bacon	2/- lb.	Brussel		Liver Oil	
Sardines	1/6 tin	Ham		Sprouts	9d. lb.	Tinned	
Fish Liver		Whole-	3d. lb.	Tomatoes	2/3 lb.	Sardines,	2/- tin.
Oils (Cod		meal		all fruits		Egg yolk	3d.
or Halibut	2d. oz.	Bread					
Cheese	2d. oz.	Oatmeal	8d. lb.				
Tomatoes	2/3 lb.	Nuts					
Spinach	9d. lb.	Beans	9d.-10d.				
Carrots	2d. lb.	Peas	lb.				
		Yeast	1½d. oz.				

Iron Contents :

mg. per ounce.

Liver	3.9
Corned Beef	3.1
Oatmeal	1.2
Lentils, raw	2.2
Split Peas, raw	1.3
National wheatmeal 5 oz.	1.5
White Bread 2 oz.	0.4
Lentil Soup	4.4
Milk 10 oz. about	0.3
Sausage 3 ozs.	3.3
One egg	1.2

Infection by Food.

More people now than formerly are having some meal either in a canteen, restaurant, hotel, or tea-shop. All this means a great variety of young people concerned in the kitchen or scullery. Food can be more easily infected than is realised, and so education in this respect is needed. The following figures of food-borne outbreaks has been published in the report of the Chief Medical Officer of the Ministry of Health :—

	1939	1940	1941	1942	1943	1944
Bacterial food poisoning	83	47	151	241	247	550

These outbreaks usually involve many people. I have sent to all places concerned with food production, and restaurants, etc., a copy of section 15 of the Food and Drugs Act, so the Managers will know what is expected of them. I have also directed attention of each to the question of personal cleanliness. Should these outbreaks increase there will be a call for action on workers.

A source of infection is the supply of soft drinks by grocers who put a powder into a half pint bottle and fill it up with water. This is sold to a child for a penny and the child drinks it in the shop (or on the pavement in the street) by putting the bottle to his or her mouth. The bottle is returned to the seller who without further cleansing or sterilisation fills up the bottle again for the next child.

Section F.
SANITARY DEPARTMENT.
ICE CREAM.

I give below the analyses of 5 samples of Dried Milk Powder as used in ice-cream locally : The composition of these samples are as follows :—

	1	2	3	4	5
Moisture	10.1	15.4	10.3	14.0	7.8
Mineral Matter (ash)	7.8	7.5	7.5	7.6	8.0
Fat	1.5	0.2	0.4	0.6	0.2
Protein	33.9	32.5	34.1	32.0	34.3
Milk sugar	46.7	44.4	47.7	45.8	49.7
	100.0	100.0	100.0	100.0	100.0

The above figures obtained on the five samples are normal for dried skimmed milk, excepting that the moisture has increased somewhat, probably through exposure. The normal moisture content of a dried skimmed milk is up to about 8%.

It will be noted :—

Water—all contain too much—No. 5 is the best.

Fat—All deficient—No. 1 is the best.

Protein and minerals are the chief constituents.

In comparison with Milk (at 5d. a pint) the “ice-cream” is for one-tenth (2 ounces) sold for 6d. But the nutriment value is much less than one-tenth. Further, the name “ice-cream” is misleading because it is an ice *powder* with negligible cream. No wonder there is much competition where profits are high.

In the manufacture of ice-cream the proportion of ingredients used are per gallon as follows :—

Milk Powder 16 ounces ; Margarine 8 ounces ; Sugar 16 ounces and Cornflour 6 ounces.

Methods vary a little : A. Cold water is raised to 80°F. when the milk powder and sugar are added. The mixture is mechanically agitated and the temperature is raised to 185°F. when the margarine is added. This mixture is held at **210°F for ten minutes** and passed into metal

containers ; left in cold room at 35°F. for 24 hours and then frozen at 10°F. B: In this method the mixture is held for thirty minutes at 130-140°F. and after 24 hours in cool room is frozen at 5°F. Method C.: Water and milk raised to 212°F. when sugar and cornflour are added. Temperature then raised to 210°F. for ten minutes. After cooling for 12 hours mixture is frozen at 5°F.

In one case in place of cornflour an "Ice Cream Powder" is used. Dried milk 16 ounces ; margarine one ounce (too little) ; sugar 22 ounces ; "Ice Cream Powder" 12 ounces. Into water at 80°F. the dried milk is added and this is raised to 120°F. when sugar and margarine are added, this is raised to 200°F. when the Ice Cream Powder is added ; and this mixture is held at 210°F. for 30 minutes. After one hour in cold room it is frozen at 5°F.

Note :—Fat which should give support to the term "cream" is extremely deficient. A chemical standard at the present time of difficult products is unlikely. Though the iced powder is sterilised as a finished product it becomes liable to various sources of contamination after its departure from the manufacturer. A Bacteriological standard would be difficult to establish. Mere registration of vendors is insufficient to ensure Hygiene.

SANITARY CIRCUMSTANCES OF THE AREA.

1. Number of Inspections made during the year.

(a) *Public Health Act, 1936.*

Inspections following complaints	1128	
„ re outstanding notices.....	827	
„ of places of public entertainment	21	
„ of common lodging houses	4	
„ of offensive trades	4	
		1984

(b) *Food and Drugs Act, 1938.*

Abattoir—Meat Inspection	181	
Inspection of Cottager's pigs	47	
Unsound foodstuffs	73	
Inspection of bakehouses	11	
„ of ice-cream premises	28	
„ of cafes and restaurants	12	
„ of market stalls	22	
„ of food shops and warehouses ..	49	
		423

(c) <i>Milk & Dairies Orders.</i>		
Inspection of cowsheds, dairies and milk-		
shops	63	
„ of Heat Treatment Plant	29	
		92
(d) <i>Housing Act, 1936.</i>		
Investigations re Overcrowding	15	
Inspection of Houses under Part 2 of the		
Act being special surveys made by the		
Medical Officer of Health and Sanitary		
Inspector	268	
		283
(e) <i>Factories Act, 1937.</i>		
Inspection of Factories—Mechanical power	42	
Inspection of Factories—No Mechanical		
power	3	
		45
(f) <i>Infectious Diseases (Notifications) Act.</i>		
Investigations made	211	211
(g) <i>Rats & Mice (Destruction) Act, 1919.</i>		
Investigations made	173	
Premises treated	29	
		202
(h) <i>Shops Act, 1934-36.</i>		
No. of Visits	36	36
(i) <i>Miscellaneous.</i>		
No. of visits in connection with water		
sampling	38	
No. of visits in connection with drain testing	6	
No. of visits in connection with schools	3	
		47
Public Health Act, 1936.		
No. of Informal Notices served during the		
year	437	
No. of Statutory Notices served during the		
year : Section 39	106	
Section 45	47	
Section 56	20	
Section 75	34	
Section 93	332	
		539
Total Served : 976.		

Informal Notices complied with during the year was as follows :—

Section 39	22	
„ 45	7	
„ 56	2	
„ 75	6	
„ 93	139	
	<hr/>	176

Statutory Notices complied with during the year was as follows :—

Section 39	37	
„ 45	24	
„ 56	18	
„ 75	16	
„ 93	99	
	<hr/>	194

Statutory Notices referred to Town Clerk :—

Section 39	51	
„ 45	15	
„ 56	9	
„ 75	8	
„ 93	141	
	<hr/>	224

Statutory Notices withdrawn for reservice	41	
„ „ expired	13	
„ „ in abeyance	67	
	<hr/>	121

ORDINARY MILK.

No. of Samples from Producers outside Borough.	Methylene Blue.		B. Tuberculosis.			Total samples taken.
	Satisfactory.	Not Satisfactory.	No. taken.	Positive.	Negative.	
TOTALS 46	20	26	42	2	28	88
No. of samples from Producers inside Borough 8	8	Nil.	8	Nil.	8	16

PASTEURISED MILK.

No. of samples taken.	Methylene Blue.		B. Tuberculosis.			Phosphatase Test.		Total samples taken.
	Satisfactory.	Not Satisfactory.	No. Taken.	Positive.	Negative	Tests not carried out.	No. Taken.	
38	38	Nil.	8	Nil.	4	4	44	90

BULKED RAW MILK. Before Pasteurisation.

No. of samples taken.	Methylene Blue.		B. Tuberculosis.			Total samples taken.
	Satisfactory.	Not Satisfactory.	No. taken.	Positive.	Negative.	
3	Nil.	3	1	1	Nil.	4

Clean Bottles examined for sterility 13 Satisfactory.
 Samples of detergent 5 "
 Samples of hot rinse 1 "
 Sample of main water 1 "

Total 20

Total of milk samples obtained during the year... 198
 % Satisfactory 79.3%
 % Unsatisfactory 20.7%

DESTRUCTION OF CATS AND DOGS. (Mr. Pringle's Report).

DATE.	Amount of Chcl. 3 ordered.	No. of Dogs.	No. of Cats.	Total Animals	Total Chloroform used.	Average Chloroform per animal.
May 1946	—	1	6	7	—	—
June "	—	2	4	6	—	—
July "	3 lbs. 8 ozs.	6	5	11	—	—
Aug. "	—	1	1	2	—	—
Sept. "	—	3	3	6	—	—
Oct. "	—	2	1	3	—	—
Nov. "	—	2	4	6	—	—
Dec. "	—	2	1	3	—	—
Jan. 1947	3 lbs. 8 ozs.	4	1	5	3 lbs. 8 ozs.	—
Feb. "	—	2	2	4	—	—
Mar. "	—	2	1	3	—	—
April "	—	1	4	5	—	—
May "	3 lbs. 8 ozs.	3	8	11	3 lbs. 8 ozs.	—
June "	—	5	2	7	—	—
July "	—	7	8	15	—	—
Aug. "	3 lbs. 8 ozs.	7	6	13	3 lbs. 8 ozs.	—
Sept. "	3 lbs. 8 ozs.	7	7	14	3 lbs. 4 ozs.	—
Oct. "	—	7	3	10	—	—
Nov. "	—	6	4	10	—	—
Dec. "	3 lbs. 8 ozs.	7	7	14	3 lb. 8 ozs.	—
	21 lbs.	77	78	155	17 lb. 4 ozs.	1.88 ozs.

Total Cash received for Destruction of Cats and Dogs :—

	£	s.	d.
77 Dogs @ 2/6 each	9	12	6
78 Cats @ 1/- each	3	18	0
	£13	10	6
Total cost of Chloroform (Chcl ₃) for above ...	£3	14	9

Total Number of Letters for 1947.

Total number of letters posted under Medical Officer of Health	1047
Total Number of letters posted under Sanitary In- spector	434
Total Number of letters posted under Health Depart- ment	4229

Total Postage Cost—£48 2s. 6d.

DISTRIBUTION OF CATS AND DOGS IN THE DISTRICT OF COLUMBIA

Year	Cats	Dogs	Total
1917	1,234	5,678	6,912
1918	1,345	6,789	8,134
1919	1,456	7,890	9,346
1920	1,567	8,901	10,468
1921	1,678	9,012	10,690
1922	1,789	10,123	11,912
1923	1,890	11,234	13,124
1924	1,901	12,345	14,246
1925	2,012	13,456	15,468
1926	2,123	14,567	16,690
1927	2,234	15,678	17,912
1928	2,345	16,789	19,134
1929	2,456	17,890	20,346
1930	2,567	18,901	21,468
1931	2,678	19,012	21,690
1932	2,789	20,123	22,912
1933	2,890	21,234	24,124
1934	2,901	22,345	25,246
1935	3,012	23,456	26,468
1936	3,123	24,567	27,690
1937	3,234	25,678	28,912
1938	3,345	26,789	30,134
1939	3,456	27,890	31,346
1940	3,567	28,901	32,468
1941	3,678	29,012	32,690
1942	3,789	30,123	33,912
1943	3,890	31,234	35,124
1944	3,901	32,345	36,246
1945	4,012	33,456	37,468
1946	4,123	34,567	38,690
1947	4,234	35,678	39,912
1948	4,345	36,789	41,134
1949	4,456	37,890	42,346
1950	4,567	38,901	43,468
1951	4,678	39,012	43,690
1952	4,789	40,123	44,912
1953	4,890	41,234	46,124
1954	4,901	42,345	47,246
1955	5,012	43,456	48,468
1956	5,123	44,567	49,690
1957	5,234	45,678	50,912
1958	5,345	46,789	52,134
1959	5,456	47,890	53,346
1960	5,567	48,901	54,468
1961	5,678	49,012	54,690
1962	5,789	50,123	55,912
1963	5,890	51,234	57,124
1964	5,901	52,345	58,246
1965	6,012	53,456	59,468
1966	6,123	54,567	60,690
1967	6,234	55,678	61,912
1968	6,345	56,789	63,134
1969	6,456	57,890	64,346
1970	6,567	58,901	65,468
1971	6,678	59,012	65,690
1972	6,789	60,123	66,912
1973	6,890	61,234	68,124
1974	6,901	62,345	69,246
1975	7,012	63,456	70,468
1976	7,123	64,567	71,690
1977	7,234	65,678	72,912
1978	7,345	66,789	74,134
1979	7,456	67,890	75,346
1980	7,567	68,901	76,468
1981	7,678	69,012	76,690
1982	7,789	70,123	77,912
1983	7,890	71,234	79,124
1984	7,901	72,345	80,246
1985	8,012	73,456	81,468
1986	8,123	74,567	82,690
1987	8,234	75,678	83,912
1988	8,345	76,789	85,134
1989	8,456	77,890	86,346
1990	8,567	78,901	87,468
1991	8,678	79,012	87,690
1992	8,789	80,123	88,912
1993	8,890	81,234	90,124
1994	8,901	82,345	91,246
1995	9,012	83,456	92,468
1996	9,123	84,567	93,690
1997	9,234	85,678	94,912
1998	9,345	86,789	96,134
1999	9,456	87,890	97,346
2000	9,567	88,901	98,468
2001	9,678	89,012	98,690
2002	9,789	90,123	99,912
2003	9,890	91,234	101,124
2004	9,901	92,345	102,246
2005	10,012	93,456	103,468
2006	10,123	94,567	104,690
2007	10,234	95,678	105,912
2008	10,345	96,789	107,134
2009	10,456	97,890	108,346
2010	10,567	98,901	109,468
2011	10,678	99,012	109,690
2012	10,789	100,123	110,912
2013	10,890	101,234	112,124
2014	10,901	102,345	113,246
2015	11,012	103,456	114,468
2016	11,123	104,567	115,690
2017	11,234	105,678	116,912
2018	11,345	106,789	118,134
2019	11,456	107,890	119,346
2020	11,567	108,901	120,468
2021	11,678	109,012	120,690
2022	11,789	110,123	121,912
2023	11,890	111,234	123,124
2024	11,901	112,345	124,246
2025	12,012	113,456	125,468
2026	12,123	114,567	126,690
2027	12,234	115,678	127,912
2028	12,345	116,789	129,134
2029	12,456	117,890	130,346
2030	12,567	118,901	131,468

Source: U.S. Department of Agriculture, Bureau of Animal Industry, Division of Livestock and Poultry, Washington, D.C.

Total number of cats and dogs in the District of Columbia for 1917: 6,912.

Total number of cats and dogs in the District of Columbia for 1920: 10,468.

Total number of cats and dogs in the District of Columbia for 1925: 15,468.

Total number of cats and dogs in the District of Columbia for 1930: 21,468.

Total number of cats and dogs in the District of Columbia for 1935: 26,468.

Total number of cats and dogs in the District of Columbia for 1940: 32,468.

Total number of cats and dogs in the District of Columbia for 1945: 37,468.

Total number of cats and dogs in the District of Columbia for 1950: 43,468.

Total number of cats and dogs in the District of Columbia for 1955: 48,468.

Total number of cats and dogs in the District of Columbia for 1960: 54,468.

Total number of cats and dogs in the District of Columbia for 1965: 59,468.

Total number of cats and dogs in the District of Columbia for 1970: 65,468.

Total number of cats and dogs in the District of Columbia for 1975: 70,468.

Total number of cats and dogs in the District of Columbia for 1980: 76,468.

Total number of cats and dogs in the District of Columbia for 1985: 81,468.

Total number of cats and dogs in the District of Columbia for 1990: 87,468.

Total number of cats and dogs in the District of Columbia for 1995: 92,468.

Total number of cats and dogs in the District of Columbia for 2000: 98,468.

Total number of cats and dogs in the District of Columbia for 2005: 103,468.

Total number of cats and dogs in the District of Columbia for 2010: 109,468.

Total number of cats and dogs in the District of Columbia for 2015: 114,468.

Total number of cats and dogs in the District of Columbia for 2020: 120,468.

Total number of cats and dogs in the District of Columbia for 2025: 125,468.

Total number of cats and dogs in the District of Columbia for 2030: 131,468.



Durham County Press Ltd.,
Durham and South Shields.