[Report 1946] / Medical Officer of Health, Plymouth Borough.

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CITY OF PLYMOUTH

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1946

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FOR THE YEAR 1946

PRINCIPAL CONTENTS

PUBLIC HEALTH AND MATERNITY AND CHILD WELFARE COMMITTEE.

The following Members of the City Council served on the Public Health and Maternity and Child Welfare Committee during the year :—

Chairman : Alderman (Mrs.) J. Marshall.

Vice-Chairman : Councillor (Mrs.) M. Jolly.

Alderman (Mrs.) C. H. Daymond.

Councillors A. H. Crimp (to November), F. E. Chapman (to November), A. Goldberg (to November), S. Robins (to November), A. E. Frayn, S. L. Gould, (Mrs.) L. Newbery, H. Porter, G. F. Vosper, W. J. Wilks, T. B. Harvey (from November), I. C. Lowe (from November) and P. N. Washbourn (from November).

EDUCATION COMMITTEE.

Chairman : Alderman R. R. Oke.

Vice-Chairman : Councillor E. S. Leatherby.

Aldermen J. L. Cornish, (Mrs.) C. H. Daymond, H. G. Mason, J.P., H. J. Perry, J.P., G. P. Ross (to November) and W. H. Weston.

Councillors G. M. Bradley, (Mrs.) B. Davey, (Mrs.) M. Jolly, F. W. H. Lyndon, S. C. Potter, H. S. Sangwell, R. A. Smith, H. L. Spear, (Mrs.) P. L. F. Colmer (from November), A. Lisburne (from November), J. H. W. Lobb (from November), J. E. Hatherley (from November), W. E. Strawbridge (from November), D. F. Nash (to November), S. W. R. Pettett (to November), and H. G. Phillips (to November).

Misses W. Drake and E. M. Leigh.

The Revs. Canon Clarke and J. Twohig.

Messrs. F. Cole, F. J. Collier, S. Griffin, H. Stipling, A. L. Strachan and H. G. Taylor.

SPECIAL SERVICES SUB-COMMITTEE.

Chairman : Councillor S. C. Potter.

Aldermen (Mrs.) C. H. Daymond, G. P. Ross (to November), and R. R. Oke (from November).

Councillors (Mrs.) B. Davey, (Mrs.) M. Jolly, F. W. H. Lyndon, H. S. Sangwell, S. W. R. Pettett (to November), H. G. Phillips (to November), A. Lisburne (from November) and J. E. Hatherley (from November).

Misses W. Drake and E. M. Leigh.

Rev. J. Twohig.

Messrs. F. J. Collier, S. Griffin and H. Stipling.

PUBLIC HEALTH OFFICERS OF THE AUTHORITY.

MEDICAL—WHOLE-TIME.

T. Peirson, M.D., M.R.C.S., L.R.C.P., D.P.H., Medical Officer of Health ; General Medical Superintendent, City Hospitals ; Port Medical Officer ; School Medical Officer.

W. N. M. Mason, M.D., M.R.C.S., L.R.C.P., D.P.H., Deputy Medical Officer of Health ; Senior Assistant Port Medical Officer ; Medical Superintendent, Mount Gold Hospital.

T. H. Harrison, M.B., L.M.S.S.A., D.P.H., Senior School Medical Officer.

H. T. Chatfield, M.C., M.B., D.P.H., Clinical Tuberculosis Officer.

D. F. Johnstone, L.R.C.P., M.R.C.S., D.P.H., Medical Superintendent, Isolation Hospital ; Venereal Diseases Medical Officer.

Marion Smellie, M.A., M.B., D.P.H., Senior Maternity and Child Welfare Medical Officer.

Mildred A. Thynne, M.R.C.S., L.R.C.P., D.P.H., Assistant Maternity and Child Welfare Medical Officer.

Marjorie Smith Wilson, M.B., D.P.H., Assistant Maternity and Child Welfare Medical Officer.

Hertha M. Tietze, M.D., Assistant Maternity and Child Welfare Medical Officer.

M. S. Harvey, M.B., D.P.H., Assistant M. and C.W. and School Medical Officer.

H. B. Boucher, M.B., F.R.C.S., Assistant Port Medical Officer.

R. St. J. Harold, L.R.C.P. & S.I., D.P.H. (N.U.I.), Assistant Port Medical Officer.

A. T. Bettinson, L.R.C.P, M.R.C.S., Medical Superintendent, Didworthy Sanatorium.

G. E. Larks, M.B., CH.M., F.R.C.S. (ENG. AND EDIN.), Medical Superintendent, City (General) Hospital.

G. B. Carter, M.D., D.P.H., Assistant School Medical Officer.

A. L. Thorburn, M.D., CH.B., B.A.O., D.P.H., Assistant School Medical Officer (Until August).
5 Resident Medical Officers, City (General) Hospital.
1 Resident Medical Officer, Isolation Hospital.
2 Resident Surgical Officers, Mount Gold Hospital.
1 Resident Medical Officer, Didworthy Sanatorium.

MEDICAL—PART-TIME.

Consulting Physicians :—

W. A. Lister, M.D., F.R.C.P. (LOND.).

Consulting Paeditrician :—

T. A. A. Hunter, B.A., M.B., M.R.C.P. (LOND.).

Consulting Surgeons :—

L. W. Innes, M.B., F.R.C.S. (ED.).
E. F. Wilson, F.R.C.S.

Orthopaedic Surgeons :—

N. Capener, F.R.C.S.
G. J. Lillie, F.R.C.S.

Consulting Gynaecologists :—

J. W. G. H. Riddell, M.C., M.D., F.R.C.S. (ED.), F.R.C.O.G.
A. B. Concanon, M.D., M.R.C.O.G., M.R.C.S., L.R.C.P., D.P.H.

Pathologist :—

E. Wordley, M.C., M.D., F.R.C.P.

Consulting Opthalmologists :—

C. B. F. Tivy, M.B., M.CH.
W. S. Burr, M.B., F.R.C.S. (ED.), D.O.M.S.
G. K. Burr, M.B., CH.B., D.O.M.S.
P. R. Greeves, B.M., B.CH., F.R.C.S. (ED.), M.R.C.S. (ENG.), L.R.C.P., D.O.M.S.

Consulting Laryngologists and Otologists :—

C. S. C. Prance, M.B., M.R.C.S., L.R.C.P., D.L.O.
R. Howarth, M.D., F.R.C.S. (ED.), D.L.O.

Consulting Radiologist :—

A. Craig Mooney, M.B., D.M.R.E.

Consulting Anaesthetists :—

S. G. Irlam, L.R.C.P., M.R.C.S.
T. T. P. Murphy, M.D., B.SC., D.A.
T. L. Chester-Williams, M.R.C.S., L.R.C.P.
D. A. Cadman, M.D., M.B., CH.B., D.P.H.
C. H. Hutchinson, M.A., M.B.
S. Hawkes, M.B.

District Medical Officers :—

Plymouth :—

C. H. Hutchinson, M.A., M.B.
T. Wood, L.R.C.P., M.R.C.S.
J. E. Harford, M.B., D.P.H.
H. N. Hearle, M.R.C.S., L.R.C.P.

Devonport :—

J. N. Morris, L.R.C.P., M.R.C.S.
G. A. Pratt, L.R.C.P., M.R.C.S.
O. N. Morris, L.R.C.P., M.R.C.S.
M. E. Gordon, B.SC., M.B., B.CH., M.R.C.S., L.R.C.P.
C. R. Barker, L.R.C.P., M.R.C.S.

Stonehouse :—

J. Simpson-White, O.B.E., M.B.

Public Vaccinators.

Devonport and Added Area of Plymouth :—

J. N. Morris, L.R.C.P., M.R.C.S.

Stonehouse :—

G. A. Pratt, L.R.C.P., M.R.C.S.

Plymouth—South :—

T. L. Chester-Williams, L.R.C.P., M.R.C.S.

Plymouth—North. :—

H. C. C. Reid, M.B.

Dental Surgeons—Whole-time.

A. Maughan, M.C., L.D.S. ; E. R. Williams, L.D.S. ; F. J. Gray, L.D.S.; G. E. Moore, L.D.S. (Temporary) ; R. A. Currie, L.D.S.

Other Staff.

Chief Sanitary Inspector :—

C. E. Sanderson, F.R.SAN.I.*†‡

Port Sanitary Inspector :—

L. N. Tope.*† (Resigned 31st July, 1946.)

Acting Port Sanitary Inspector :—

A. S. Kitt.*† (Commenced 1st August, 1946.)

Meat Inspector :—

P. A. Hawthorn.*†

Superintendent Health Visitor :—

Miss E. G. Wright, S.R.N., S.C.M. (Resigned 2nd July, 1946.)
Miss D. Silk, S.R.N., S.C.M. (Commenced 1st September, 1946.)

Assistant Supervisor of Midwives :—

Miss J. Casey, S.R.N., S.C.M.

Director of Nurse Training :—

Miss D. Biddle, S.R.N., S.C.M.

Chief Clerk :—

R. M. Lawson*, T.D.

Chief Clerk, School Medical Department :—

E. T. Perkins.

Steward, City Hospital :—

F. J. Barrett.

Steward, Mount Gold and City Isolation Hospitals :—

J. Burrows.

City Meteorologist :—

G. H. Ivory.

* Sanitary Inspector's Certificate.
† Meat Inspector's Certificate.
‡ Sanitary Science Certificate.

To the Lord Mayor, Aldermen and Councillors of the City of Plymouth.

I have the honour to present to you my Annual Report on the health of the City of Plymouth for the year 1946.

The Registrar-General's estimate of the mid-1946 civilian population was 176,070 as compared with 157,580 for 1945. According to the Food Executive Officer's ration book records, the resident civilian population at 1st March, 1947, was 183,000.

Births. The Plymouth birth rate per 1,000 population was 24.26 as compared with 19.63 for England and Wales, and 22.87 for County Boroughs and great towns. The total number of births in the City was 4,373, the highest figure since 1921, and approximately 65% of them took place in institutions, including hospitals and nursing homes, an unusually high proportion, and due in great measure to the difficult housing position in the City. Owing to the excess of applications for admission over the capacity of the bed accommodation, it has recently become necessary to select those with unsatisfactory home conditions.

Infectious Diseases. The incidence of infectious diseases in the City has, on the whole, been remarkably low during the year. The decline in the number of diphtheria cases and deaths has continued, due to the immunisation of children as a result of the intensive publicity campaign. The number of cases of diphtheria in 1946 was less than one-fifth of those in 1938 which was an average pre-war year for diphtheria incidence, and only one child died of diphtheria last year in Plymouth, compared with fifteen in 1938. A significant fact, however, was that 60% of the 68 cases of diphtheria occurred amongst children between five and fifteen years of age. This supports the practice recommended at the present time that those immunised at the age of one year should receive one reinforcing injection about the age of five years just before entering school.

Of the other common infectious diseases, there were no deaths from scarlet fever, one from measles and four from whooping cough. Whooping cough is one of the most troublesome of the common diseases, and the Council has recently obtained the Minister of

Health's approval to a scheme of immunisation against this disease. So far it has not proved possible to produce an antigen of the same reliability as in the case of diphtheria. For the time being, therefore, immunisation against whooping cough is not being recommended by propaganda, but is given to infants only upon the parent's request.

Owing to the low number of admissions of infectious diseases into the Isolation Hospital, an average bed occupation of about 53, it was possible to use two ward blocks there for early cases of pulmonary tuberculosis, and the hospital staff took on this new work with commendable willingness.

Cancer. After protracted negotiations a joint cancer scheme for Devon, Cornwall, Exeter and Plymouth was approved early in 1947, and as a result there should be considerable improvement of the facilities for the early diagnosis and treatment upon which the success of a cancer scheme must largely depend.

Hospitals. Several hospital improvement schemes involving building work were submitted for the approval of the Ministry or are under preparation by the City Architect. It has not been found possible to achieve much in this direction.

A Joint Hospital Planning Committee still provides the opportunity for the exchange of views and consultation between the Prince of Wales's Hospital Board and the Public Health Committee, and administers the Joint Hospital Admission Bureau and ensures the appointment of common visiting medical staff to the voluntary and municipal hospitals.

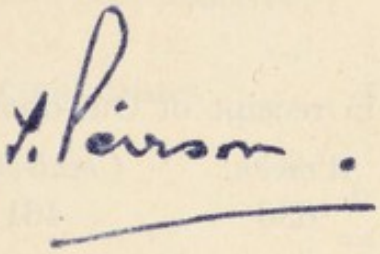
Staff. Some categories of trained staff are still very hard to obtain, e.g. health visitors, midwives and sanitary inspectors. The Committee's bursary scheme for the training of health visitors has proved to be very successful. During the year, the Committee in collaboration with the Education Committee commenced the scheme of training of nursery nurses for the National Nursery Certificate. Applications for entry have been greater than the number we could accept. The course of training for the sanitary

inspector's certificate was resumed in September, 1946, at the Plymouth Technical College.

I take the opportunity of recording my appreciation of the loyal work of my staff.

I am, my Lord Mayor, Ladies and Gentlemen,

Your obedient servant,



SEVEN TREES,
LIPSON ROAD,
PLYMOUTH.

July, 1947.

Statistics and Social Conditions of the Area 1946

Area in acres (Land and Inland Water)	9,515
Rateable value of the City	£1,579,686
Sum represented by the penny rate (estimated) ...	£6,250
Registrar-General's estimate of the civilian population	176,070
No. of marriages in the City during 1946	1,915

SOCIAL WELFARE.

No. of persons in receipt of Out-door relief on the 29.12.46.

Men.	*Women.*	*Children.*	*Total.*
255	636	461	1,352

SOCIAL CONDITIONS.

No. of unemployed persons in the City on the 31st December, 1946.

	Age.	*Total.*
Men	18 and over	810
Boys	14–17	36
Women	18 and over	964
Girls	14–17	64

Live Births.	*Total.*	*M.*	*F.*	
Legitimate ...	3871	2019	1852	Birth-rate per 1,000
Illegitimate ...	401	204	197	of the estimated
	4272	2223	2049	civilian population =24.26
Still births.				
Legitimate ...	93	54	39	Still birth rate per
Illegitimate ...	8	6	2	1,000 total (live and
	101	60	41	still) births=23.09
Deaths under 1 year :—				Death-rate of infants
Legitimate ...	172	100	72	under one year
Illegitimate ...	25	18	7	=46.11 per 1,000
	197	118	79	live births
All deaths	2443	1235	1208	Death-rate per 1,000 of estimated population=13.87

Death-rate of infants under one year of age :—

All infants per 1,000 live births (Total deaths 197) ...	46.11
Legitimate infants per 1,000 legitimate live births (172)	44.43
Illegitimate infants per 1,000 illegitimate live births(25)	62.34

Deaths from Puerperal Causes (headings 29 and 30 of the Registrar-General's Short List) :—

		Deaths.	*Rate per* 1,000 *total (live and still) births.*
No. 29.	Puerperal and post-abortive sepsis	1	0.22
No. 30.	Other maternal causes ...	5	1.14
		6	1.36

Laboratory Facilities. The following tables show the bacteriological and pathological work carried out for the City at the Prince of Wales's (Greenbank) Hospital, Plymouth.

6,882 specimens were examined for the Public Health Authorities of the City. The nature of these examinations is as follows :—

Sputums for Tubercle	2381
Swabs for Diphtheria	2105
Bacteriological Counts on Milks	988
,, ,, Waters	439
,, ,, Shell-fish...	9
Hairs for Ringworm	3
Bacteriological Examinations for Infectious diseases—	
Urines	183
T. Swabs and Misc. Swabs	163
Blood Counts	259
Blood Agglutinations	15
C.S.F. Examinations	30
Sections	23
Animal Inoculations (Rats)	5
Examination of Fæces	42
Ascheim Zondeks	1
Vaccines	4
Examination of Food (Meat Pies)	3
Miscellaneous	229
Total	6882

For V.D. Clinics—

Wassermanns and Kahns	4526
Gonococci	4085
Gonococcal Fixation Tests	512
Others (Cultures, etc.)	390
C.S.F.	1
Total	9514

For Medical Practitioners—

Wassermanns and Kahns	196
Gonococci	55
Gonococcal Fixations	8
C.S.F. (Wassermann)	1
Total	260

For Other Hospitals:—

Wassermanns and Kahns	4022
Gonococci	60
Gonococcal Fixations	3
C.S.F. Examinations	4
C.S.F. (Wassermanns)	6
Vaginal Pus for Trichmonas	1
Total	4096

For City Hospital:—

Microscopical Examinations on Morbid Tissues..	422
Bacteriological Examinations	1742
Blood Counts	902
Biochemical Examinations	1549
Wassermanns and Kahns	600
G.C. Smears	112
Gonococcal Fixation Tests	7
Sputums for T.B.	320
Ascheim Zondeks	29
Vaginal Pus for Trichmonas	16
C.S.F. Examinations	88
C.S.F. Wassermanns	32
Agglutinations	17
Total	5836

CLIMATOLOGICAL OBSERVATIONS.

TAKEN AT THE "HOE," PLYMOUTH, DURING THE YEAR 1946.

	1946.	1945.	50 *Years Average.*
TEMPERATURE.			
Maximum	74.8 (July 13th)	76.1 (Aug. 2nd)	—
Minimum	21.0 (Dec. 21st)	20.1 (Jan. 26th)	—
Mean	51.5	52.7	51.4
Daily Range	9.6	10.8	10.8
Relative Humidity	78%	80%	82%
EARTH TEMPERATURES.			
Earth, 1 ft. deep	53.1	53.4	52.2*
Earth, 4 ft. deep	53.4	53.4	52.6‡
Minimum on Grass	11.6 (Dec. 21st)	15.0 (Jan. 26th)	—
SEA TEMPERATURE.			
Mean, 6 ft. deep	53.8	54.9	53.2*
RAINFALL.			
Total during year	46.46″	35.24″	37.45″
Greatest Daily Fall	1.58″ (Nov. 23rd)	1.96″ (Oct. 20th)	—
No. of Wet Days	197	175	188
SUNSHINE.			
Total Hours	1517.9	1652.5	1683.3
Greatest Daily Amount	14.9 (June 13th) (July 7th)	14.9 (June 17th)	—
No. of Sunless Days	66	55	62
WIND.			
Prevailing Direction	S.W.	W.S.W.	S.W.
Highest Velocity (Gust)	62 m.p.h. (Jan. 9th) (Dec.8th)	Not available.	—

* Denotes a 45 year Average. ‡ Denotes a 27 year Average.

G. H. IVORY & PARTNERS,
24 Athenaeum Street,
Plymouth.

MEDICAL OUT-RELIEF WORK

District.	*No. of visits to Patients' Homes.*	*Attendances at Surgery.*	*No. on Permanent Medical Relief List.*
1	243	374	260
2	235	488	276
3	461	712	238
4	597	478	164
5	558	716	210
6	522	889	292
7	363	606	258
8	July to Dec. 144	122	219
9	Mar. to Dec. 214	200	102
10	222	191	279

In April, 1946, it was decided that District No. 8 should be divided into two separate districts. This was due to the fact that the number of patients in No. 8 district amounted to approximately 500, which was far too much for one Medical Officer to deal with. (Minute 2434, Public Health Committee, 11.4.46.)

District No. 8 subsequently became Districts 8 and 10, District No. 9 remaining as before.

TABLE I.

Vital Statistics—Plymouth—1914–1946.

Year.	Estimated Mid-year Population (a) Civilian (b) Total Resident.	Birth Rate.	Death. Rate.	Infant Mortality Rate per 1,000 Births.	Crude Death-Rates per 1,000 Population from						
					Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Tuberculosis.		Cancer.
									Respiratory.	Other Forms.	
1914	212,421 (b)	23.70	15.50	109.70	.26	.05	.22	.25	1.23	.37	1.08
1915	187,911 (a)	19.90	17.40	119.30	.61	.04	.13	.23	1.26	.45	1.15
1916	184,473 (a)	21.60	16.10	90.60	.26	.02	.08	.28	1.37	.35	1.24
1917	179,375 (a)	19.39	16.44	96.95	.46	.01	.11	.17	1.25	.49	1.33
1918	179,629 (a)	19.17	18.90	96.63	.31	.03	.32	.09	1.67	.49	1.16
Average		**20.75**	**16.86**	**102.63**	**.38**	**.03**	**.17**	**.20**	**1.35**	**.43**	**1.19**
1919	181,967 (a)	21.62	15.48	85.85	.16	.02	.02	.20	1.27	.40	1.38
1920	189,218 (a)	26.35	14.48	74.78	.18	.00	.17	.19	1.03	.24	1.29
1921	199,860 (a)	21.21	12.5	77.52	.01	.02	.05	.06	1.04	.21	1.34
1922	200,370 (a)	19.65	14.4	74.31	.22	.01	.10	.07	1.09	.24	1.25
1923	193,017 (a)	19.49	12.7	50.67	.03	.00	.04	.05	1.04	.23	1.40
Average		**21.66**	**13.91**	**72.62**	**.12**	**.01**	**.07**	**.11**	**1.09**	**.26**	**1.33**
1924	192,900 (a)	18.16	14.3	81.53	.13	.00	.16	.11	1.08	.22	1.31
1925	197,378 (a)	18.1	12.2	63.0	.01	.01	.07	.04	0.91	.22	1.36
1926	187,300 (a)	17.2	12.3	71.9	.10	.01	.07	.18	0.95	.18	1.49
1927	187,600 (a)	16.5	12.0	61.0	.00	.02	.06	.12	0.97	.16	1.58
1928	187,600 (a)	17.0	12.0	69.2	.41	.01	.02	.17	0.85	.17	1.52
Average		**17.59**	**12.5**	**69.32**	**.13**	**.01**	**.07**	**.12**	**0.95**	**.19**	**1.45**
1929	199,000 (a)	16.5	12.6	59.5	.02	.02	.17	.13	0.84	.12	1.39
1930	199,000 (a)	15.9	11.8	60.0	.14	.03	.02	.11	0.84	.17	1.47
1931	191,800 (a)	16.4	13.5	66.8	.01	.01	.05	.08	0.69	.20	1.48
1932	208,440 (b)	15.59	12.55	58 44	.02	.04	.07	.09	0.78	.15	1.49
1933	206,200 (b)	15.67	13.23	58.16	.06	.01	.06	.08	0.86	.12	1.47
Average		**16.01**	**12.73**	**60.58**	**.05**	**.02**	**.07**	**.10**	**0.80**	**.15**	**1.46**
1934	203,450 (b)	15.7	12.05	53.69	.06	.00	.08	.07	0.82	.17	1.59
1935	203,600 (b)	15.0	12.25	59.70	.02	.00	.01	.11	0.56	.15	1.58
1936	206,400 (b)	14.8	12.25	55.86	.01	.00	.09	.19	0.60	.13	1.57
1937	210,460 (b)	14.6	12.79	45.88	.00	.00	.01	.08	0.70	.07	1.63
1938	211,800 (b)	15.6	11.95	53.25	.12	—	.05	.07	0.64	.13	1.54
Average		**15.14**	**12.25**	**53.67**	**.04**	**.00**	**.05**	**.10**	**0.66**	**.13**	**1.58**
1939	215,500 (a)	15.6	12.61	42.04	—	—	—	.11	0.64	.12	1.65
1940	197,800 (a)	16.6	15.72	59.69	.02	—	.00	.53	0.83	.13	1.85
1941	149,300 (a)	16.43	23.87	77.49	.08	—	.07	.18	0.94	.15	2.25
1942	127,300 (a)	22.12	15.51	51.82	.00	—	.01	.12	0.95	.23	2.51
1943	136,530 (a)	23.03	16.69	37.53	.06	—	.06	.07	0.92	.20	2.34
Average		**18.75**	**16.88**	**53.71**	**.03**	—	**.03**	**.20**	**0.85**	**.16**	**2.12**
1944	144,700 (a)	24.03	14.66	39.98	.00	—	.00	.02	0.86	.12	2.13
1945	157,580 (a)	24.27	15.55	55.96	.00	—	01	.03	0.79	.10	2.18
1946	176,070 (a)	24.26	13.87	46.11	.00	—	.02	.01	0.60	.14	2.06

Note.—A series ot dashes indicates that there were no deaths from that particular disease during that year.

A " 0 " preceding a decimal point indicates that in some previous year the rate was greater than unity.

A rate of .00 indicates that there were too few deaths during that year to be expressed as a rate to two decimal places.

TABLE II.

VITAL STATISTICS—PLYMOUTH—1914–1946.

YEAR.	STILLBIRTHS.		INFANT MORTALITY		NEO-MORTALITY.		MATERNAL MORTALITY.					
							SEPSIS.		OTHERS.		TOTAL.	
	No.	*Rate per 1,000 Live and Still Births.*	*No. of Deaths under 1 year.*	*Rate per 1,000 Live Births.*	*No. of Deaths under 4 weeks.*	*Rate per 1,000 Live Births.*	*No. of Deaths.*	*Rate per 1,000 Live and Still Births.*	*No. of Deaths.*	*Rate per 1,000 Live and Still Births.*	*No. of Deaths.*	*Rate per 1,000 Live and Still Births.*
1914	51	10.02	553	109.7	215	42.68	5	.98	22	4.32	27	5.30
1915	29	6.80	505	119.3	145	34.26	6	1.41	17	3.98	23	5.39
1916	64	14.51	394	90.6	140	32.20	4	.90	20	4.53	24	5.43
1917	59	17.57	376	96.95	137	35.33	2	1.50	15	3.81	17	4.31
1918	133	33.24	373	96.63	132	34.20	5	1.25	14	3.50	19	4.75
Average	**67**	**16.43**	**444**	**102.63**	**154**	**35.73**	**4**	**1.21**	**17**	**4.03**	**22**	**5.03**
1919	143	33.70	352	85.85	135	32.93	5	1.18	18	4.24	23	5.42
1920	153	27.61	403	74.78	182	33.78	4	.73	22	3.96	26	4.69
1921	?	?	347	77.52	153	34.18	3	.67	12	2.68	15	3.35
1922	134	31.22	309	74.31	153	36.81	4	.93	17	3.96	21	4.89
1923	129	30.33	209	50.67	102	24.74	5	1.17	12	2.82	17	3.99
Average	**139**	**30.71**	**324**	**72.62**	**145**	**32.49**	**4**	**.94**	**16**	**3.53**	**20**	**4.47**
1924	125	32.23	306	81.53	128	34.11	6	1.54	19	4.90	25	6.44
1925	?	?	243	63.0	117	30.54	3	.78	15	3.91	18	4.69
1926	?	?	262	71.9	106	29.12	3	.83	8	2.19	11	3.02
1927	?	?	214	61.0	112	31.99	11	3.15	16	4.56	27	7.71
1928	149	39.64	250	69.2	121	33.53	5	1.38	17	4.71	22	6.09
Average	**137**	**35.93**	**255**	**69.32**	**117**	**31.85**	**5**	**1.53**	**15**	**4.05**	**20**	**5.59**
1929	147	40.03	210	59.5	111	31.49	6	1.76	11	2.86	17	4.62
1930	179	49.73	208	60.0	93	27.19	8	2.22	18	5.00	26	7.22
1931	128	36.00	229	66.8	102	29.77	1	.29	8	2.33	9	2.62
1932	153	44.94	190	58.44	97	29.84	8	2.35	12	3.52	20	5.87
1933	126	37.53	188	58.16	107	33.11	7	.69	13	5.26	20	5.95
Average	**147**	**41.64**	**205**	**60.58**	**102**	**30.28**	**6**	**1.46**	**12**	**3.79**	**18**	**5.25**
1934	118	35.5	172	53.96	91	28.41	6	1.81	8	2.40	14	4.21
1935	124	38.8	183	59.70	103	33.60	9	2.82	7	2.19	16	5.01
1936	120	37.7	171	55.86	77	25.16	5	1 57	4	1.26	9	2.83
1937	118	36.9	141	45.88	66	21.48	7	2.19	10	3.13	17	5.32
1938	140	40.6	176	53.25	87	26.32	2	0.58	5	1.45	7	2 03
Average	**124**	**37.9**	**168**	**53.73**	**85**	**26.99**	**6**	**1.79**	**7**	**2.08**	**12**	**3.88**
1939	127	35.5	145	42.04	82	23.79	2	0.55	9	2.51	11	3 06
1940	117	34 2	197	59.69	95	28.83	7	2.04	4	1.17	11	3.21
1941	82	32.3	178	77.49	75	30.57	2	0.84	4	1.68	6	2.52
1942	87	29.9	146	51.82	85	30.17	2	0.69	8	2.75	10	3.44
1943	103	31.7	118	37.53	57	18.13	5	1.54	7	2.15	12	3.69
Average	**108**	**32.7**	**157**	**53.71**	**79**	**26.29**	**4**	**1.13**	**6**	**2.05**	**10**	**3.18**
1944	99	27.6	139	39.98	80	23.01	3	0.84	4	1.12	7	1.96
1945	111	28 2	214	55.96	112	29.28	3	0.76	14	3.56	17	4.32
1946	101	23.09	197	46.11	113	26.45	1	0.22	5	1.14	6	1.36

DEATHS BY AGE GROUPS AND CAUSES—PLYMOUTH—YEAR 1946.

Cause of Death	*In Public Institutions.*	Age and Sex Distributions																Grand Total.
		0–1 *years.*		1–5 *years.*		*Total under 5 years.*		5–15 *years.*		15–45 *years.*		45–65 *years.*		65 *and upwards.*		*Totals all ages.*		
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1. Typhoid and Paratyphoid Fevers ...	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2. Cerebro-spinal Fever	1	1	–	–	–	1	–	–	–	–	–	–	–	–	–	1	–	1
3. Scarlet Fever	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
4. Whooping Cough	3	1	1	–	2	1	3	–	–	–	–	–	–	–	–	1	3	4
5. Diphtheria	1	–	–	1	–	1	–	–	–	–	1	–	–	–	–	1	1	2
6. Tuberculosis—Respiratory System ...	53	1	–	1	1	2	1	2	–	29	30	28	6	3	4	64	41	105
7. Other forms of Tuberculosis	25	2	–	4	5	6	5	1	4	6	2	1	–	–	–	14	11	25
8. Syphilitic Disease	4	–	–	–	–	–	–	–	–	1	–	8	1	1	1	10	2	12
9. Influenza	3	1	–	–	–	1	–	–	1	1	–	2	2	4	5	8	8	16
10. Measles	–	–	1	–	–	–	1	–	–	–	–	–	–	–	–	–	1	1
11. Acute Poliomyelitis and Polio-encephalitis	1	–	–	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1
12. Acute Infectious Encephalitis ...	1	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1	–	1
13. M. Cancer of buccal cavity and Oesophagus (males)	6	–	–	–	–	–	–	–	–	1	–	8	–	15	–	24	–	24
13. F. Cancer of Uterus (females) ...	8	–	–	–	–	–	–	–	–	–	4	–	9	–	6	–	19	19
14. Cancer of Stomach and Duodenum ...	28	–	–	–	–	–	–	–	–	2	3	19	12	23	15	44	30	74
15. Cancer of Breast	4	–	–	–	–	–	–	–	–	–	5	1	14	–	11	1	30	31
16. Cancer of all other sites	91	–	–	–	–	–	–	2	1	7	7	45	29	62	63	116	100	216
17. Diabetes	11	–	–	–	–	–	–	–	–	–	1	3	2	4	5	7	8	15
18. Intra-cranial vascular lesions ...	101	–	–	–	–	–	–	–	–	1	4	26	39	78	119	105	162	267
19. Heart disease	174	–	–	–	–	–	–	1	–	8	9	101	51	263	297	373	357	730
20. Other diseases of circulatory system ...	41	–	–	–	–	–	–	–	–	–	1	10	8	11	19	21	28	49
21. Bronchitis	29	1	4	1	–	2	4	–	–	2	2	17	4	40	37	61	47	108
22. Pneumonia	58	24	24	1	2	25	26	–	1	4	1	18	12	12	27	59	67	126
23. Other respiratory diseases	8	–	–	–	–	–	–	–	–	4	–	9	3	5	7	18	10	28
24. Ulceration—stomach or duodenum...	10	–	–	–	–	–	–	–	–	2	–	5	3	3	–	10	3	13
25. Diarrhœa (under 2 years of age) ...	6	3	4	–	–	3	4	–	–	–	–	–	–	–	–	3	4	7
26. Appendicitis	6	1	–	–	–	1	–	–	2	1	–	1	–	–	1	3	3	6
27. Other digestive diseases	23	–	1	2	1	2	2	–	–	1	3	3	10	15	19	21	34	55
28. Nephritis	21	–	–	1	–	1	–	1	–	5	3	11	12	24	19	42	34	76
29. Puerperal and post-abortive sepsis ...	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1	1
30. Other Maternal causes	5	–	–	–	–	–	–	–	–	–	5	–	–	–	–	–	5	5
31. Premature birth	42	31	18	–	–	31	18	–	–	–	–	–	–	–	–	31	18	49
32. Congenital malformations, birth injury and infantile disease	38	43	18	–	–	43	18	–	–	–	3	–	–	–	–	43	21	64
33. Suicide	2	–	–	–	–	–	–	–	–	5	4	6	4	2	4	13	12	25
34. Road traffic accidents	13	–	–	–	–	–	–	1	–	3	–	4	1	2	3	10	4	14
35. Other violent causes	29	4	4	5	1	9	5	1	–	7	2	6	1	8	8	31	16	47
36. All other causes	132	5	4	1	3	6	7	5	2	9	13	11	7	67	99	98	128	226
Total	979	118	79	18	15	136	94	14	11	100	104	343	230	642	769	1235	1208	2443

MATERNAL AND INFANT MORTALITY RATES IN NINETEEN COUNTY BOROUGHS FOR THE YEARS 1936–1945.

County Borough.	Maternal Mortality Rates.										Infantile Mortality Rates.									
	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
Southampton	4.08	1.69	2.26	2.7	3.16	2.74	1.64	1.85	1.56	2.01	53.5	48.6	50.5	48	50.6	52.15	40.86	38.9	46.36	56.1
Birmingham ...	3.53	2.96	2.71	2.49	1.74	1.95	1.82	1.35	0.95	1.12	62	60	61	60	70	69	56	55	42	49
Blackpool ...	4.2	2.90	4.74	2.6	7.1	2.0	4.8	2.5	3.8	2.6	63.0	57.7	47.0	53.5	53.0	56.8	68.4	62.6	41.3	37.8
Bournemouth...	4.85	2.85	1.41	1.36	2.73	2.02	2.74	2.30	3.49	4.10	39.48	45.89	44.72	47.4	65.91	42.69	43.91	47.00	41.11	48.02
Brighton ...	4.3	1.0	3.0	3.2	4.5	2.8	2.5	2.9	1.8	0.8	58	51	61	45	69	47	58	55	68	63
Bristol ...	3.10	3.53	3.18	2.93	2.73	1 26	2.10	1 41	1.25	1.25	48	46	42	42	56	54	37	45	35	35
Cardiff ...	3.75	3.67	3.79	2.47	2.80	3.36	3.84	4.45	2.39	3.08	55	64	52	53	59	75	57	55	46	55
Croydon ...	3.85	3.87	0.87	1.14	1.65	3.23	3.35	0.53	2.17	2.44	41	60	40	38	39	37	39	37	44	41
Grimsby ...	3.99	1.26	6.00	2.48	1.25	1.36	1.90	1.87	1.66	2.89	67	57	49	53	52	57	56	54	54	47
Hull	3.3	2.48	2.67	3.18	2.75	3.98	1.68	4.61	1.95	1.91	65	77	69	62	70	76	68	69	58	61
Newport Mon.	2.45	1.27	3.18	6.70	2.37	2.91	2.21	1.04	1.46	1.10	63.8	62.3	61.7	53.6	79.7	78.2	58.1	48.9	51.7	62.4
Nottingham ...	4.5	2.8	1.8	1.3	2.7	2.8	2.5	1.38	0.85	1.33	89	80	71	66	61	80	62	65	56	53
Portsmouth ...	2.21	1.51	2.28	3.08	1.70	2.61	3.91	1.81	1.32	0.69	49.59	43.81	60.15	52.23	49.21	56.15	41.77	47.32	44.98	42.67
Plymouth ...	**2.8**	**5.32**	**2.03**	**3.06**	**3.21**	**2.52**	**3.44**	**3.69**	**1.96**	**4.32**	**55.86**	**45.88**	**53.25**	**42.04**	**59.69**	**77.49**	**51.82**	**37.53**	**39.98**	**55.96**
Sheffield ...	—	3.37	2.85	2.37	1.52	1.45	0.73	1 25	0.87	1.35	—	55	50	48	55	67	49	56	41	46
Sunderland ...	3.60	3.45	3.86	2.82	1.18	1.65	2.51	1.56	1.60	1.47	72	85	67	75	73	104	80	80	72	55
Swansea ...	6.6	3 8	1.9	2.7	2.9	1.4	3.0	2.0	1.5	0.9	57	56	50	58	57	71	61	48	39	45
West Ham ...	—	1.15	1.89	2.66	1.55	3 39	2.45	1.40	1.40	2.00	—	62	57	45	42	55	49	54	43	38
Willesden ...	1.76	3.27	1.68	2.49	2.08	1.66	2.28	1.10	2.17	1.48	60	64	54	54	52	52	51	58	42	49

DEATHS OF CHILDREN UNDER 5 YEARS—PLYMOUTH 1946.

Cause.	0–1 *years.*		1–2 *years.*		2–3 *years*		3–4 *years.*		4–5 *years.*		*Total under* 5 *years.*	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Cerebro Spinal Fever	1	–	–	–	–	–	–	–	–	–	1	–
Whooping Cough	1	1	–	–	–	–	–	1	–	1	1	3
Diphtheria	–	–	–	–	–	–	1	–	–	–	1	–
Tuberculosis of the Respiratory System ...	1	–	1	–	–	1	–	–	–	–	2	1
Other forms of Tuberculosis	2	–	3	2	–	3	1	–	–	–	6	5
Influenza	1	–	–	–	–	–	–	–	–	–	1	–
Measles	–	1	–	–	–	–	–	–	–	–	–	1
Polioencephalitis	–	–	–	–	–	–	–	–	1	–	1	–
Diseases of the circulatory system	–	–	–	–	–	1	–	–	–	–	–	1
Bronchitis	1	4	1	–	–	–	–	–	–	–	2	4
Pneumonia	24	24	–	2	1	–	–	–	–	–	25	26
Gastro-enteritis	3	4	–	–	–	–	–	–	–	–	3	4
Appendicitis	1	–	–	–	–	–	–	–	–	–	1	–
Other digestive diseases	–	1	1	–	–	–	–	1	1	–	2	2
Nephritis	–	–	–	–	1	–	–	–	–	–	1	–
Prematurity	31	18	–	–	–	–	–	–	–	–	31	18
Congenital malformations, birth injury and infantile disease	43	18	–	–	–	–	–	–	–	–	43	18
Violent causes (less Road Traffic Accidents)...	4	4	2	–	–	–	2	–	1	–	9	4
All other causes	5	4	1	–	–	2	–	–	–	1	6	7
Totals	118	79	9	4	2	7	4	2	3	2	136	94

INFANT MORTALITY—PLYMOUTH 1946.

Cause of Death.	*Under 1 week.*		*1–2 weeks.*		*2–3 weeks.*		*3–4 weeks.*		*Total under 1 month*		*1–3 months.*		*3–6 months.*		*6–9 months.*		*9–12 months.*		*Total under 1 year.*	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Cerebro-Spinal Fever	-	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–
Whooping Cough	-	–	–	–	–	–	–	–	–	–	–	–	1	–	–	1	–	–	1	1
Tuberculosis of Respiratory System	–	–	–	–	–	–	–	–	–	–	-	-	–	–	1	–	–	–	1	–
Other forms of Tuberculosis ...	–	–	–	–	–	–		–	–	–	1	–	–	–	1	–	–	–	2	–
Influenza	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	1	–
Measles	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Bronchitis	–	–	–	-	–	1	–	–	–	1	–	2	–	1	1	–	–	–	1	4
Pneumonia	–	1	1	–	2	2	–	3	3	6	5	5	7	5	7	4	2	4	24	24
Gastro-enteritis	–	–	–	–	–	-	–	1	-	1	2	1	1	–	–	2	–	–	3	4
Appendicitis	–	–	–	–	–	–	–	–	-	–	–	-	–	–	–	–	1	–	1	-
Other digestive diseases*	–	–	–	–	–	–	–	–	–	-	–	–	–	–	–	–	–	1	–	1
Prematurity	24	12	1	2	3	1	2	1	30	16	1	2	–	–	–	–	–	-	31	18
Congenital Malformations, Birth Injury, Infantile Disease ...	26	10	7	1	5	–	–	–	38	11	3	1	2	2	–	2	–	2	43	18
Violent Causes (not including Road Traffic Accidents)	1	3	-	–	–	–	–	–	1	3	1	1	1	-	1	–	-	–	4	4
All other causes	3	–	–	–	–	–	–	–	3	–	–	2	1	1	1	1	-	–	5	4
Total	54	26	9	3	10	4	2	5	75	38	13	14	13	9	13	10	4	8	118	79

* Intussusception.

Maternity and Child Welfare

Report of Senior Assistant Medical Officer.

Births. The live birth-rate for 1946 is 24.26 per 1,000 of the estimated civilian population (176,070), a decrease of .01 on the previous year, but 5.16 higher than the rate for England and Wales.

	Notified	*Registered*	*Allocated*
Total live births (legitimate and illegitimate)	3985	4003	4272
Total stillbirths (legitimate and illegitimate)	110	110	101
Total births	4095	4113	4373
Illegitimate births—live ...	131	131	401
stillbirths	4	4	8
Total	135	135	409

No. of births notified by doctors and parents	341
No. of births notified by midwives	3754
	4095

PLACE OF CONFINEMENT.

Own home by municipal midwife	1025
Own home by municipal midwife with doctor	203
Own home by private midwife	107
Own home by private midwife with doctor	104
Own home by T.T.N.A. district midwife	258
Own home by T.T.N.A. district midwife with doctor	122
Alexandra Maternity home by midwife	1004
Alexandra Maternity home by midwife with doctor	258
City Hospital by midwife	653
City Hospital by midwife with doctor	161
Private nursing homes—doctor	134
Doctors' District cases	66
Total	4095

Stillbirths. The stillbirth rate is 23.09 per 1,000 allocated births, and 0.57 per 1,000 of the civilian population. Prior to 1937, Plymouth's stillbirth rate was lower than that for England and Wales. From 1942–1945 inclusive, it was appreciably higher, but this year it has fallen to only 0.04 above the rate for England and Wales.

More than two-thirds of the stillbirths took place in hospital maternity wards and maternity homes.

STILLBIRTH RATE.

Year.	England and Wales.	Plymouth.	
	Per 1,000 population.	Per 1,000 births.	Per 1,000 population.
1936	0.61	37.72	0.58
1937	0.60	36.97	0.56
1938	0.60	40.6	0.66
1939		35.5	0.59
1940	0.55	34.29	0.59
1941	0.51	32.3	0.41
1942	0.54	29.95	0.68
1943	0.51	31.7	0.75
1944	0.50	27.68	0.68
1945	0.46	28.20	0.70
1946	0.53	23.09	0.57

No. of stillbirths (institutional, 82; domiciliary, 36) 118

Institutional.

City Hospital	48
Flete Maternity Home	8
Alexandra Maternity Home	25
Charlton Nursing Home	1
	82

Domiciliary.

Municipal Midwife	23
Private Midwife	7
Three Towns Nursing Association Midwife	6
	36
Doctor in attendance	83
Midwife only in attendance	35
	118
Female stillbirths	56
Male stillbirths	62
	118

Summary of 118 cases.

(*a*) Macerated : 48.

Duration of pregnancy.

Over 40 weeks	2
40 weeks	18
39 weeks	1
36–39 weeks	12
32–35 weeks	5
30–32 weeks	1
30 weeks or under	9
	48

Parity.

1st pregnancy	15
2nd pregnancy	18
3rd pregnancy	8
4th pregnancy	4
Over 5th pregnancy	3
	48

Pre-natal supervision.

Satisfactory	46
No supervision	2
	48

Standard of living.

Good	25
Fair	18
Poor	1
Not known	4
	48

Causes.

Post-mature.

Toxæmia	1
Long labour	1
	2

Full-term.

Associated with anencephaly	1
Associated with poor health of mother ...	1
Associated with long 1st stage	1
A.P.H.	1
A.P.H.+partial rupture of uterus	1
Toxæmia	2
Cord round neck	1
Cord prolapsed	2
Placental insufficiency	1
Shock	1
No known cause	7
	19

36–39 weeks.

A.P.H.	3
Toxæmia	2
Cord round neck	1
Placental insufficiency	1
Associated with hydrocephalus	1
No known cause	4
	12

32–35 weeks.

A.P.H.	2
Hypertension	1
Associated with hydrocephalus	2
	5

28–32 weeks.

Toxæmia	2
Associated with hydrocephalus	2
Not known	6
	10

Note that 68% were 36 weeks and over, and that the antenatal supervision is recorded as satisfactory.

(*b*) Premature but not macerated : 30.

Duration of pregnancy

36–37 weeks	11
32–35 weeks	8
28–30 weeks	11
	30

Parity.

1st pregnancy	12
2nd pregnancy	4
3rd pregnancy	7
4th pregnancy	3
5th pregnancy	1
Over 5th pregnancy	3
	30

Pre-natal supervision.

Satisfactory	30

Standard of living.

Good	14
Fair	11
Poor	2
Not given	3
	30

Causes.

37 weeks.

Cord round neck in extended breech ... (Pr. 1)	1
Second twin ... ... (M. 1)	1
	2

36 weeks.

Toxæmia	(M. 1)		1
Eclampsia	(M. 1)		1
A.P.H. (both Cæsars) ...	(Pr. 1 ; M. 1) ...		2
Fœtal deformity :			
Anencephaly	(M. 3)		3
Ascites	(Pr. 1)		1
Unknown	(Pr. 1)		1
			9

32–35 weeks.

Toxæmia	(M. 1 ; Pr. 1) ...		2
A.P.H.	(M. 2)		2
A.P.H. after a fall ...	(M. 1)		1
A.P.H. + fœtal deformity	(Pr. 1 ; M. 1) ...		2
Fœtal deformity ...	(M. 1)		1
			8

28–30 weeks.

Toxæmia	(Pr. 1 ; M. 1) ...		2
A.P.H.	(Pr. 2)		2
Prolapsed cord	(Pr. 1)		1
Twin pregnancy ...	(M. 3)		3
Prematurity only ...	(Pr. 2)		2
Not known	(M. 1)		1
			11

(*c*) Stillborn at or near term : 40 In good condition : 39
Anencephalic monster 1

Parity.

1st pregnancy	17
2nd pregnancy	12
3rd pregnancy	3
Over 3rd pregnancy	7
	39

Age.

20 years and under	3
21–24 years	12
25–29 years	8
30–34 years	6
35–39 years	5
40 years and over	4
Not known	1
	39

Pre-natal supervision.

Satisfactory	39

Standard of living.

Good	18
Fair	14
Poor	1
Not known	6
	39

Delivery.

Spontaneous	18
Manual	5
Instrumental	11
Cæsarean section	3
B.B.A.	1
Not known	1
	39

Causes.

Toxæmia, twins	...	(M. 1) ...	1
Toxæmia, Cæsarean section	... ...	(Pr. 1) ...	1
Hypertension	... ...	(M. 1) ...	1
Hæmorrhage, A.P.H.	...	(M. 2) ...	2
Dystocia	... ...	(M. 3; Pr. 6) ...	9
Cord, prolapsed	...	(M. 2; Pr. 1) ...	3
Cord, round neck	...	(M. 3; Pr. 5) ...	8
Breech, B.B.A.	...	(M. 1) ...	1
Breech, precipitate	...	(M. 1) ...	1
Breech, extended	...	(M. 1) ...	1
Breech, ordinary	...	(M. 2) ...	2
Twins	...	(M. 3; Pr. 2) ...	5
Post-mature, induction of labour	... ...	(M. 1) ...	1
B.B.A., No attendant		(M. 1) ...	1
Cerebral hæmorrhage, precipitate birth	...	(Pr. 1) ...	1
Not known	... ...	(Pr. 1) ...	1
			39

Circular 20/44 Care of Premature Infants.

There were 246 (including 10 pairs of twins) notified premature live births during 1946 of whom 158 were surviving and living in Plymouth on the 30th June, 1947, that is at the age of six months or over.

Twenty-one died within twenty-four hours, twenty-four died within the first week, and eleven died after the first week and within twenty-eight days. The majority of these deaths were due to prematurity; nine died between the ages of one month and six months, and these deaths were mostly due to broncho-pneumonia, apart from two due to gastro-enteritis.

Of the 158 surviving and living in Plymouth at six months or over, eighty-five were entirely breast fed for at least the first few weeks of life, although by the age of three months the majority of these were artificially fed.

More detailed information is given in the following tables :—

1. INSTITUTIONAL AND DOMICILIARY PREMATURE, OR UNDERWEIGHT, BABIES.

	Total Births.	*Died within 24 hours.*	*Died within the first week.*	*Died after the first week and within 28 days.*	*Survived at end of month.*	*Died after 28 days.*	*Left Plymouth between age of 1 and 6 months.*	*Total surviving and living in Plymouth at 30.6.47.*
Institutional Premature Babies ...	130	12	15	7	96	4	20	72
Domiciliary Premature Babies ...	116	9	9	4	94	5	3	86
	246*	21	24	11	190	9	23	158

* 232 Legitimate, 14 Illegitimate ; 132 Males, 114 Females.

2. CLASSIFICATION OF THE 17 DISTRICT PREMATURE BABIES TRANSFERRED TO HOSPITAL.

No.	*Weight.*	*Duration of Pregnancy.*	*Remarks.*
1	4 lbs. 14 ozs.	34–36 weeks.	Difficult with feeding. *Died* at Prince of Wales's Hospital, Devonport. Prematurity — 3 weeks premature.
2	5 lbs. 8 ozs.	8 months.	Transferred to Prince of Wales's Hospital, Devonport, on account of Convulsions and Bronchitis.
3	2 lbs. 8 ozs.	? 28 weeks.	Emergency case. Dangerously feeble. *Died* aged 11 hours—Prematurity.
4	5 lbs.	36 weeks.	Emergency case. Filthy home conditions. *Died* aged 90 days Dietetic gastro-enteritis.
5	4 lbs. 12 ozs.	37 weeks.	Emergency case. Unsatisfactory home conditions.
6	1 lb. 8 ozs.	26 weeks.	Very feeble. Transferred to Hospital for incubator treatment. Emergency case. *Died* aged 32½ hours—Prematurity.
7	2 lbs. 12 ozs.	28 weeks.	Very feeble.
8	5 lbs. 8 ozs.	36 weeks.	No bowel action—vomiting. *Died* aged 9 days—Atresia of Colon, Atresia of Bile Ducts, Obstruction.
9	? 3 lbs.	? 28 weeks.	Emergency case. Very feeble. *Died* aged 12 hours—Prematurity.

No.	*Weight.*	*Duration of Pregnancy.*	*Remarks.*
10	2 lbs.	26–28 weeks.	Very feeble. *Died* aged 24 hours—Prematurity.
11	3 lbs.	33 weeks.	No one competent to look after baby at home. *Died* aged three weeks—Prematurity.
12	4 lbs. 4 ozs.	28 weeks.	Unsatisfactory home conditions. *Died* aged 44 days—Gastro-enteritis.
13	4 lbs. 12 ozs.	32–36 weeks.	Removed to City Hospital on the 9th day on account of neglect and not being fed properly.
14	3 lbs. 2 ozs.	28–30 weeks.	Dangerous feebleness. *Died* aged two days—Prematurity.
15	? 2 lbs.	? 28 weeks.	Dangerous feebleness. *Died* aged 9 hours—Prematurity.
16	4 lbs. 2 ozs.	37 weeks.	Second twin. Bleeding from nose.
17	3 lbs. 8 ozs.	? 28 weeks.	Dangerous feebleness. *Died* aged one week—Prematurity.

Note.—5 babies survived and 12 babies died.

3. Institutional and Domiciliary Premature Babies.

PROBABLE CAUSE OF PREMATURITY
(INCLUDING SEVERAL FULL TERM BUT UNDERWEIGHT BABIES).

Cause.	*Total Births.*	*Died within 24 hours.*	*Died within 28 days.*	*Died after 28 days.*	*Left Plymouth between age of 1 and 6 months.*	*Total surviving and living in Plymouth at 30.6.47.*
Full term, but underweight	47	–	3	1	3	40
Toxæmia	30	3	6	2	3	16
Associated with Ante-partum Hæmorrhage	1	–	–	–	–	1
Ante-partum Hæmorrhage	13	5	2	–	–	6
Hypertension	2	–	–	–	–	2
Medical Induction ...	2	–	–	–	–	2
Labour induced ...	2	–	1	–	–	1
Following Cæsarean for Toxæmia	1	–	1	–	–	–
Following attempted Version	1	–	–	–	1	–
Multiple pregnancy ...	17	2	5	–	–	10
Hydramnios	6	1	2	–	–	3
Cardiac	1	–	1	–	–	–
Mental distress	2	–	1	–	–	1
Pyelitis	1	–	–	–	1	–
Infarction of Placenta...	1	–	1	–	–	–
Associated with Positive W.R.	2	–	1	–	–	1
Fall	1	–	–	–	–	1
Unknown	115	10	11	6	15	73
Placenta Prævia ...	1	–	–	–	–	1
Totals ...	246	21	35	9	23	158

4. Initial Feeding of the 158 Premature Babies surviving and Living in Plymouth at the Age of Six Months.

(*a*) Domiciliary : 86.

52 Entirely Breast fed.
4 Breast and National Dried Milk.
2 Breast and Nestles.
1 Breast, Nestles, National Dried Milk.
2 Breast and Ostermilk.
2 Breast and Cow and Gate.
1 Breast and Allenburys.
1 Breast and Cows Milk.
1 Expressed Breast Milk and Cow and Gate.
1 Cows Milk.
2 Ambrosia.
1 National Dried Milk and Nestles.
4 Ostermilk.
4 National Dried Milk.
2 Cow and Gate.
1 Frailac and Ostermilk.
1 Cow and Gate Half Cream.
1 Nestles and National Dried Milk.
2 Frailac and Cow and Gate.
1 Evaporated Milk.

86

Note.—Smallest baby 2¾ lbs. Largest baby 5½ lbs.

(*b*) Institutional : 72.

33 Entirely Breast fed.
1 Breast and Trufood.
1 Breast and Cows Milk.
2 Breast and Modified Cows Milk.
2 Breast and National Dried Milk.
9 Expressed Breast Milk.
5 Expressed Breast Milk, Breast.
1 Expressed Breast Milk and Modified Cows Milk.
2 Expressed Breast Milk and Cows Milk.
2 Expressed Breast Milk and Frailac.
1 Nestles.
1 Trufood.
1 Ostermilk.
1 Cows Milk.
2 Frailac and Ostermilk.
2 Frailac.
6 Nursing Home cases (Cards and particulars not received).

72

Note.—Smallest baby 3 lbs. Largest baby 5½ lbs.

1945 Follow Up. 144 of the 252 premature babies born during 1945 were surviving and living in Plymouth on the 30th June, 1946. A year later four had died and eleven had left Plymouth, leaving 129 surviving and well.

Infant Mortality. (See Table on page 14, and Chart on page 18c).

Number of deaths under one year : 197 : (under 1 month : 113).

Infant mortality rate : 46.11 per thousand live births (England and Wales, 43).

Neo-natal mortality rate : 26.45 per 1,000 live births.

Total deaths under 1 week : 80.

Prematurity deaths under 1 month : 46.

Congenital malformation deaths under 1 month : 49.

Gastro-enteritis deaths under 1 month : 1.

Pre-natal and neo-natal causes account for 56% of the deaths, respiratory diseases for 27%, diseases of the digestive tract including gastro-enteritis for 4.5% and infectious diseases for 3%.

The proportion of deaths due to pre-natal and neo-natal causes remains fairly constant from year to year, the average for the past five years being 54%.

Deaths of Children between 1 and 5 years.

Number of deaths : 33.

This is not a high figure, but the fact that 11, that is exactly one-third of these deaths, were due to tuberculosis, is a somewhat distrubing feature.

	Deaths 0–1 years.	*Deaths 1–5 years.*	*Total deaths under 5 years.*
1938	176	59	235
1939	145	48	193
1940	197	94	291
1941	178 (27 enemy action)	112 (48 enemy action)	290
1942	146	32	178
1943	118	49	167
1944	139	40	179
1945	214	46	260
1946	197	33	230

Infantile Diarrhoea. Notifications : 34 cases.

There were seven deaths from gastro-enteritis in children under two years, giving a rate of 1.63, the corresponding rate for England and Wales being 4.4.

Seasonal incidence of notified cases.

In November and December there were 19 notifications (deaths 3).

6 months to 1 year	5
3 months and under	3
Over 1 year	11
	19

In January and February there were 11 notifications (death 1).

Under 3 months	6
5 months	1
8 months	1
Over 1 year	3
	11

In May one notification was received (died), in September two and in October one. There were no notifications during the months of March, April, June, July and August. The title "summer diarrhœa" is therefore not appropriate, as the incidence was almost entirely confined to the winter months. The two unnotified deaths occurred in October and December.

Feeding :	Breast fed	Nil.
	Dried milk	12
	Liquid milk (boiled 5) ...	7
Occurred :	Own home	32
	Institution	2
Treated :	Hospital	9

Ophthalmia Neonatorum.

	Where treated					
No. notified.	*Own home.*	*Royal Eye Infirmary.*	*City Hospital and Royal Eye Infirmary.*	*Maternity Home.*	*Vision Un-impaired.*	*Vision Impaired.*
21	8	8	3	2	21*	–

* Includes 1 death.

Notifications : 21. Outward transfers 2, leaving 19 belonging to Plymouth, of which 10 were district cases and 9 institutional.

A. District cases : 10.

Treated at home, 8. All mild cases. Earliest onset 6th day.

Treated Royal Eye Infirmary, 2. (i) Severe conjunctivitis occurring after 14th day. (ii) Onset 4th day. G.C. present. Treated with penicillin. Complete recovery.

B. Institutional cases : 9. (Flete 4, City Hospital 3, Alexandra Maternity Home 2).

Seven cases were referred to the Royal Eye Infirmary and of these one died of broncho-pneumonia whilst under treatment. In all, the onset was late, after the 12th day. There was no impairment of vision in any case.

Child Life Protection.

The demand for foster-mothers has been much greater than the supply and this despite our scheme of guaranteed payments to foster-mothers.

One is forced to the conclusion that the present day strain of coping with ordinary household affairs is deterring many women from acting as foster-mothers who would otherwise be glad to do so.

Health Visitors paid 359 home visits as Child Life Protection Officers.

FOSTER-PARENTS.

No. on Register, 1st January, 1946	28
New registrations during the year	3
On Register at end of year	31

FOSTER-CHILDREN.

No. on Register, 1st January, 1946		33
Notifications of children received during the year		43
		76
Removals from Register during the year :—		
Adopted	6	
Removed to care of relatives	26	
Removed to official organisations ...	4	
Removed to outside areas	1	
Died	1	
Removed to other Foster-mothers ...	3	
Total removals from Register		41
On Register at end of the year		35
Interviews with Mothers and Fathers		20
Interviews with Foster-mothers		20
Home visits by Superintendent Health Visitor ...		45

Visits were paid by a Medical Officer to three boarding schools taking boarders under the age of nine years, and to a voluntary children's home.

Adoption of Children (Regulation Act, 1939).

Cases brought forward from 1945		28
New cases in 1946		72
Total on Register for 1946		100
Adoptions completed during 1946		35
Adoptions not proceeded with	11	
No. of children who died during year ...	1	
No. who were transferred to other areas	2	
		49
Total on Register at end of 1946		51

Visiting :—		
1st visits	29	
Re-visits	119	
Total visits	148	
Interviews by Superintendent Health Visitor ...		313

Adoption work cannot be hurried. It demands great understanding of human problems and relationships, much tact and kindness combined with sound judgment.

No adoption is sponsored unless it seems the best thing for the child, and the greatest care is taken to secure a really good home for each adopted child.

Illegitimate Children. Circular 2866.

Special care has been given to illegitimate children as follows :—

Admitted to our residential nursery	16
Admitted to day nurseries	26
Placed with foster-mothers under our guaranteed payments to foster-mothers' scheme	41
Adoptions :—	
Applications considered	100
Adoptions completed	35

For further information, see section on Moral Welfare.

Moral Welfare.

We were without a Moral Welfare Worker from October, 1945, to the end of March, 1946. The following report therefore covers the period from the 1st of April to the end of the year.

Cases in hand from 1945		61
Cases reported by (includes 12 cases re-opened) :—		
Maternity and Child Welfare	131	
Social Welfare Officers	24	
Social Workers	14	
Public Officials	13	
Themselves and others interested ...	25	
		207
Cases dealt with		268
No. of interviews		883
No. of visits		552

Cases were dealt with on the following lines :—

Helped and advised	9
Unmarried mothers helped and advised	76
Married women with illegitimate children ...	50
Matrimonial difficulties	16
Young girls in moral danger helped and visited...	6
Young girl in moral danger sent to six months Training Home	1

Taken to Children's Home	9
Put in touch with Youth Clubs	3
Foster homes found (through M. & C.W. Dept.)	4
Put in touch with County Welfare Officers ...	4
Mental defective unmarried mothers helped and advised	2
Adoptions arranged	6
Missing girl traced	1
Residential work found with baby	5
Work found	22
Taken to Maternity Homes	6
Taken to Mother and Baby Homes	4 girls, 4 babies
Taken to Hostel for expectant unmarried mothers	6
Grant through City Treasurer for foster home ...	1
Hostel accommodation for working girl	1
Affiliation Orders obtained through private agreement	5
Affiliation Orders obtained through the Court ...	2
Grants, allowances, etc., administered	26
Grants obtained	12

In addition to this, gifts of baby clothes, prams, cots, books, etc., were given where required.

Our Moral Welfare Officer submits the following account of her work.

" The greatest problem with which we have been faced is the recurrence of illegitimacy. Two cases have had a fourth child at the age of 24.

Our first step to try to stop this occurring is strongly to advise the girl to keep the child and also, if possible, to get her into a Maternity Home where she will be met with kindness and understanding and taught to look after her child and ultimately feel that she does not want to part with it. We are most anxious to have an hostel where girls, after training, can go out to daily work. At the present time, they have to go out of the City, and it is during the ante-natal period that one has the greatest influence on them.

We try, whenever possible, to trace the putative father and get him to take his share of the responsibility. In a number of cases private agreements have been drawn up and the man is paying regularly through this office.

In cases where it has not been possible to obtain help from the putative father grants have been made, in most cases through Barnardo's, either to the foster-mother or to the grandmother. These grants vary from 5/– to 23/6 a week and are based by the Society on the girl's circumstances.

This Society also pays the doctor's bills for the child, and if for any reason the girl loses time from work the Society will make it up by an additional grant. They ask for a report on the child and its mother each month.

We are now receiving about £30 per month for these grants. In cases of married women with illegitimate children, also widows, the Society has taken the child into one of their Homes and the mother makes a small payment, which is paid through this office, as it is hoped her circumstances later will allow her to have her child out with her again.

We are administering in various ways about £550 a year.

We feel strongly that the after-care is one of the most important parts of the work. When a girl is re-established, and, as it might appear our work finished, it is then that we like her to feel that we are still her friends and encourage her to come and see us at the office in a friendly way. We do feel there is a great need for us to have a club where we can invite these girls.

If the girls are working out of town a correspondence is kept up with them and, when possible, they are visited and it is amazing how much they appreciate this link.

Much concern is felt in the number of young wives who are expecting babies who ask us to arrange adoption as the marriage is a failure. Also, a great number are of couples who come to us with matrimonial difficulties and, in many cases, our efforts to prevent a broken marriage seem in vain.

Health Visiting. There were only twelve Health Visitors on the staff on December 31st, with a known case load of 13,872 children under five (3,879 being under one year).

Some districts have been left almost entirely without a Health Visitor for many months, and home visiting generally has not been adequately done for several years, although home visiting is a fundamental part of Maternity and Child Welfare work. The situation is beyond local control, being due to the national shortage of trained Health Visitors.

TABLE X. INFANT WELFARE CENTRES.

	Town Hall.	*Beaumont Hut.*	*Devonport Park.*	*Beacon Park.*	*Peverell.*	*Honicknowle.*	*St. Budeaux.*	*Efford.*	*Crownhill.*	*Totals.*
No. of sessions held ...	51	189	51	81	49	53	52	50	10	586
No. of babies entered on register	326 (261 1st)	1190 (859 1st)	283 (216 1st)	353 (264 1st)	250 (164 1st)	96 (70 1st)	242 (195 1st)	190 (133 1st)	54 (26 1st)	2984 (2188 1st)
No. of children entered on register	231 (75 1st)	674 (170 1st)	156 (79 1st)	203 (91 1st)	121 (43 1st)	69 (19 1st)	127 (29 1st)	175 (67 1st)	70 (31 1st)	1826 (604 1st)
Total ...	557 (336 1st)	1864 (1029 1st)	439 (295 1st)	556 (355 1st)	371 (207 1st)	165 (89 1st)	369 (224 1st)	365 (200 1st)	124 (57 1st)	4810 (2792 1st)
No. remaining on register 31st December, 1946...										
Babies	181	706	172	277	105	39	210	102	12	1804
Children	324	1079	244	227	226	29	141	221	104	2595
Total ...	505	1785	416	504	331	68	351	323	116	4399
No. of babies weighed and mothers advised ...	2092	9486	2001	2800	2133	788	2246	1511	199	23256
No. of children weighed and mothers advised...	984	3041	525	791	426	205	452	650	83	7157
Total ...	3076	12527	2526	3591	2559	993	2698	2161	282	30413
Doctors' consultations ...	979	4179	909	945	553	293	706	805	99	9468
Average attendances per session	60.3	66.2	49.5	44.3	52.2	18.7	51.9	43.2	28.2	51.9
Dressings done	196	437	162	241	153	—	72	249	10	1520
Sewing classes held ...	—	—	—	—	—	—	—	—	—	—
Total attendances ...	—	—	—	—	—	—	—	—	—	—
Attendances at clinics by Health Visitors ...										2,836
Diphtheria Immunisation										
No. 1st attendances ...	272	889	367	347	65	—	364	178	32	2514
No. re-attendances ...	561	1965	794	614	228	—	862	291	63	5378

Summary of visits paid during the year :—

Births	4,283
1st year visits	7,529
1st visits, 1–5 years	968
Re-visits, 1–5 years	14,101
1st ante-natal visits	465
Re-ante-natal visits	455
Visits re infectious diseases	199
Child Life Protection visits	412
Visits re adoption	370
Special visits	1,123
	29,905

The 199 visits in connection with infectious diseases are made up as follows :—

Ophthalmia neonatorum	10
Discharging eyes	10
Whooping cough	108
Measles	32
Chicken pox	1
Enteritis	23
Mumps	4
Cerebro-spinal meningitis	5
Dysentery	1
Pneumonia	2
Scarlet fever	1
Puerperal fever	1
Cerebro-spinal fever	1
	199

Eighty-four sanitary defects were reported by Health Visitors, and 112 visits were paid in connection with the Home Help Service.

Infant Welfare Centres. A new Child Welfare Centre was opened at Crownhill on 18th October, 1946, providing one child welfare, one ante-natal and one diphtheria immunisation session each week.

Our child welfare weekly sessions increased from eleven to thirteen. In 1938 we had a total of 717 child welfare sessions as against 586 in 1946, although we had 277 more children attending our Centres in 1938. There is obviously great need for extension of our work, when premises and staff are available.

Since November 8th, 1946, creche facilities have been available at Beacon Park Centre on Friday afternoons from 2 to 5 p.m. The creche is staffed by voluntary workers. Up to twenty children can be accommodated, and a charge of 6d. per child is made for the afternoon. Advance bookings are made at the Centre.

No. of sessions	8
No. of children attending	93
Average attendance per session	12

Food Advice Service. In an endeavour to help mothers with their many problems, under present-day conditions, relating to food, marketing, and household budgeting, a special service was started in the month of July. The Education Authority made it possible to provide this service by lending a full-time demonstrator, and the necessary equipment. The demonstrator reports on her work as follows :—

" Demonstration points have been established at Beacon Park, Beaumont Hut, Stonehouse, Devonport, Crownhill and St. Budeaux Welfare Centres, as well as at Efford Community Centre.

At all these places contact is made with the mothers attending for Child Welfare and Ante-natal and Immunisation purposes. At some the mothers stay for a complete demonstration which illustrates ways and means of using welfare and rationed foods. At other places, where time and circumstances do not permit of full demonstrations, talks with illustrative dishes are given.

Instructions are available in the form of Ministry of Food pamphlets and well-tried typed recipes prepared by the instructor. Increasing interest is being shown in this service particularly by the younger modern mothers. It is often possible to follow up instructions given at the centre by visits to the homes where particular help is given to the housewife. No visit is made except at the request of the mother who very frequently gathers together friends and neighbours to join in.

The active co-operation of the Health Visitor has been most helpful in establishing this service."

Orthopaedic Treatment. Child Welfare medical officers refer cases to the visiting Orthopædic Surgeon at the Mount Gold Orthopædic Hospital, and arrangements are then made for the prescribed treatment to be carried out.

During 1946, 101 cases were referred of which 7 cases were treated as in-patients.

Number of sessions held weekly: 16.
See table for summary of attendances.

ANTE-NATAL AND POST-NATAL CLINICS.

	Town Hall.	*Beaumont Park.*	*Devonport Park.*	*Beacon Park.*	*St. Budeaux*	*Efford.*	*Crownhill*	*Totals.*
No. of sessions held	99	244	84	82	98	53	10	670
1st attendances Pr.	148	508	121	112	109	34	5	1037
1st attendances M.	239 395	625 1155	209 343	188 306	168 279	119 158	8 13	1556 2649
1st attendances N.P.	8	22	13	6	2	5	—	56
Re-attendances	1491	4110	1196	1061	1131	671	20	9680
Post-natal attendances 1st ...	1	6	2	—	—	6	—	15
Post-natal attendances re- ...	2	—	1	—	—	—	—	3
Miscellaneous 1st	9	16	5	45	—	—	—	75
Miscellaneous re-	5	—	—	7	—	—	—	12
Total attendances 1st	405	1177	350	351	279	164	13	2739
Total attendances re-	1498	4110	1197	1068	1131	671	20	9695
Average per session	19	21	18	17	14	15	3	18
Consultations	1812	5126	1403	1325	1319	801	30	11816
No. of transfers from 1945 ...	123	240	25	64	49	43	—	544
Total No. of women attending during 1946 A.N. ...	518	1395	368	370	328	201	13	3193
Total No. of women attending during 1946 P.N. ...	— 528	— 1417	— 375	— 415	— 328	— 207	— 13	— 3283
Total No. of women attending during 1946 Misc. ...	10	22	7	45	—	6	—	90

Note.—Crownhill average one month, 5. Clinic opened October, 1946.

Mothers attending Municipal Ante-natal Clinics :—

No. confined in 1946	2,008*
No. aborted in 1946	58
No. of above confined in City Hospital ...	503
No. confined at Flete	639
No. confined T.T.N.A. District Midwife ...	21
No. confined Alexandra Maternity Home ...	41
No. confined Municipal Midwife	790
No. confined Private Midwife	12
No. confined Private Nursing Home	8
No. left Plymouth	131

* Includes 47 stillbirths.

Character of labour in 2,008 confinements :—

Spontaneous	1,902
Instrumental	52
Cæsarean	33
Induction	12
Bimanual	5
Not known	4

Abnormalities found in cases attending for the first time in 1946 :—

1.	Contracted pelvis :—	
	Minor	1
	Major	12
2.	Albuminuria	55
3.	Toxæmia	19
4.	Syphilis	9
5.	Cardiac diseases	13
6.	Respiratory diseases	20
7.	Carious teeth	342
8.	Profuse leucorrhœa	14
9.	Severe digestive disturbance	4
10.	Anæmia	71
11.	Epilepsy	1

Abnormalities found on post-natal examination :—

No. of cases examined P.V.	24
Subinvolution	1
Cervical tears and erosions	2
Retroversion	2

Three hundred and seventy-six Wassermann tests were done, only one being positive.

The work done at our municipal ante-natal clinics has greatly increased. In 1938, we had 407 sessions which 1,202 expectant mothers attended. In 1945, we had 586 sessions, with 2,434 expectant mothers attending. In 1946, the sessions increased to 670, and the expectant mothers attending to 3,193—almost three times as many as in 1938.

Post-natal. As it has not been possible to cope with post-natal examinations at our Centres for some years past, arrangements were made to refer midwives' district cases to a post-natal clinic at the City Hospital, six weeks after the confinement.

This clinic started on 12th April, 1946, and by the end of the year 681 women had been given a special appointment. Of these only 144 attended for examination.

Findings are summarised in the following table :—

No. of 1st attendances		144
No. of re-attendances		8
No. advised or treated		38
No. referred City Hospital for in-patient treatment		5
No. referred to Gynæcologist		1
Perineum deficient	20	
Cystocele	15	
Rectocele	6	
Cervical tears	46	
Cervical erosion	10	
Uterus subinvoluted	1	
Uterus prolapsed	1	
Uterus retroverted	23	
No. of mothers not breast feeding		44

Flete Maternity Home.

Plymouth mothers confined at Flete during 1946	636
Devon County mothers confined at Flete during 1946	89
Cornwall County mother confined at Flete during 1946	1
	726

Fees paid in advance at Maternity and Child Welfare Office during 1946 ... ... £2,454 2s. 6d.

Home Helps. Our Home Help Service, first established in 1919, was further extended during 1946 to cover Domestic Help as advocated by Circular 110/46 of the Ministry of Health, and this combined service was put into operation on the 7th October, 1946.

During the war years it was almost impossible to obtain helpers, but by 31st December, 1946, we had 16 registered helpers who attended 47 home help cases and 17 domestic cases.

In 1938 the cost to the City of the Home Help Service was £209 10s. 8d. For the financial year ending March 31st, 1947, the cost of the new joint service was as follows :—

	Home Help.	*Domestic Help.*
	£ s. d.	£ s. d.
Paid in Wages	524 1 2	631 9 3
Amount Recoverable ...	184 16 2	174 10 4
Cost	£339 5 0	£456 18 11

Circular 179/44 of the Ministry of Health authorises the reimbursement by the Ministry of reasonable expenses incurred by Local Authorities on the Domestic Help Service.

Since October 7th, 1946, helpers have been paid 1/6 per hour, and a new scale of recovery from householders has been in operation, namely the scale suggested in Circular 110/46 of the Ministry of Health.

Supervision of Midwives.

Number notifying their intention to practise	57
On Register at end of year	57
Municipal (including Non-Medical Supervisor of Midwives)	17
In private practice	5
T.T.N.A.	12
Alexandra Maternity Home	20
City Hospital	3
	57

No. of cases attended by private midwives :—

One midwife had 72 cases, one had 61, one had 37, one had 36, and one had 5 cases.

Approximately 75.6% of the notified births (district and institutional) were conducted by midwives only.

District cases attended by midwife	1,390
District cases attended by midwife acting as maternity nurse	429
*Institutional cases attended by midwife ...	1,657
*Institutional cases attended by midwife acting as maternity nurse	553
	4,029

* Includes maternity and nursing homes and hospitals.

Medical help was sought by midwives in 969 cases, approximately 119 calls being for the child.

The following are the reasons given for seeking medical aid :—

Toxæmia of pregnancy	84	Varicose veins	6
Severe sickness	4	Twins	4
Albuminuria	8	Stillbirth	3
Oedema	2	Unsatisfactory condition of the mother :—	
Pyelitis	2	Ante-natal	9
Eclampsia	1	Post-natal	6
Contracted pelvis	3	Adherent placenta	13
Malpresentation	15	Retained membranes	1
Patient's request	2	Painful breast	5
Fœtal distress	16	Ruptured perineum	381
Maternal distress	15	Pain in leg	3
Hæmorrhage :—		Rise of temperature	35
Ante-partum (undefined)	28	Abdominal pains	2
Post-partum	13	Skin condition of mother	1
Intra-partum	2	Skin condition of baby	2
Prolonged labour	126	Deformity of baby	2
Difficult labour	2	Feeble infant	32
Breech	29	Discharging eyes	36
Prolapsed cord	3	Jaundice	3
Uterine inertia	3	Convulsions	2
Miscarriage	3	Unsatisfactory condition of baby	42
Threatened abortion	14		
Premature rupture of membranes	2		
Post-maturity	3		969
Cardiac	1		

Compared with last year's figures there is an increase of 124 in the number of calls.

Other notifications received from midwives under Central Midwives Board rules :—

Notification of artificial feeding	220
Notification of stillbirth	19
Notification of death	13
Notification of having laid out a dead body	12
Notification of liability to be a source of infection	18

Municipal Domiciliary Midwifery Service.

At the end of 1946, there were fifteen midwives on the staff, plus one Non-medical Supervisor of Midwives.

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

Number of cases attended :—		
Midwife only	1,023	
Midwife with Doctor	203	
		1,226
Number of cases attended by relief nurses :—		
Midwife only		2
		1,228

Number of cases booked	1,474
Number of ante-natal visits paid by midwives ...	6,603
Number of ante-natal clinic visits paid by midwives	144
Number of emergency deliveries transferred to Elete	10
Number of patients transferred to the City Hospital for confinement	14
Number of patients transferred to the City Hospital after confinement (including 3 emergencies) ...	11
Number transferred to the Alexandra Maternity Home after confinement (emergency)	1
Number transferred to the Royal Eye Infirmary after confinement (emergency)	1
Number of emergency deliveries	57
Number of emergency miscarriages	4
Number of booked miscarriages	4
Number of patients booked for the administration of Gas and Air Analgesia	116
Number of Gas and Air administrations	79

Amount of fees collected ... ... £2,974 17s. 10d.

	£	s.	d.
Midwifery fees ...	2,320	7	0
Maternity fees ...	555	15	0
Sets and Pads ...	98	15	10
	£2,974	17	10

Number of accouchement sets sold ...	267
Number of maternity pads sold	151 packets.

Fees to be collected by City Treasurer ... £589 12s. 6d.

Fees paid to Doctors. Two hundred and sixty-one accounts were dealt with under Section 14 of the Midwives Act, 1918. In 66 of these doctors' accounts, the full fee was paid by the Local Supervising Authority without recovery. In 180 cases the full fee, and in 15 cases half the fee was recoverable in accordance with the scale of income fixed by the City Council. Amount paid, £418 19s. Recoverable, £299 17s. Total cost, £119 2s.

Maternity and Nursing Homes.

MATERNITY HOMES.

On Register, 1st January, 1946	2
Closed during the year	1
On Register at end of year	1

NURSING HOMES.

On Register, 1st January, 1946	3
Closed during the year	–
On Register at the end of year	3

Maternal Mortality. Seven women died in Plymouth from causes due to pregnancy and childbirth, and six of these deaths belonged to Plymouth, giving a maternal mortality rate of 1.36 per 1,000 births.

This is a very low rate for Plymouth, and is actually lower than the corresponding rate for England and Wales which is 1.43.

For the first time since 1929, there were no abortion deaths.

One of the six deaths was due to sepsis, and five to other causes.

Why Plymouth Maternal Mortality rate should be very high in 1945 and very low in 1946, while the birth rate remained high for both years, is not apparent.

DEATHS DUE TO PREGNANCY AND CHILDBIRTH, 7

(Belonging to Plymouth, 6).

CAUSES.

Sepsis	2
Hæmorrhage P.P.H.	1
Toxæmia	1
Eclampsia	1
Ruptured uterus	2
	7

WHERE CONFINED.

Own home	1
City Hospital	1
Alexandra Maternity Home	2
Undelivered—City Hospital	3
	7

CHARACTER OF LABOUR.

Spontaneous	1
Forceps	2
Cæsarean section	1
Undelivered	3
	7

DURATION OF PREGNANCY.

40 weeks	3
Over 40 weeks	2
30 weeks	2
	7

AGE.

20–24 years	1
30–34 years	3
35–39 years	3
	7

Parity.	
1st pregnancy	1
2nd pregnancy	2
3rd pregnancy	1
7th pregnancy	2
10th pregnancy	1
	7
Home Conditions.	
Good	4
Fair	3
	7
Ante-Natal Supervision.	
Satisfactory	4
None	1
Inadequate	2
	7
Place of Death.	
Own home	1
City Hospital	4
Alexandra Maternity Home	2
	7

Total Puerperal Mortality.

Year	England and Wales			Plymouth		
	Per 1,000 live births	Per 1,000 total births		Per 1,000 live births	Per 1,000 total births	
		Including abortions	Excluding abortions		Including abortions	Excluding abortions
1928	4.42	4.25	—	6.04	—	—
1929	4.33	4.16	—	4.98	—	—
1930	4.40	4.22	—	6.43	—	—
1931	4.11	3.94	—	—	2.81	—
1932	4.21	4.04	—	—	5.58	—
1933	4.51	4.32	—	—	5.95	—
1934	4.60	4.42	—	—	4.2	—
1935	4.10	3.93	—	—	5.01	—
1936	3.81	3.65	—	—	2.82	—
1937	3.23	3.11	—	—	5.3	—
1938	3.08	2.97	—	—	2.03	—
1939	2.93	2.82	—	—	3.07	—
1940	—	2.6	2.16	—	3.8	3.2
1941	—	2.76	2.23	—	2.10	1.26
1942	—	2.17	1.01	—	3.44	3.09
1943	—	2.29	1.84	—	3.6	2.7
1944	—	1.93	1.53	—	2.79	2.24
1945	—	1.79	1.44	—	4.32	3.56
1946	—	1.43	1.24†	—	1.36*	1.36**

† Sepsis 0.18
Other causes ... 1.06

** Sepsis 0.226
Other causes ... 1.133

* No abortions.

Puerperal Pyrexia. Total notifications, 77 ; belonging to Plymouth, 59.

Rate per 1,000 total births, 13.49. (England and Wales, 8.50).

Year.	*No. of cases notified. P.P.*
1938	67
1939	48
1940	59
1941	39
1942	29
1943	41
1944	49
1945	36
1946	77

Mothers' Advice Clinic. A weekly afternoon session is held by a voluntary organisation at our Beaumont Hut Centre.

No. of clinics held	48
New cases	237
(Sent by Health Authority, 36)	
No. of return visits	714
No. dealt with by post	390
	1,104
No. seen by Doctor	494
(includes all new patients)	

Day Nurseries. Our two day nurseries seemed to be needed as much as ever and have had a successful year.

HOE STREET. Accommodates 40 children.

No. of children admitted during the year ...	55
No. of children discharged during the year ...	57
Average daily attendance	29.8

NELSON GARDENS. Accommodates 45 children.

No. of children admitted during the year ...	38
No. of children discharged during the year ...	32
Average daily attendance	33.3

There was a small outbreak of mumps at Nelson Gardens in September ; there were two cases of chicken pox, one of mumps and one of whooping cough at Hoe Street, but apart from that, the day nurseries remained free from infectious diseases, and the health of the children generally was very good.

Queen's Gate Residential Children's Nursery.

On the 21st May, 1946, the children and staff at Warleigh House were transferred to 4 and 5 Queen's Gate and Warleigh Nursery was closed.

There is accommodation at Queen's Gate Nursery for sixteen under two, and sixteen two-to-five year olds.

	Under 2 years.	*Over 2 years.*	*Total.*
No. admitted during the year :—			
Court Order	6	3	9
Relieving Officer's order	15	1	16
Others	44	26	70
No. discharged (includes 1 boarded out) ...	44	42	86
No. in residence 31.12.46	19	15	34

Many applications for admission have had to be refused.

Nursery Students.

During the year our three nurseries became recognised as training nurseries for the Certificate of the National Nursery Examination Board, and on 14th October, sixteen students started their training, four being attached to each Day Nursery, and eight to Queen's Gate Residential Nursery. The Course of training covers a period of two years and consists of :—

(*a*) practical work and training in the Nurseries themselves ; and

(*b*) the further education of the girls in vocational and general subjects under arrangements made by the Local Education Authority.

A Course tutor was appointed and is resident at Queen's Gate.

Sanitary Circumstances of the Area

REPORT OF THE CHIEF SANITARY INSPECTOR.

MR. C. E. SANDERSON.

Water Supply. The water supply for the City, which is an upland surface one, was adequate in quantity during the year, an extremely wet year.

Plumbo Solvency. The soft acid water from the upland surface supply has a plumbo solvent action, although on only rare occasions in recent years has the presence of lead been detected. Since 15th July, 1946, 4 cwts of lime per day have been added to the water supply, and this was done largely because of the presence of copper staining on baths and lavatory basins supplied from the hot water system. The addition of this lime has raised the pH from an average of 6.6 to between 7.0 and 7.5. Water from the same source which is supplied to the Yelverton area was treated with 0.5 grains per gallon of sodium carbonate and the pH maintained between 7.0 and 7.2.

Purification. Although the supply is not filtered there is a continuous application of chlorine gas in 2.0 parts per million. The estimate population supplied is 183,000, plus service personnel and all supplies are piped to houses.

Chemical Analysis.

Sixteen samples of water were submitted for chemical analysis, and all gave satisfactory results. The following table gives a representative summary of the results of samples sent for chemical analysis, the figures representing parts per 100,000 :—

	March.	*June.*	*October.*	*December.*
Temporary Hardness ...	0.4	2.4	0.2	0.3
Permanent Hardness ...	2.6	3.4	3.2	4.7
Total Hardness ...	3.0	5.8	3.4	5.0
Chlorides as Chlorine ...	1.6	1.3	1.3	1.7
Ammonia free and saline as nitrogen...	Nil.	Nil.	0.002	0.003
Ammonia, albuminoid as nitrogen...	0.0024	0.012	0.013	0.009
Nitrates as nitrogen ...	Nil.	0.02	0.02	0.02
Nitrites as nitrogen ...	Nil.	Nil.	Nil.	Nil.
Oxygen (absorbed 3 hrs. at 37° C.)	0.076	0.12	0.21	0.2
Metals (zinc, copper and lead)	Absent	Absent	Absent	Absent
pH value ...	6.5	6.4	7.0	7.3

Bacteriological Examination of Water.

Five hundred and forty-two samples of water were submitted for bacteriological examination, a summary of results being shown in the following table :—

SAMPLES OF WATER SUBMITTED FOR BACTERIOLOGICAL EXAMINATION DURING 1946

Source	*Samples submitted to the Prince of Wales's Hospital Laboratory*			*Samples submitted to the County Bacteriologist, Exeter*		
	Total No. samples	*B. Coli present in 100 ml.*	*B. Coli absent in 100 ml.*	*Total No. samples*	*B. Coli present in 100 ml.*	*B. Coli absent in 100 ml.*
From premises inside the City, supplied by City mains	373	82	291	94	69	25
From Bathing Pools inside the City	54	26	28	—	—	—
From premises outside the City supplied by City mains	14	3	11	1	—	1
From Mains supply prior to Chlorinization (Raw Water)	6	3	3	—	—	—
Grand Totals	447	114	333	95	69	26

SANITARY INSPECTION OF THE AREA

The sanitary inspection of the City proceeded throughout the year with a depleted staff of sanitary inspectors.

Complaints received. The number of complaints of nuisances and housing defects continued to increase, the following table showing the extent of the increase in the number of complaints during the past five years :—

Year	1942	1943	1944	1945	1946
Number of complaints received	1080	1319	1704	1916	2658

A total of 2,658 complaints received were investigated.

The large majority of complaints referred to housing defects. Difficulty continued to be experienced in arranging expeditious abatement of nuisances, this difficulty being due mainly to the continuing shortage of labour and materials.

Prosecutions. In eighteen cases it was necessary to issue summonses against persons for non-compliance with Abatement Notices. Ten of these summonses were withdrawn, the nuisance having been abated before the date of hearing. Eight Nuisance Orders were made by the Court, all of which were complied with.

PREMISES INSPECTED The following table shows the number of inspections of various premises carried out during the year together with the number of Notices served.

Premises Inspected	Inspections or Visits	Intimation Notices served or Improvements required	Intimation Notices complied with or Improvements effected	Statutory Notices served during the year	Statutory Notices complied with during the year
Houses inspected (Public Health Act and Housing Act)	6124	3204	—	—	—
Houses re-inspected (Public Health Act and Housing Act)	16945	—	2595	470	360
No. of premises (other than houses) inspected for nuisances	559	99	86	1	1
No. of owners or contractors interviewed	741	—	—	—	—
No. of houses visited *re* contacts of infectious diseases	1055	—	—	—	—
No. of houses visited *re* notifiable diseases	470	—	—	—	—
No. of houses visited *re* other diseases	8	—	—	—	—
Accumulations	224	75	70	—	1
Butchers and food factories	1159	9	3	—	—
Cinemas and amusement places	5	1	1	—	—
Common lodging-houses	40	5	—	—	—
Cowsheds	156	4	4	—	—
Dairies and milkshops	583	5	3	—	—
Fresh fish shops	259	13	9	—	—
Fried fish and chip shops	196	14	4	1	—
Fresh fish carts	154	1	—	—	—
Ice-cream premises	165	—	—	—	—
Knackers' yards	11	—	—	—	—
Milk vehicles	190	—	—	—	—
Offensive trades	26	1	2	—	—
Outworkers	301	1	1	—	—
Premises to examine foodstuffs	955	8	3	1	—
Provision shops	218	3	—	—	—
Public conveniences	815	153	176	—	—
Public houses	49	4	13	—	—
Restaurants and restaurant kitchens	396	31	21	—	—
Schools	20	2	6	—	—
Smoke observations	32	—	2	—	—
Static water tanks	45	6	11	—	—
Swimming baths	57	—	1	—	—
Tents, vans and sheds	46	7	2	—	—
Tips	19	2	1	—	—
Water courses	17	—	—	—	—
Houses inspected for rat infestation	5877	279	—	—	—
Houses re-inspected for rat infestation	1042	15	340	1	2
Premises other than houses inspected for rat infestation	1079	68	—	—	—
Premises other than houses re-inspected for rat infestation	236	—	79	—	—
Visits *re* Rent Restriction Acts	47	—	—	—	—
Miscellaneous	4160	40	41	4	—
Slaughter-houses	2890	—	—	—	—

Result of Service of Notices.

Owing to the continuing shortage of labour and materials, specifications in Notices referred only to essential repairs.

The nature and extent of nuisances abated and works executed are as follows :—

HOUSES :

Walls repaired	87
Outside plastering repaired	178
Inside plastering repaired	535
Floors renewed or repaired	236
Floors ventilated	25
Roofs renewed or repaired	751
Chutes, downpipes or gutters renewed or repaired	247
Chimneys repaired	74
Ceilings repaired	309
Doors and frames repaired	75
Lighting and ventilation of rooms improved ...	11
Window sashes or frames renewed or repaired ...	261
Window cords renewed	246
Staircases repaired	11
Grates or ovens repaired or renewed	122
Boilers provided or repaired	47
Food stores provided or repaired	2
Wash-houses provided or improved	31
Outbuildings repaired...	4
Obstructive buildings demolished	2
Walls or ceilings cleansed and redecorated ...	256
Bedding cleansed or destroyed	15
Yard paving relaid or repaired	55
Nuisances from animals abated	23
Accumulations removed	129
Ash bins provided	207
Water supply provided	10
Water taps or pipes repaired	79
Water samples taken for analysis	481
Miscellaneous repairs and nuisances abated ...	306
Damp-proof courses inserted	1

DRAINAGE :

Drains tested, smoke	89
New drains constructed	18
Drains relaid	25
Drains repaired	108
Drains cleansed	457
Inspection or intercepting chambers provided ...	29
Inspection or intercepting chambers repaired ...	21
Intercepting traps fixed	12
Soil pipes or ventilating shafts fixed or repaired	27
Gullies fixed	44
Troughs provided	20
Troughs trapped or waste pipes repaired	52
Bath wastes trapped or repaired	7
Lavatory basins trapped or waste pipes repaired	16
Drain inlets inside house abolished	3

WATER-CLOSETS :

Additional W.C.s provided	17
W.C.s reconstructed	15
Lighting and ventilation improved	4
New pans and traps fixed	165
W.C.s cleansed	12
Flushing apparatus provided	20
Flushing apparatus repaired	150
Miscellaneous repairs	117

ERADICATION OF BED BUGS :

No. of houses infested with bed bugs	154
No. of houses disinfested by insecticides	154
No. of families' furniture disinfested	61

CESSPOOLS :

Emptied	6
Other repairs	3

RAT DESTRUCTION :

Baits laid in sewers	16,348
Baits taken in sewers	6,164
Baits laid elsewhere	164,307
Baits taken elsewhere	47,863

TENTS, VANS, SHEDS :

Removed	2

URINALS :

Lighting and ventilation improved	2
Flushing apparatus fixed or repaired	43
Walls repaired or made impervious	3
Other repairs	73

EARTH OR PAIL CLOSETS :

Provided	1
Abolished	2
Cleansed or repaired	1

DAIRIES, COWSHEDS AND MILKSHOPS :

No. of premises registered	—
Designated Milk Licences issued	31
Existing dairies improved	1
Drainage improved	1
Paving repaired	3
Lighting or ventilation improved	1
Limewashing or cleansing carried out	21
Other repairs	2

ICE CREAM PREMISES :

No. of premises registered	9

FOOD SHOPS, KITCHENS AND PREMISES USED FOR PREPARATION OR MANUFACTURE OF PRESERVED FOODS :

Accumulations removed	6
Cleanliness improved	19
Storage arrangements improved	1
Ash-bins provided	16
Washing-up sinks fixed	2
Lighting and ventilation improved	3
Other repairs	15

Fried Fish Shops:	
Cleansing carried out	1
Storage accommodation provided or improved ...	2
Other repairs	2
Ash bins provided	2
Offensive Trades:	
Accumulations removed	1
Knackers' Yards:	
Cleanliness improved	1
Other repairs	1
Stables:	
Limewashing carried out	1
Back Lanes:	
Accumulations removed	64
Surfaces repaired	1
References to Other Departments:	
To the City Engineer	225
To the Water Engineer	20
To the Housing Estates Manager	845
To the Director of Education	10
To other Departments	350

Rats and Mice Destruction. The number of complaints of rat infestation received during the year was 369. This compares with 444 received during the year 1945, and 610 during 1944. From this it would appear that some success has attended rat destruction operations.

The systematic treatment of both surface infestations and sewers continued during the year.

8,234 inspections of premises were carried out in connection with rat infestation, 6,919 of these inspections being applied to house property and 1,315 inspections being made of other premises.

It was necessary to serve 279 notices requiring rat-proofing of premises, all of which were complied with at the end of the year.

HOUSING.

1. INSPECTION OF DWELLING-HOUSES DURING THE YEAR:—

(1)	(*a*)	Total number of dwelling-houses inspected for defects (under Public Health or Housing Acts)	6124
	(*b*)	Number of inspections made for the purpose	23069
(2)	(*a*)	Number of dwelling-houses (included in sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932 ...	63
	(*b*)	Number of inspections made for the purpose	218
(3)		Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	44
(4)		Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	3020

2. REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES:—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	2595

3. ACTION UNDER STATUTORY POWERS DURING THE YEAR:—

(*a*) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936:

(1)	Number of dwelling-houses in respect of which notices were served requiring repairs	Nil
(2)	Number of dwelling-houses which were rendered fit after service of formal notices:	
	(*a*) By owners	2
	(*b*) By local authority in default of owners	Nil

(*b*) Proceedings under Public Health Acts:

(1)	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	443
(2)	Number of dwelling-houses in which defects were remedied after service of formal notices:	
	(*a*) By owners	328
	(*b*) By local authority in default of owners	Nil

(*c*) Proceedings under Sections 11 and 13 of the Housing Act, 1936:

(1) Number of dwelling-houses in respect of which Demolition Orders were made	11
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	3

(*d*) Proceedings under Section 12 of the Housing Act, 1936:

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	16
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or rooms having been rendered fit	Nil
(3) Number of Undertakings not to use unfit houses accepted	12

4. Housing Act, 1936. Part iv—Overcrowding:—

(*a*)	(1) Number of dwellings overcrowded at the end of the year	597
	(2) Number of families dwelling therein	684
	(3) Number of persons dwelling therein	2815
(*b*)	Number of new cases of overcrowding during the year	426
(*c*)	(1) Number of cases of overcrowding relieved during the year	133
	(2) Number of persons concerned in such cases	394

Having regard to the extent of war damage to house property and the consequent dispersal of population, there is no doubt that the above-mentioned figures do not reflect the true state of overcrowding in the City.

actories. Details of the sanitary inspection of factories under the Factories Act, 1937, are given in the following tables:—

1. Inspections:—

Premises.	*Number of*		
	Inspections.	*Written Notices.*	*Occupiers prosecuted.*
Factories with mechanical power	388	23	—
Factories without mechanical power	209	9	—

2. Defects found.

Particulars.	*Number of Defects.*			*No. of defs. in respect of which prosecutions were instituted*
	Found.	*Remedied.*	*Referred to H.M. Inspector.*	
Want of cleanliness ...	8	8	—	—
Overcrowding	—	—	—	—
Unreasonable temperature ...	—	—	—	—
Inadequate ventilation ...	—	—	—	—
Ineffective drainage of floors	—	—	—	—
Sanitary Conveniences—				
insufficient	1	1	—	—
unsuitable or defective	2	2	—	—
not separate for sexes	1	1	—	—
Other offences	5	5	—	—

Cremations. The number of cremations during the year 1946 was 942. Of this number 217 were in respect of residents of the City of Plymouth.

Up to the end of 1946 a total of 5,892 cremations were carried out since the Crematorium opened in 1934.

Inspection and Supervision of Food.

Bacteriological Examination of Milk Supplies. 590 samples of milk were submitted for bacteriological examination, of which 534 were found to be satisfactory, and 56 in an unsatisfactory state of cleanliness.

In addition, 364 samples were submitted to the Phosphatase Test, 4 being unsatisfactory.

The following tables show the number and results of samples submitted to :—

(1) Methylene Blue Test.

(2) Bacteriological Count and B. Coli Test.

(3) Phosphatase Test.

(1) Methylene Blue Test :

Description of Milk.	*Total No. of Samples.*	*Satisfactory.*	*Unsatisfactory.*
Tuberculin Tested (Certified) Milk ...	282	242	40
Accredited Milk ...	23	17	6
Sterilised Milk ...	3	3	—
Heat Treated Milk ...	3	3	—
Pasteurised Milk ...	215	200	6
Tuberculin Tested ...	8	8	—
Totals ...	534	473	52

(2) Bacteria Count and B. Coli Test :

Description of Milk.	*Total No. of Samples.*	*Satisfactory.*	*Unsatisfactory.*
Pasteurised Milk ...	20	20	—
Tuberculin Tested (Certified) Milk ...	33	31	2
Sterilised Milk ...	—	—	—
Accredited Milk ...	3	1	2
Totals ...	56	52	4

(3) Phosphatase Test :

Description of Milk.	*Total No. of Samples.*	*Satisfactory.*	*Unsatisfactory.*
Pasteurised Milk ...	332	329	3
Sterilised Milk ...	32	31	1
Totals ...	364	360	4

Examination of Milk for Tubercle Bacilli.

74 samples of milk were examined biologically for the presence of Tubercle Bacilli, none being found positive.

Licences under the Milk (Special Designations) Order, 1936.

The following table shows the number of licences to use the various designations applied to milk issued during the year :

Description of Licence.	*No. issued*
Pasteuriser's licences (" Holder " Process)	4
Pasteuriser's licences (High Temperature Short Time Process)	1
Retail Tuberculin Tested licences	21
Accredited Producer's licences	2
Retail Pasteurised licences	2
Tuberculin Tested Bottling licence	1
Total	31

FOOD AND DRUGS SAMPLES REPORTED NOT GENUINE

Article.	*Nature of Adulteration.*	*Action taken.*
Raw Milk	Contained 6% of added water.	Legal Proceedings instituted. Case dismissed.
Raw Milk	Contained 5% of added water.	do.
Tincture of Iodine ...	Contained an excess of 11% of iodine and an excess of 14% of potassium iodide.	Letter of caution.
Raw Milk	21% deficient in milk fat	Fined £2 and £1 1s. Costs.
Raw Milk	Contained 4% of added water.	Fined £1.
Raw Milk	Contained 8% of added water.	Letter of caution.
Raw Milk	Contained 4% of added water.	Letter of caution.
Raw Milk	Contained 2% of added water.	Letter of caution.
Raw Milk	Contained 1% of added water.	Letter of caution.
Tincture of Iodine ...	Contained an excess of 32% of iodine and 34% of potassium of iodide.	Letter of caution.
Raw Milk	2% deficient in milk fat ...	Letter of caution.
Raw Milk	Contained 2% of added water.	Letter of caution.
Raw Milk	Contained 5% of added water.	Letter of caution.
Raw Milk	Contained 3% of added water.	Letter of caution.
Raw Milk	Contained 1% of added water.	Letter of caution.
Raw Milk	Contained 3% of added water.	Letter of caution.
Non-brewed Vinegar	7% deficient in Acetic Acid	Letter of caution.
Orange Squash ...	12% deficient in crystalline Citric Acid.	Informal sample.
Raspberry Jam .	Contained an excess of 240 parts per million of Sulphur Dioxide.	Letter of caution.
Tincture of Iodine ...	Contained an excess of 11% iodine and 11% of potassium iodide.	Letter of caution.
Tincture of Iodine ...	Contained an excess of 113% of iodine and 44% of potassium iodide.	Letter of caution.
Zinc Ointment ...	Contained an excess of 15% of zinc oxide.	Letter of caution.
Ginger Cordial ...	14% deficient in Crystalline Citric Acid. 40% deficient in sugar. 25% deficient in saccharin	Informal sample.
Dried Full Cream Milk	Consisted of Dried Machine Skimmed Milk.	Informal sample.

During the year, in following up samples of milk below the standard, twelve " Appeal to Cow " samples were taken from four farms.

Initial Sample			*"Appeal to Cow" Sample*	
Non-fatty solids	*Milk-fat*	*Observations*	*Non-fatty solids*	*Milk-fat*
7.99	3.32		8.95	4.251
8.07	3.04			
8.16	3.62		8.31	3.41
8.33	3.37		8.51	3.13
8.41	3.35		8.59	2.84
			9.1	3.55
			9.38	3.3
9.04	2.94		9.3	3.4
			9.44	3.7
8.07	3.71		8.54	3.3
8.24	3.35		8.59	3.43
8.41	3.29		8.84	3.3
8.24	3.52		8.62	3.6

Adulteration, etc.

The various samples of food and drugs submitted for analysis during the year are classified in the following table, together with the number of the various articles which were found to be adulterated :—

SAMPLES TAKEN UNDER THE FOOD AND DRUGS ACT.

Articles	*Official Samples*		*Informal Samples*		*Total No.*
	Genuine	*Adulterated*	*Genuine*	*Adulterated*	
Aspirin tablets	–	–	13	–	13
Apple juice	–	–	1	–	1
Butter	–	–	21	–	21
Beer	–	–	6	–	6
Baking powder	–	–	5	–	5
Choc Malt Spread ...	–	–	1	–	1
Coffee	–	–	14	–	14
Cocoa	–	–	10	–	10
Camphorated oil ...	–	–	12	–	12
Castor oil	–	–	12	–	12
Cod-liver oil	–	–	6	–	6
Cheese	–	–	20	–	20
Cordials	–	–	13	2	15
Condensed machine-skimmed milk ...	–	–	2	–	2
Condensed full-cream milk	–	–	7	–	7
Coffee and chicory ...	–	–	5	–	5
Cooking fat	–	–	14	–	14
Crab dressing	–	–	3	–	3
Dried machine-skimmed milk	–	–	1	–	1
Dried full-cream milk ...	–	–	1	1	2
Dried egg	–	–	1	–	1
Dandelion coffee essence	–	–	3	–	3
Epsom salts	–	–	5	–	5
Flavourings	–	–	16	–	16
Ground spices	–	–	5	–	5
Glycerine	–	–	3	–	3
Golden raising powder ...	–	–	1	–	1
Gelatine	–	–	7	–	7
Ice cream powder ...	–	–	7	–	7
Jam	–	–	1	1	2
Lard	–	–	6	–	6
Malt Cup	–	–	1	–	1
Malt vinegar	–	–	8	–	8
Marmalade	–	–	1	–	1
Margarine	–	–	20	–	20
Meat and fish paste ...	–	–	19	–	19
Meat and vegetable extract	–	–	10	–	10
Mustard	–	–	5	–	5
Malt and Cod Liver Oil ...	–	–	3	–	3
Magnesia	–	–	4	–	4
Pepper	–	–	4	–	4
Pasteurised milk ...	22	–	8	–	30
Raw milk	82	14	2	–	98
Sausages	–	–	16	–	16
Sugar	–	–	24	–	24
Stomach tablets	–	–	1	–	1
Soups (tinned)	–	–	20	–	20
Sterilised milk	1	–	–	–	1
Self-raising flour ...	–	–	4	–	4
Saccharin tablets ...	–	–	15	–	15
Tuberculin-tested pasteurised milk ...	4	–	–	–	4
Table jelly	–	–	1	–	1
Tincture of iodine ...	–	–	10	4	14
Tea	–	–	7	–	7
Vinegar	–	–	3	1	4
Whisky	–	–	1	–	1
Zinc ointment	–	–	4	1	5
Totals ...	109	14	413	10	546

Inspection of Meat and Slaughter-houses.

There are four private slaughter-houses in use in the City, and these were visited on 2,890 occasions during the year.

Also 1,159 visits were made to food factories and butchers shops.

Carcases Inspected and Condemned.

The total number of carcases inspected at the Meat Market and in the private slaughter-houses and food factories during the year was 31,373, which was made up as follows :—

Bovines	8,427
Calves	2,796
Sheep and Lambs	20,097
Pigs	53

The total weight of meat and offal condemned during the year from animals killed inside and outside the City was 367 tons 11 cwts. 3 qrs. 12 lbs. This amount was made up as follows :—

	Cattle excluding Cows.	*Cows.*	*Calves.*	*Sheep and Lambs.*	*Pigs.*
Number killed	4546	3881	2796	20097	53
Number inspected	13417		10087	102804	6463
All diseases except Tuberculosis. ... Whole carcases condemned	207½		44	70¼	18
Carcases of which some part or organ was condemned	4812		112	1775	45
Percentage of the number inspected affected with disease other than Tuberculosis	11.8	24.0	1.1	1.7	0.7
Tuberculosis only Whole carcases condemned	111		7	1	14
Carcases of which some part or organ was condemned	1371		2	–	379
Percentage of the number inspected affected with Tuberculosis	4.1	6.1	0.0006	0.0009	6.2

Seizure of Unsound Meat.

Following the examination of meat supplied to a local hotel on which were found traces of a green dye similar to that used for marking meat found to be unfit for human consumption, an inspection of the shop from which the meat had been supplied was carried out.

In the refrigerator was found a piece of meat weighing approximately 9 lbs. distinctly marked with the green dye. There were also found in offal bins various trimmings of beef heavily stained with green dye. The meat was seized and a Justice of the Peace judged it to be unfit for human consumption and ordered its destruction.

Proceedings were instituted against the butcher for selling and also for having in his possession for sale meat which was unfit for human consumption. The defence was that the meat which had been sold was that which had been allocated, and the meat which was deposited in the shop was being kept for a friend who was to give the meat to greyhounds.

The Magistrates imposed a fine of £25 and £5 costs for selling meat unfit for human food, and dismissed the case relating to unsound meat being deposited and intended for sale for human consumption.

Foodstuffs other than Meat (including tinned goods).

The number of inspections made of various food premises are shown in the table on page 52a.

Arising out of these inspections, the following foodstuffs were condemned :—

Tinned Goods :—	*Tons*	*cwts.*	*qrs.*	*lbs.*
Meat	1	8	–	25
Fish		17	–	15
Milk	1	4	–	17
Fruit	1	8	3	15
Vegetables	1	3	2	15
Soup	1	7	3	7
Jam	1	6	2	25

PROVISIONS :—	*Tons*	*cwts.*	*qrs.*	*lbs.*
Fruit	8	8	3	27
Sweets and Chocolate	2	2	1	5
Sausages and Sausage Meat ...		12	–	12
Flour		9	1	21
Biscuits	4	1	3	24
Cereals		9	1	24
Cheese		8	–	11
Tea			1	16
Fats		1	1	16
Various	3	10	1	6

Fish Inspection. The following summary indicates the quantity of fish and shell-fish inspected during the year and the quantity found to be unfit for food :—

	Tons	*cwts.*	*qrs.*	*lbs.*
Quantity of fish inspected	1980	15	—	—
Quantity of mixed fish found to be unfit for human food	17	6	2	14
Quantity of shell-fish found to be unfit for human food	–	1	2	–

Infectious Diseases

Incidence. The following table shows the incidence per 1,000 estimated civilian population of infectious diseases in Plymouth during 1946 and compares it with 1946 figures for England and Wales and County Boroughs, and the figures for the City for 1945 and 1944.

	Plymouth 1946	*England and Wales,* 1946	126 *County Boroughs and Great Towns* 1946	*Plymouth* 1945	*Plymouth* 1944
Typhoid Fever ...	0.00	0.01	0.01	0.00	0.00
Paratyphoid Fever	0.00	0.02	0.02	0.00	0.00
Cerebro-Spinal Fever	0.04	0.05	0.05	0.02	0.07
Scarlet Fever ...	1.29	1.38	1.51	2.04	1.35
Whooping Cough ...	1.94	2.28	2.48	2.34	1.05
Diphtheria	0.38	0.28	0.32	1.00	1.13
Erysipelas	0.32	0.22	0.25	0.39	0.27
Smallpox	0.00	0.00	0.00	0.00	0.00
Measles	1.22	3.92	4.73	16.80	0.45
Pneumonia ...	1.05	0.89	1.02	0.32	1.29

The table on page 68 shows the number of notifications received for each disease, classified by age groups. It also shows the percentages notified in each age group of the total of each disease.

The number of cases of Diphtheria in the City during the year is the lowest we have yet experienced, but as will be seen from the above table it does not compare too favourably with other County Boroughs and England and Wales. This low figure is undoubtedly mainly due to the increase in the numbers of children receiving immunisation treatment against Diphtheria. The section dealing with this will be found in the following pages.

Notifications of Gastro-enteritis (under 2 years of age) showed a drop of 61 on the previous year, and there were only 7 deaths from that disease compared with 25 deaths in 1945.

The quarterly incidence of Infectious Diseases is shown in the table on page 75.

Diphtheria Immunisation. Reorganisation of the method of record keeping to comply with Ministry of Health Circular 194/45 revealed a lower level of protection of the child population than was previously estimated.

During 1946 the position improved slightly as shown in Table A, and the present level of protection stands at 35% under 5 years of age and 64% in the 5–15 years group (including full and waning protection, but not including those who failed to complete the course of immunising injections and who cannot be considered to be protected in any way). Table A shows the year's progress.

TABLE A.

SHOWING PROGRESS IN PROTECTING THE CHILD POPULATION AGAINST DIPHTHERIA DURING 1946.

		31*st* Dec., 1945.	31*st* Dec., 1946.	*Increase during* 1946.
	Child population under 5 years of age	14,370	15,960	1,590
0–5 Years.	Number of such children who have received course of immunising injections	4,317	5,662	1,345
	Percentage of population under 5 years of age who have received course of immunising injections	30%	35%	5%
	Child population aged 5–15 years ...	23,720	24,850	1,130
5–15 Years.	Number of such children who have received course of immunising injections	13,819	15,960	2,141
	Percentage of population aged 5–15 years who have received course of immunising injections	58%	64%	6%

The provision of diphtheria immunisation in Plymouth through the City's Infant Welfare Service began in 1927, and was extended to the School Health Service in 1931. Thus the townsfolk were aware of this protective measure, and many mothers realised its great value when the nation-wide diphtheria immunisation campaign started in 1940.

Table B shows the work done in the last sixteen years in Plymouth towards protecting the child population along with the trend in diphtheria cases and deaths in the same period.

TABLE B.

To show Work done in Diphtheria Immunisation in the last Sixteen Years and the trend of Diphtheria Cases and Deaths in the same Period.

Year.	Total Births.	Diphtheria. Total of		Primary Diphtheria Immunisations.			*Total immunised expressed as percentage of births in previous years	Population.
		Cases.	Deaths.	Ages. 0–5.	Ages. 5–15.	Total No. 0–15.		
1930	3421	—	—			—	—	—
1931	3427	367	17	1282		1282	38%	191,800
1932	3251	444	20	1107		1107	32%	208,440†
1933	3232	337	18	972		972	30%	206,200†
1934	3203	376	15	335	363	698	22%	203,450†
1935	3065	481	23	874	1244	2118	66%	203,600†
1936	3061	455	40	662	1104	1766	58%	206,400†
1937	3073	272	17	500	1035	1535	50%	210,460†
1938	3305	357	15	430	707	1137	37%	211,800†
1939	3446	404	25	568	615	1183	36%	215,500†
1940	3295	1361	105	2812	6765	9577	278%	197,800
1941	2453	348	28	673	1244	1917	58%	149,300
1942	2817	227	16	2323	1029	3352	137%	127,300
1943	3144	209	10	1593	1050	2643	94%	136,530
1944	3477	163	4	1680	535	2215	70%	144,700
1945	3824	157	6	1701	417	2118	61%	157,580
1946	4272	68	2	2223	928	‡3151	82%	176,070

* Taking the number of births in the previous year as the number of non-protected entrants into the 0–15 age groups, this percentage indicates progress only if it is greater than the over-all percentage of protection in the 0–15 age groups. Over-all percentage of protection 0–15 years at 31st December, 1946, was 54%.

† Includes Service personnel—Civilian population not available.

‡ Any discrepancy between this figure and the increases in Table A is due to the addition to the Central Index of the records of children immunised elsewhere and the records of children attending for reinforcing injections whose original records had been destroyed by enemy action.

The coincidence of a sharp outbreak of diphtheria in 1940 accentuated the importance of protecting the children and approximately 20% of children between 0–15 years were immunised in that year. The bombing of 1941 caused a reverse to the progress, and although 1942 saw some recovery the tempo of 1940 has never been regained. This explains the present conjuncture illustrated in Table C, in which we find that 65% of the children under 5 years of age have NEVER received any protective immunisation, whereas only 36% of those aged 5–15 years are completely unprotected,

the latter section of the child population benefiting from the activity of six years ago. In explanation of Table C it should be realised that a primary course of immunisation or a reinforcing injection within the previous four years may be considered to be protective. Beyond that period, especially in the younger and more susceptible age groups the protection is waning but is still of some significance in preventing fatal consequences.

The fall in the number of deaths from diphtheria to only 2 (1 in age group 0–15) during 1946 (Table B) may be credited to the immunisation campaign. As great a fall in diphtheria cases can be confidently expected if the child population under 5 years of age is protected to twice its present percentage by the time it moves into the school years, and if school entrants immunised in infancy receive a reinforcing injection just prior to or subsequent to school entry.

The level of protection in the present school entrants is not satisfactory.

TABLE C.

STATE OF PROTECTION OF CHILDREN UNDER THE AGE OF 15 YEARS AT 31ST DECEMBER, 1946.

Year of Birth.	*By Primary Course within 4 years.*		*By Reinforcing Injection within 4 years.*		*By Primary or Reinforcing Dose more than 4 years ago.*		*Approx. child population.* †	*Unprotected.*	
	No.	*% of Age Group.*	*No.*	*% of Age Group.*	*No.*	*% of Age Group.*		*No.*	*% of Age Group*
1932	162	6	91	4	1045	42	2485	1187	48
1933	170	7	168	6	1046	42	2515	1131	45
1934	168	7	156	6	1061	42	2505	1120	45
1935	237	10	173	7	1283	53	2435	742	30
1936	316	14	241	11	1387	58	2344	400	17
1937	420	18	234	10	1160	50	2324	510	22
1938	425	17	371	15	1114	45	2500	590	23
1939	488	20	403	16	1009	40	2500	600	24
1940	454	17	378	14	594	22	2696	1270	47
1941	396	16	479	18	331	13	2546	1340	53
Total 5–15	3236	13	2694	11	10030	40	24850*	8890	36
1942	930	30	430	14	1	—	3050	1689	56
1943	1250	38	120	4	—	—	3197	1827	58
1944	1674	50.5	—	—	—	—	3319	1645	49.5
1945	1250	37	—	—	—	—	3336	2086	63
1946	7	.2	—	—	—	—	3058	3051	99.8
Total 0–5	5111	32	550	3	1	—	15960*	10298	65
Total 0–15	8347	20	3244	8	10031	26	40810*	19188	46

* These totals agree with the Registrar General's estimated population of children under 15 years of age at Mid. 1946.

† Proportionate to the birth rates in the relevant years.

As shown below Immunisation Clinics are available to all parts of the City, and parents are reminded by post, by press notices and on every opportunity by medical officers, health visitors and school nurses of the need to protect their children against diphtheria. Protection, however, is voluntary, and the responsibility rests on the parents to do their duty by their children.

At Clinics.—Diphtheria Immunisation Clinics at which treatment is free of charge and attendance is welcomed are established at :—

District.	*Location.*	*Day and Time.*
Stonehouse.	Behind site of Old Town Hall, St. Mary Street.	Thursdays, 9-15 a.m. to 10-15 a.m.
St. Judes.	Beaumont Hut, Beaumont Park.	Thursdays, 10-30 a.m. to 11-15 a.m.
St. Budeaux.	Methodist Church Hall, next State Cinema.	Tuesdays, 10-15 a.m. to 11 a.m.
Crownhill.	Crownhill Centre, Cross Park (Shopping Centre).	Fridays, 10-30 a.m. to 11-15 a.m.
Devonport.	Garden Street, lower part of Devonport Park.	Tuesdays, 9 a.m. to 10 a.m.
Efford.	168 Blandford Road (top of road).	Fridays, 9 a.m. to 10 a.m.
Swilly.	City Isolation Hospital Gates, Beacon Park Road.	Fridays, 9 a.m. to 10-15 a.m.

At Schools.—Through the willing co-operation of teachers, consent forms for immunisation are sent to parents through new pupils or are provided on demand. On receipt of the consent form the School Health Department arranges visits to the schools by a medical officer and nurse to carry out the treatment. Absentees at the time of school visits or re-visits are sent appointments for specially arranged immunising sessions held at School Clinics as and when required.

Through General Practitioners.—Diphtheria immunising antigen is provided free of charge to General Practitioners. In return the Medical Officer of Health seeks information on children immunised for entry in the central index. It requires only a post-card or telephone call to the Public Health Department for a General Practitioner to obtain supplies.

Follow-up.—The Health Visitors check their lists of birth notifications against the immunisation records and encourage those mothers to have their children protected who have not done so by the time the child reaches the age of one year. In addition a colourful reminder letter is sent to the parent on the child's first birthday.

Publicity and Propaganda.—Opportunity was taken at Health Weeks at the Efford Community Centre and Astor Institute to put over good advice. A publicity drive timed to coincide with centrally planned film trailers and other propaganda was made in the summer of 1946 through press advertisements, cinema slides, posters and press interviews. The response was very satisfactory, showing an increase of approximately 100% on the "tick-over" level. The

plotting of publicity drives against the graph of immunisations completed over the last three years shows that if timed between late spring and early autumn they succeed; if at other times they do not succeed.

Central Index.—In accordance with Ministry of Health Circular 194/45 the record system was revised and centralised as from January, 1946. A Central Index is now established in the Public Health Department in which there is a record of all children immunised showing dosage, antigen used and any subsequent reinforcing injections or schick test results. Records are filed by name and date of birth, which facilitates identification despite change of address and also an accurate assessment of state of protection of the 0–15 age groups. Information is gathered from the Clinics, School Health Department and General Practitioners and is readily available for reference.

Commencing on the 1st July, 1946, an arrangement of invitations to reinforcement and follow-up of incomplete courses was instituted. One thousand one hundred invitations were sent to parents whose children required a reinforcing injection to ensure full protection before school entry. A total of 1,345 reinforcements were given to children aged 0–15 years during the year, and of the 862 reinforcements given during the period 1st July to 31st December, 246 cases were traced directly to this invitation and many others responded without bringing the letter to the clinic.

One hundred and eighty-eight cases of incompleted courses were sent advisory notes, and by 31st December, 1946, thirty-six of these cases had completed the course.

SCHICK TESTS.

Number of Post Schick Tests done.	*Positive.**	*Negative.*	*Not Read.*
663	13	544	106

Schick Conversion Rate, 97.66%.

* Slight positives and doubtfuls are included and a further immunising injection was given.

TABLE D.

DIPHTHERIA AMONGST CHILDREN AGED 0–15 YEARS DURING THE LAST FOUR YEARS.

Year.	*Cases.*		*Deaths.*	
	Unprotected.	*Immunised.*	*Unprotected.*	*Immunised.*
1943	140	25	10	–
1944	99	25	4	–
1945	83	30	5	1
1946	42	11	1	–
Total for four years	364	91	20	1

CASE FATALITY, 1943–46.

Unprotected ...	... 20 deaths in 364 cases	=	5.5%
Protected ...	... 1 death in 91 cases	=	1.1%

CASE INCIDENCE PER 10,000 CHILDREN AGED 0–15 DURING 1946.

Unprotected population 0–15 : 19,188	21.9
Immunised population 0–15 : 21,622	5.1
Total population 40,810	12.9

MORTALITY FROM CERTAIN INFECTIVE DISEASES, 1921–1946.

PLYMOUTH COMPARED WITH ENGLAND AND WALES.

PER 1,000 CIVILIAN POPULATION.

YEAR.	*Diphtheria.*			*Scarlet Fever.*			*Measles.*			*Whooping Cough.*		
	PLYMOUTH		*England and Wales Death Rate.*	PLYMOUTH		*England and Wales Death Rate.*	PLYMOUTH		*England and Wales Death Rate.*	PLYMOUTH		*England and Wales Death Rate.*
	No. of Deaths.	*Death Rate.*		*No. of Deaths*	*Death Rate.*		*No. of Deaths.*	*Death Rate.*		*No. of Deaths.*	*Death Rate.*	
1921–1930 Average ...	20	.10	.08	3	.01	.02	21	.10	.10	14	.07	.11
1931–1940 Average ...	29	.14	.07	2	.00	.01	8	.03	.04	10	.04	.04
1941 ...	28	.18	.06	—	—	.00	12	.08	.02	11	.07	.06
1942 ...	16	.12	.04	—	—	.00	1	.00	.01	2	.01	.02
1943 ...	10	.07	.03	—	—	.00	8	.06	.02	8	.06	.02
1944 ...	4	.02	.02	—	—	.00	1	.00	.00	1	.00	.02
1945 ...	6	.03	.01	—	—	.00	1	.00	.01	3	.01	.01
1946 ...	2	.01	.01	—	—	.00	1	.00	.00	4	.02	.02

NOTES.—A series of dashes indicates that there were no deaths from that disease in that year.
A rate of .00 indicates that there were too few deaths to be expressed as a rate to two decimal places.

INFECTIOUS DISEASES NOTIFIED 1946—CIVILIANS—BY AGE GROUPS.

	Under 1 Year.		1–2 Years.		2–3 Years.		3–4 Years.		4–5 Years.		5–10 Years.		10–15 Years.		15–20 Years.		20–25 Years.		25–35 Years.		35–45 Years.		45–65 Years.		65 Years and Over.		Age Unknown.		Total All Ages.	Number Admitted to the City Isolation Hospital.
	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.		
Small-Pox			1	100																									1	1
Scarlet Fever ...			11	4.8	11	4.8	14	6.1	23	10.1	87	38.2	64	28.1	8	3.5	4	1.75	2	.8	3	1.3	1	.4	–		–		228	92
Diphtheria			1	1.4	6	8.8	4	5.9	1	1.4	28	41.2	13	19.4	1	1.4	5	7.4	6	8.8	2	2.9	1	1.4					68	68
Enteric Fever ...										NIL.																				
Pneumonia	26	14.1	13	7.0	10	5.4	6	3.2	4	2.1	19	10.3	5	2.7	12	6.5	4	2.1	16	8.6	22	11.9	34	18.5	13	7.0	1	.54	185	
Puerperal Pyrexia ...															3	3.9	22	28.6	44	57.1	8	10.4							77	
Cerebro-Spinal Fever	3	37.4					1	12.5	1	12.5			2	25.0			1	12.5											8	6
Encephalitis Lethargica										NIL.																				
Dysentry			1	16.6			1	16.6			2	33.4	1	16.6					1	16.6									6	1
Ophthalmia Neonatorum ...	21	100																											21	
Erysipelas							1	1.72			1	1.72	1	1.72	2	3.42	4	6.9	5	8.6	7	12.1	20	34.4	15	25.8	2	3.44	58	11
Gastro-Enteritis (under 2 years) ...	19	55.5	15	44.5																									34	
Whooping Cough ...	46	13.4	54	15.8	58	16.9	57	16.6	34	9.9	89	26.0	1	.29	2	.58							1	.29					342	9
Measles	13	6.0	22	10.2	32	14.8	30	13.9	29	13.4	79	36.6	5	2.35	3	1.39											3	1.39	216	10
Malaria										NIL.																				
Food Poisoning ...											1	25			1	25							2	50					4	
Polio-encephalitis ...	1	100																											1	1
TOTALS ...	129	10.3	118	9.4	117	9.3	114	9.1	92	7.3	306	24.4	92	7.3	32	2.54	40	3.19	74	5.9	42	3.34	59	4.7	28	2.2	6	.47	1249	205

	JAN.–MARCH.			APRIL–JUNE.			JULY–SEPT.			OCT.–DEC.			TOTALS FOR YEAR.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Small-Pox ...	–	–	–	–	1	1	–	–	–	–	–	–	–	1	1
Scarlet Fever ...	34	23	57	19	32	51	31	28	59	29	32	61	113	115	228
Diphtheria ...	13	13	26	12	12	24	4	7	11	3	4	7	32	36	68
Pneumonia ...	44	58	102	14	13	27	11	14	25	20	11	31	89	96	185
Puerperal Pyrexia	–	13	13	–	21	21	–	21	21	–	22	22	–	77	77
Cerebro-Spinal Fever	1	1	2	1	1	2	–	1	1	1	2	3	3	5	8
Encephalitis Lethargica ...	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dysentry ...	–	–	–	2	–	2	1	–	1	3	–	3	6	–	6
Ophthalmia Neonatorum ...	1	–	1	4	1	5	1	4	5	5	5	10	11	10	21
Erysipelas ...	2	7	9	3	6	9	2	16	18	7	15	22	14	44	58
Gastro-Enteritis (under 2 years)	5	3	8	2	–	2	2	–	2	13	9	22	22	12	34
Whooping Cough	29	41	70	27	51	78	39	46	85	41	68	109	136	206	342
Measles	2	3	5	7	5	12	43	49	92	59	48	107	111	105	216
Food Poisoning...	–	–	–	1	2	3	–	–	–	–	1	1	1	3	4
Polio-encephalitis	–	–	–	–	–	–	1	–	1	–	–	–	1	–	1
TOTALS ...	131	162	293	92	145	237	135	186	321	181	217	398	539	710	1249

Vaccination. The following table gives particulars of vaccinations carried out in the City during the past five years.

Year	*Births*	*Primary vaccinations*	*Percentage of Children vaccinated*	*Re-vaccinations*
1942 ...	2360	937	39.70	7
1943 ...	2754	1113	41.10	22
1944 ...	3016	1663	55.14	85
1945 ...	3752	1803	48.05	39
1946 ...	3947	1890	47.88	74

The City Isolation Hospital and Lee Mill Hospital

REPORT OF THE MEDICAL SUPERINTENDENT.

General Remarks. Perhaps the most important event affecting the hospital during the year was the re-opening in September of the kitchen, which had been out of action for five years following its total destruction by a bomb. Although some of the equipment is still outstanding, the kitchen is well able to deal adequately with all the requirements of patients and staff and is thoroughly up to date in every way. At the present time it is probably the most modern in the City, and the administrative and kitchen staff appreciate the convenience and increased facilities for cooking after making shift with inadequate equipment for so many years. There is no doubt that the variety and palatibility of the food has been greatly increased as a result of this modern building.

There is still a great call for beds to accommodate early cases of pulmonary tuberculosis, and following the successful experiment of last year with the women patients, a ward of 15 beds was opened to take in cases of early pulmonary tuberculosis in men. Initial active treatment is undertaken where indicated, and as beds become vacant at Didworthy, transfers of suitable cases to that Sanatorium are arranged. In addition, the services of a thoracic surgeon are available to give advice on those patients who require surgical treatment for their condition.

Lee Mill Hospital was opened once again for four weeks in May, to accommodate one solitary case of small pox which occurred in a child recently returned from the East. The patient made a good recovery, and the hospital immediately closed again on her discharge.

Plans for the general improvement of the hospital were drawn up during the year, chiefly the conversion of Ward 3 into a cubicle ward, and the central heating of wards 1, 2 and 3, which at present rely entirely on an obsolete pattern of coal fire. It is hoped that this work will soon be in progress.

An entirely new stores system will shortly be introduced and two Nissen Huts have been erected in the grounds and are in process of being converted into store rooms. This will enable the official bin card system to be put into operation for the first time at this hospital.

Nursing. During the year there was no real difficulty in securing the services of sufficient staff adequate to the number of patients. There is some indication that conditions in the future may not be so favourable as the new Rushcliffe Scale financially penalises the State Registered Nurse who desires to take her fever certificate.

Increasing emphasis on Nursing education has made the employment of a Sister Tutor essential. Previously, Matron, who holds the required qualification, has undertaken this work, but increasing administrative duties preclude her from continuing this indefinitely. Miss B. Ball, who for some years has been a ward sister at this hospital is now studying for her Sister Tutor's Certificate, and it is hoped that on completion of her examination she will be able to take over this aspect of the Nurses' training.

The examination results have been satisfactory, securing 100% pass in the Preliminary State Examination and 74% pass in the Final State Fever Examination. During the year 186 lectures and coaching classes have been given by the medical staff in addition to ward instruction and Matron's Nursing classes.

The sickness rate amongst the Nursing Staff has been entirely negligible.

Domestic. During the year the supply of domestic staff has been sufficient and there has been no great difficulty in obtaining our establishment.

General Statistics

	Plymouth Area.	*Outside Area.*	*Total.*
Cases Admitted	405	52	457
Cases Discharged	353	42	395
Service Cases admitted (included in above) ...	35	—	35
Deaths	14	1	15

During the year 62 visits were paid to patients outside the hospital at the request of medical practitioners in the district and 1,061 specimens were sent to the Central Laboratory as follows :—

Swabs	717
Fæces	20
Urines	18
Slides	50
Bloods	40
Cerebro Spinal Fluids	16
Other Examinations	200

Scarlet Fever.

As in previous years, only those cases where facilities at home for isolation or treatment were inadequate were admitted to hospital. Generally speaking the disease was of a mild type. Altogether 104 cases received treatment—92 from Plymouth and 12 from outside districts.

OUTSIDE CASES.

Plympton R.D.C.	6
Kingsbridge R.D.C.	4
Torpoint U.D.C.	2

It was not necessary to amend the diagnosis in any of these cases.

Among the Plymouth cases, the diagnosis was amended as follows :—

Tonsillitis	3
Rubella	2
Dermatitis	1
Aphthous Stomatitis	1
Tonsillitis and Toxic Erythema	1
Toxic Erythema	1
Gastritis	1

Diphtheria. There is no doubt whatever of the success of the immunisation campaign. The number of cases admitted was the lowest ever recorded in the history of this hospital. There was only one death from Laryngeal Diphtheria and this case was in fact notified as a Streptococcal Sore Throat.

If the incidence of this disease continues to remain low, it may well be necessary to modify the structure of the present Diphtheria Ward so as to permit of the nursing of other acute throat infections as well as Diphtheria.

On the whole, the disease was mild in type, but several severe cases received treatment.

Similarly there has been a great diminution in laryngeal diphtheria, and the large number of tracheotomies previously performed for this disease have virtually ceased.

Such figures must be gratifying to the Medical Officer of Health for in the past years, Plymouth has always had a heavy incidence of diphtheria of an extremely grave type.

No. of admissions	171
No. of deaths	1
No. of Plymouth cases	146
No. of Outside cases	25

The 25 outside cases were notified from, and the diagnosis altered as follows :—

Admitted from		*Amended Diagnosis.*
Plympton R.D.C.	17	Tonsillitis, 7. Diphtheria and Scarlet Fever, 2. Diphtheria and Vincents Angina 1.
Torpoint U.D.C. ...	1	
Saltash Borough	2	
St. Germans R.D.C.	1	Tonsillitis, 1.
Tavistock R.D.C.	1	
Bodmin Borough	1	
Kingsbridge R.D.C.	2	

Plymouth Cases.

After observation, the diagnosis was amended in the following 73 cases :—

Tonsillitis	40
Peritonsillar Abscess	1
Vincent's Angina	12
Retro-pharyngeal Abscess	1
Glandular Fever	6
Scarlet Fever	2
Influenza	1
Bronchitis	1
Erythema Multiformæ	1
Myeloid Leukeamia	1
Pharyngitis	1
Streptococcal Pharyngitis	2
Pulmonary Tuberculosis	1
Anginous Glandular Fever	1
Aphthous Stomatitis	1
Catarrhal Laryngitis	1

Laryngeal Diphtheria.

Six cases were notified as such, 2 from Plymouth and 4 from outside authorities. The Plymouth cases proved to be one of Laryngitis and one of Whooping Cough with Broncho-Pneumonia.

One of the cases from outside Plymouth proved to be a Retro-pharyngeal abscess (this case died) (Tavistock R.D.C.). Two others (1 each from St. Germans R.D.C. and Plympton R.D.C.) proved to be Catarrhal Laryngitis, and the fourth case (Kingsbridge R.D.C.) recovered.

A case notified and admitted with " Streptococcal Throat " proved to be Laryngeal Diphtheria and subsequently died. This was the only death from Diphtheria in the Hospital during the year.

Other Diseases. During the year 143 cases of various other infections were treated as under, 132 Plymouth cases and 11 Outside cases —

Notified as suffering from		*Amended Diagnosis.*
Acute Anterior Poliomyelitis	2	Influenza, 1. Acute Rheumatism, 1.
Blister on Heel	1	Septic Toe, 1.
Broncho-pneumonia ...	5	Tonsillitis, 1.
Broncho-pneumonia and Pertussis	5	Pertussis and Bronchitis, 1.
Boil on Leg	1	
Cerebro-spinal Fever ...	9	T.B. Meningitis, 2. Heat Stroke and Tonsillitis, 1. Marasmus, 1. Teething, 1. Meningococcal Meningitis, 1.
Conjunctivitis	1	
Dermatitis	1	Scabies, 1.
Erysipelas	11	Infected Bite, 1.
Follicular Tonsillitis ...	1	Tonsillitis, 1.
Gastro-Enteritis	1	Enteritis, 1.
Influenza	3	
Infected Toe	1	
Diphtheria Carrier ...	1	Tonsillitis 1.
Measles	9	Tonsillitis, 1. Bronchitis and Rubella, 1. Secondary Syphilis, 1. Septicæmia, 1. Toxic Erythema, 1. Rubella, 1.
Measles and Broncho-pneumonia	2	Measles, 1. Broncho-pneumonia and Pertussis, 1.
Migraine	1	

Notified as suffering from		*Amended Diagnosia*
Meningitis	8	Pneumococcal meningitis and Broncho-pneumonia, 1. T.B. Meningitis, 1. Miliary Tuberculosis, 1. Meningococcal meningitis, 1. Central pneumonia 1. Enteritis, 1. Pneumococcal meningitis, 1.
Mumps	6	Adenitis, 1.
Malaria	1	
Measles and Convulsions	1	
Mumps and Broncho-pneumonia	2	
Observation	13	Influenza, 2 Erythema simplex 1. Headache, 1. Glandular Fever, 1. Tonsillitis, 3. Nil abnormal, 1. Gastritis, 1. Pleurisy with effusion, 1. Infective hepatitis, 1. Diphtheria, 1.
Hilar Tuberculosis ...	1	
Poliomyelitis	1	Influenza with Laryngitis, 1.
Pemphigus	3	Seborrheic dermatitis, 1. Infantile eczema, 2.
Pertussis	7	Bronchial Catarrh, 1.
Lobar Pneumonia ...	2	
Pertussis and Stomatitis	1	Stomatitis, 1.
Rubella	3	Pityriasis Rosea, 1. Acute encephalomyelitis, 1.
Varicella	10	Varicella and Scarlet Fever, 1. Erythema multiforme, 1.
Varicella and Dermatitis	1	
Vincent's Angina ...	2	Influenza and Vincent's Stomatitis, 1.

Notified as suffering from		*Amended Diagnosis.*
Streptococcal Throat ...	5	Streptococcal Cervical Adenitis, 1. Influenza, 1. Laryngeal Diphtheria, 1. Scarlet Fever, 1. Naso-pharyngeal Diphtheria, 1.
Tonsillitis	4	
Septic Toe	1	
Small Pox	1	
Sprained Ankle	1	
Typhoid Fever	1	Enteritis, 1.
Pharyngitis	1	Tetanus, 1.
Throat Observation ...	1	Tonsillitis, 1.

The 11 cases notified from outside areas, are classified as follows :—

Notified as suffering from		*Amended Diagnosis.*
Cerebro-spinal Fever ...	2	Tetany, 1. Acute Lymphocytes Chorio-meningitis, 1.
Dysentery	3	
Erysipelas	2	
Measles and pneumonia	2	Measles and mild bronchitis, 1.
Meningitis	1	Cerebro-spinal meningitis, 1.
Patient under observation	1	Toxic erythema, 1.

Tuberculosis. 33 cases were admitted during the year. 16 men and 17 women. Three were discharged to Didworthy, one to Mount Gold Hospital, and six home.

Collapse therapy was carried out in eight cases, necessitating 206 refills during the year. All X-ray work in connection with these cases has been carried out at Beaumont House, the patient being conveyed by ambulance.

Occupational therapy has been carried out by both men and women, and is much appreciated by those who are obliged to stay in bed for long periods.

Thanks are due to several local concert parties who have entertained the patients, in the evenings. Their efforts have been greatly appreciated.

SOME NOTES ON RECENT ADVANCES IN THE TREATMENT OF FEVERS.

The advent of penicillin has been of the greatest use in the treatment of many of the acute infections met with in fever hospital practice, and although it is yet too early to assess results on a large scale, it looks as though many of the complications of this group of diseases may be averted or rapidly cured.

At the time of writing I have found the use of penicillin in Hypertoxic Diphtheria disappointing and am not convinced that it has any advantages over the older method of treatment with massive intravenous doses of Antitoxin. Laryngeal Diphtheria, however, appears to present a different problem.

Several cases of severe Laryngeal Diphtheria have been admitted to the hospital, which, from my previous knowledge, would have required operation within a very few hours. Treatment with penicillin has, within a short time, alleviated their condition to such an extent that operation has become unnecessary.

Presumably much of the obstruction is due to œdema caused by secondary infection and when this is controlled by penicillin sufficient air entry is available for the child to breathe comfortably until the membrane separates in due course. Further cases will have to be tried before coming to a definite conclusion, but some of those already seen have been dramatic in their rapid recovery.

Many types of meningitis, notably staphylococcal, streptococcal, pneumococcal and meningococcal respond readily to penicillin, and the best results are obtained by intrathecal white penicillin combined with sulphonamides by mouth. The recovery is amazingly rapid.

Similarly the adenitis following Scarlet Fever quickly subsides after adequate penicillin therapy, thus cutting short the long period in hospital usually required by these patients.

It has been found that cases of Erysipelas, particularly in old people, do not respond any quicker with penicillin than with sulphonamides, and occasionally it has been necessary to use both drugs in obstinate cases.

Previously, measles has taken a heavy toll in children under five years, and the only efficient prophylactic has been convalescent serum, which has always been difficult to obtain. Even then, the duration of immunity is short and the child is liable to another attack in perhaps only a few weeks. Other prophylactics such as immune globulin have at this hospital been found unsatisfactory.

For many years it has been the practice to start children on full doses of one or other of the sulphonamide drugs as soon as the rash appears. This is continued for at least 48 hours and occasionally for 72 hours, according to the condition of the child. Rapid amelioration of the symptoms occur and no complications have ever occurred in cases so treated. Penicillin is equally effective, but not so suitable for home treatment. It would appear that the complications are due to secondary organisms which are largely destroyed by using sulphonamides early.

Provided this regime is followed, I think it would be perfectly safe to nurse this disease in an open ward, a procedure, which hitherto has always been thought undesirable.

Similarly the broncho-pneumonia following measles and whooping cough responds rapidly both to sulphonamides and penicillin.

These points are mentioned as it is felt that they may be of interest to practitioners who have to treat many of these cases at home.

Venereal Diseases Treatment Centre

REPORT OF MEDICAL OFFICER.

General Remarks. During the year 1,300 new cases presented themselves for diagnosis and treatment, 348 more than the previous year.

This is the highest number ever recorded since the Clinic was first founded. The previous highest total treated at this clinic was 984 in the year 1944.

Causes of this rise in number are due to the following reasons :—

1. Increased use of the clinic following Press propaganda.
2. Men demobilised from the Services making sure they are fit before returning home, and, similarly, wives making sure they are not infected when their husbands return.
3. A real increase in the incidence of venereal disease, much of it contracted abroad with consequent repercussions at home.
4. The present laxity in sex morals.

At the moment there seems little hope that the incidence will be reduced for some years. In view of this the greatest attention has been paid to defaulters and no effort spared to encourage them to attend for treatment. Although compulsory powers are useful in some cases, persuasion and education will always be the most profitable lines to follow in the prevention of these diseases.

The greatly increased numbers of patients seeking diagnosis and treatment has at times caused overcrowding and delay at the Clinic, and it is possible that in the near future a fresh review of the situation will be required in order to extend the present facilities.

Table "A." Gives the number of cases treated throughout the year, including transfers from other centres and referred cases.

Table "B." Gives new cases of V.D. presenting themselves for initial treatment, and excludes all cases treated previously at this or other centres.

Table "C." Is a complete summary of the work of this Clinic during the year 1946.

Syphilis. 219 cases were treated during the year, 97 cases more than last year, and the highest recorded as far as this disease is concerned.

100 of the above cases were in the acute stage of infection and 127 cases were admitted to hospital for treatment—58 males and 69 females.

42 cases are believed to have been infected in Plymouth during the year—17 males and 25 females.

Summary.	*Males.*	*Females.*
New cases who received initial treatment at this clinic during the year	64	63
Cases under treatment at other centres who were transferred to this clinic during the year	77	15
	141	78

Gonorrhoea. 297 cases were treated during the year, an increase of 129 on last year's figures. Of these cases 292 were admitted to hospital for treatment, a very satisfactory percentage.

Infections of the above disease believed to have been contracted in Plymouth during the year are males 75 and females 19.

Soft Chancre. Five cases were treated.

Non-Venereal Conditions. In view of the large number of cases who attended for advice and treatment and where no evidence of venereal disease was found, it was thought interesting to classify these as under :—

	Male.	*Female.*
Carcinoma of genitals	1	—
Scabies	18	4
Paraphimosis	7	—
Phimosis	4	—
Balanitis	9	—
Other Skin Affections	4	1
Non-specific Urethritis Vaginitis ...	435	293

Of the Non-specific infections (Urethritis and Vaginitis) 53 cases were admitted to hospital for treatment—32 Males and 21 Females.

Ophthalmia Neonatorum. On 1.11.46 the administrative work in connection with the above was transferred to the Maternity and Child Welfare Department.

Up to that time 11 cases were admitted and treated at the Royal Eye Infirmary, Plymouth. 10 recovered without impairment of vision and 1 died.

Plymouth.	*Devon.*	*Cornwall.*	*Total.*
10	Nil.	1	11

Regulation 33b. The work of the Almoner continues to be of great assistance and a summary of her work appears below.

Number of cases reported on Form 1	32
Number of cases found and attended	16
Number of cases found and refused to attend ...	6
Number of cases untraced through lack of Name, addresses or description	10
Number actually served with Form 2	4
Number prosecuted	1
Number found free from infection although named on Form 1	4
Defaulters followed up	15

CONTROL OF VENEREAL DISEASE.

The most important work undertaken in the control of the disease is contact tracing. Every patient who attends the clinic is carefully questioned as to the possible source of infection, and where the contact is known, they are encouraged to bring or advise their consort to attend for examination or treatment. In the case of married patients, they are instructed to bring their wives and, if necessary, the children for observation. In the main, this works well, and only in a few cases do they refuse the proferred advice. In the case of casual acquaintances, a description of the person involved is asked and all relevant particulars taken which may help in tracing the infected partner. We can often recognise these descriptions, and the Almoner is able to visit and persuade them to attend on the grounds that complaint has been made that they are diseased. Every person named on a Form 1 is traced as far as

possible, but this is often difficult on account of the vague particulars given. The regular local prostitutes are very good indeed as regards attending regularly or when sent for. They appear to be only too keen to keep themselves as free of disease as possible and have great confidence in the Almoner and the treatment given to them. Unfortunately a new technique in prostitution has arisen which renders contact tracing extremely troublesome. On the appearance of a foreign ship in the Port, a horde of strange prostitutes appear from other towns. They spread a good deal of disease judging from the number of complaints received. By the time they are found, or when the ship departs, they have disappeared to another part. Many of these girls are young, and well versed in the law. This type of "ship follower" is vicious, lazy, and impervious to advice regarding the desirability of examination and treatment.

The number of patients under treatment who default in an infectious state are very few indeed, though a considerable number cease attending before their tests of cure are completed. Fortunately most of these cases are probably free from infection. In the case of defaulters a plain hospitals card is sent to them, and if this hint is insufficient, then they are visited by the Almoner who does her best to persuade them to amend their ways.

At the moment regulation 33b is not very helpful. It would be much more efficient if anyone named on Form 1 was obliged to be examined at once without waiting for a second complaint, which is often not forthcoming.

TABLE "A."—TOTAL NEW CASES FOR THE YEAR

(INCLUDING TRANSFERS FROM OTHER CENTRES AND REFERRED SERVICE CASES).

Year	*Syphilis*				*Chancroid*				*Gonorrhoea*				*Non-Venereal*				*Totals*			
	Plymouth	Devon	Cornwall	Totals	Plymouth	Devon	Cornwall	Totals	Plymouth	Devon	Cornwall	Totals	Plymouth	Devon	Cornwall	Totals	Plymouth	Devon	Cornwall	Totals
1941	118	10	8	136	4	–	1	5	193	17	11	221	173	16	13	202	488	43	33	564
1942	240	12	10	262	–	–	2	2	186	23	13	222	226	25	19	270	652	60	44	756
1943	282	11	8	301	–	–	–	–	146	19	8	173	405	52	53	510	833	82	69	984
1944	212	10	5	227	1	–	–	1	108	16	15	139	467	41	60	568	788	67	80	935
1945	112	5	5	122	–	–	–	–	130	24	14	168	538	65	59	662	780	94	78	952
1946	174	24	21	219	5	–	–	5	229	33	35	297	667	57	69	793	1075	114	125	1314

TABLE "B."—NEW CASES FOR THE YEAR
(EXCLUSIVE OF TRANSFERS)

Year	*Syphilis.*			*Gonorrhoea.*			
	Male	*Female*	*Totals*	*Male*	*Female*	*Totals*	*Totals*
1941 ...	38	26	64	115	51	166	230
1942 ...	45	49	94	111	80	191	285
1943 ...	32	50	82	91	40	131	213
1944 ...	18	59	77	70	55	125	202
1945 ...	18	34	52	92	48	140	192
1946 ...	64	63	127	189	40	229	356

TABLE "C"

	Syphilis.		*Soft Chancre.*		*Gonorrhoea*		*Non-Venereal or Undiagnosed Conditions.*	
	M.	F.	M.	F.	M.	F.	M.	F.
(1) Cases which were under treatment on January 1st, 1946	66	87	–	–	39	30	16	7
(2) Cases which came for the first time in the year	148	81	4	1	256	47	483	310
(3) Cases included under (2) which had already been treated for the same infection by civilian treatment centres, by Service authorities, or by other practitioners working under Circular 2226	77	15	–	–	63	5	–	–
(4) Of the cases in (2) less those in (3) the numbers with								
Syphilis, primary	38	32	–	–	–	–	–	–
Syphilis, secondary	13	17	–	–	–	–	–	–
Syphilis, latent in 1st year of infection ...	4	9	–	–	–	–	–	–
Syphilis, all later stages	7	5	–	–	–	–	–	–
Syphilis, congenital	2	–	–	–	–	–	–	–
Soft Chancre	–	–	4	1	–	–	–	–
Gonorrhœa, 1st year of infection	–	–	–	–	186	40	–	–
Gonorrhœa, later	–	–	–	–	3	–	–	–
Non-venereal conditions	–	–	–	–	–	–	478	298
Conditions remaining undiagnosed at 31st December, 1946	–	–	–	–	–	–	5	12
(5) The numbers which ceased to attend before completion of treatment were	5	–	–	–	–	–	–	–
(6) The numbers which ceased to attend after completion of treatment but before being passed as cured were	7	6	–	–	47	23	–	–
(7) The numbers transferred to other care were ...	9	11	–	–	43	18	123	28
(8) Number of cases discharged after completion of treatment and final test of cure or after diagnosis as non-venereal	76	36	4	1	159	27	350	272
(9) The numbers remaining on December 31st, 1946, either under treatment or under observation were	116	115	–	–	46	9	26	17
(10) The total attendances were	2591	2344	16	5	1777	563	2116	1314 = 10726

(11) The cases in Item (4) resided in the Counties and County Boroughs (or Countries) in the case of persons residing elsewhere than in England and Wales) as shown at the heads of the different columns	COUNTIES,		COUNTY BOROUGHS AND COUNTRIES			
	Plymouth		Devon		Cornwall	Total
Syphilis cases		104		11	12	127
Gonorrhoea cases		176		26	27	229
Soft Chancre cases		5		–	–	5
Non-venereal and undiagnosed cases ...		666		57	70	793
(12) The total attendances of all patients residing in each area were		8901		1017	808	10726

	Microscopical for		*Serum for*		*Others for Diagnosis of Venereal Disease*
	Syphilis (1)	*Gonorrhoea* (2)	*Syphilis* (1)	*Gonorrhoea* (2)	
(13) The numbers of specimens sent by me to an approved laboratory for tests were	123	4085	2259	512	693

Constant change occurs in treating these diseases as a result of cumulative experience. At the time of writing the methods used are as follows :—

Acute Syphilis.

Sero Negative Cases. 3,600,000 units of penicillin over one week, followed by a course of twelve weekly injections of Arsenic and Bismuth.

Sero Positive Cases. Penicillin as above, but two courses of Arsenic and Bismuth, over a period of 24 weeks.

Gonorrhoea.

Males. 200 and 250 thousand units of penicillin at an interval of four hours, followed by the usual tests of cure. Routine Wasserman reactions taken at 2 and 6 months to exclude possibility of masked syphilis.

Females. As above, but Sulphonamides by mouth in addition, usually for 3 days. Routine Wasserman reaction as above.

The incidence of frank jaundice has been very low, only 6 cases having been noted.

There were seven cases of dermatitis.

In order to keep the incidence of jaundice at a minimum, meticulous care has been taken over the question of syringe sterilisation and a new routine has been put into use.

Tuberculosis

REPORT OF THE TUBERCULOSIS OFFICER.

Notifications. During the year 1946, 334 cases were notified as suffering from Tuberculosis. This number included 284 Pulmonary (182 males and 102 females) and 50 Non-Pulmonary (28 males and 22 females).

This number shows a decrease of 4 on the previous year.

The details of the notifications during 1946 are as follows :—

Age Periods	*Respiratory*		*Non-Respiratory*	
	M.	*F.*	*M.*	*F.*
0–1	–	–	–	–
1–5	–	2	5	5
5–15	9	10	6	6
15–25	49	45	9	4
25–35	52	26	6	4
35–45	30	12	–	2
45–55	27	2	1	1
55–65	11	3	1	–
65 and upwards	4	2	–	–
Totals ...	182	102	28	22

The age period 5–15 shews an increase in number compared with the previous year, this increase amounting to three times as many notifications from Pulmonary Tuberculosis in both sexes.

The numbers on the Notification Register at the end of the year were as follows :—

Pulmonary.			*Non-Pulmonary.*			*Total cases.*
Males.	*Females.*	*Total.*	*Males.*	*Females.*	*Total.*	
726	481	1207	166	204	370	1577

There were 8 Posthumous Notifications during the year This number was composed of 6 Pulmonary and 2 Non-Pulmonary cases.

Deaths. Ninety cases who were on the Tuberculosis Dispensary Register died during 1946. This number shews a decrease of forty on the previous year.

At the end of the year 1946, the following number of patients were on the " live " Dispensary Register.

	Adults.		*Children.*		*Totals.*
	Males.	*Females.*	*Males.*	*Females.*	
Pulmonary ...	735	355	19	26	1135
Non-Pulmonary	63	59	31	43	196
Totals ...	798	414	50	69	1331
	1212		119		

Dispensary. During the year 1946, 1,746 New Cases were sent to the Tuberculosis Dispensary by Medical Practitioners. This figure shews an increase of 265 on the previous year

The following table shews the number of cases referred to the Tuberculosis Officer each year since 1937, and the number of contacts who have been examined for the same period. The twenty-three contacts found to be suffering from tuberculosis are included in the figure of 327 New Cases found to be definitely tuberculous.

	New Cases.				*Contacts.*			
Year.	*Definitely Tuberc.*	*Non-Tuberc.*	*Diagnosis not completed*	*Total examined*	*Definitely Tuberc.*	*Non-Tuberc.*	*Diagnosis not completed*	*Total examined*
1937	266	649	78	993	8	411	17	436
1938	232	707	104	1043	7	362	41	410
1939	297	721	108	1126	4	376	13	393
1940	247	677	123	1047	10	377	31	508
1941	208	585	53	846	5	163	4	172
1942	274	744	57	1075	5	224	7	236
1943	297	1015	90	1402	4	309	25	338
1944	260	1077	81	1418	12	378	10	400
1945	340	987	154	1481	10	461	9	480
1946	327	1265	154	1746	23	623	65	711

Attendances. The number of attendances of patients at the Tuberculosis Dispensary during the year, excluding those who attended for X-ray examination, and which are shewn elsewhere, totalled 14,007.

Since 1937 the attendances have been as follows :—

1937	10,665
1938	9,638
1939	9,233
1940	8,599
1941	5,709
1942	7,270
1943	8,942
1944	9,506
1945	11,550
1946	14,007

Evening Clinic. The Thursday evening clinic has been well patronised and the attendances have increased considerably.

This clinic is now as large as the Monday and Wednesday afternoon clinics.

Domiciliary Visiting. *Tuberculosis Officer.* The Tuberculosis Officer paid 457 visits to patients at their homes or at hospitals.

Nurses and Health Visitors. The Health Visitors and Three Towns Nurses paid 3,150 visits to patients during the year.

Consultations. The following consultations were held by the Tuberculosis Officer during the year :—

Personal	90
Other than personal (T145)	1542

Special Forms of Treatment. The Tuberculosis Officer gave the following special forms of treatment at the Dispensary during the year :—

Artificial Pneumo-thorax refills ...	1288
Injections of Tuberculin	1103

X-ray. The number of X-ray examinations made during the year amounted to 4,408. The following table shews the number of examinations made each year since 1937 :—

1937	2,956
1938	3,344
1939	3,381
1940	3,617
1941	2,941
1942	3,901
1943	3,394
1944	4,097
1945	5,313
1946	4,408

Compared with the previous year, the number of X-Ray examinations shews a decrease of 905. This, however, is not a true indication of the work involved as the installation of a new X-Ray apparatus was commenced on the 4th February. This was completed on the 23rd March, 1946, when the X-Ray examinations were resumed.

Bacteriological Work. The number of specimens of sputa, etc., which were tested during the year amounted to 1,195. The following table shows the number of specimens sent for examination since 1937 :—

1937	1,567
1938	1,370
1939	1,259
1940	1,210
1941	762
1942	935
1943	1,036
1944	956
1945	1,138
1946	1,195

Institutional Treatment. There is still a lengthy " Waiting List " for both Didworthy Sanatorium and Mount Gold Pulmonary Section. The position was eased a little for male beds at Didworthy by opening a ward at Swilly Hospital during the year. This ward takes fifteen cases.

We have now a total of 219 beds for Pulmonary cases at Didworthy, Mount Gold and Swilly Isolation Hospital.

Voluntary Organisations. *Tuberculosis Care and After-Care Committee.* This Committee still continues to do useful work in helping both patients and their families in many ways.

Some members of this Committee have been very helpful in arranging distribution of clothing, food, etc., which has been sent from Australia and other places.

This organisation has been curbed somewhat in its activities in supplying clothing, owing to the scarcity of clothing coupons.

Council of Social Service. This organisation has worked smoothly with the Tuberculosis Care and After-Care Committee. There has been close co-operation in arranging for the distribution of various gift parcels from overseas.

Allowances and Grants. The following details of the work carried out under Memorandum 266/T are given below.

136 applications for financial assistance were dealt with from those having institutional or domiciliary treatment, as given in the following table :—

Didworthy Sanatorium	22
Mount Gold Hospital	14
City Isolation Hospital	10
Domiciliary—Waiting admission to institutions	46
Discharged from institutions	41
Being treated at home (Observation)	3
Total	136

One hundred and twenty-six of the applications were eligible to receive allowances and financial assistance was granted in respect of the undermentioned classes of payments :—

Maintenance Allowances	94
Maintenance and Discretionary Allowances	2
Discretionary Allowances	3
Special Payments	27
Total	126

Discretionary Allowances were granted in response to :—

4 applications for rent.

1 application for insurance premiums.

Special payments granted were made in respect of applications for Pocket-Money Allowances, and, in one instance, for rent.

One hundred and eight variations in payments were made to applications on account of various changes in circumstances.

Amounts of allowances paid :—	£	s.	d.
Maintenance Allowances	5,193	13	3
Discretionary Allowances	80	16	2
Special Payments	245	10	4
Total	£5,519	19	9

This total payment shews an increase over last year's expenditure of more than £800.

There were 27 more applications for financial assistance and 30 more patients were eligible to receive allowances and financial assistance. Owing to the scheme, patients have been more ready to accept Sanatorium Treatment as their financial worries have been reduced. It is, however, regretted that the scheme does not yet include all forms of tuberculosis.

BEAUMONT HOUSE DENTAL CLINIC, 1946.

Department	*New Patients.*	*Attendances*	*Perm. Extractions*	*Temp. Extractions*	*Local Anaesthetic*	*Simple Anaesthetic*	*Prolonged Anaesthetic*	*Fillings.*	*Scalings.*	*Dentures Patients Supplied.*	*Repairs.*	*Regulation Appliance.*	*Other Operations.*
M. & C. W.	345	808	777	207	62	61	62	129	59	66	8	—	389
Tuberculosis	148	607	221	2	113	—	6	240	77	26	17	—	194
Social Welfare	56	203	271	—	46	—	8	3	8	24	12	—	106
Police	34	203	58	—	12	—	2	76	43	12	8	—	174
City Hospital	48	32	159	—	18	—	9	—	—	1	—	—	—
School Medical	—	—	—	—	—	—	—	—	—	2	—	36	1

VISITS TO INSTITUTIONS.

Didworthy	27
Mount Gold	26
City Hospital	29
Queen's Gate Nursery ...	1
Swilly Hospital ...	3
Day Nurseries	6

Mount Gold and Orthopaedic Tuberculosis Hospital

REPORT OF THE MEDICAL SUPERINTENDENT.

General Remarks. Plans have been submitted for the construction of out-patients, fracture and physiotherapy departments, for enlargement of the existing operating theatre unit, and for an administrative block.

In order to provide accommodation for resident nursing staff and nurses in training, and facilities for non-resident and part-time nursing staff, considerable extension of the existing Nurses Home is required.

Orthopaedic Hospital. This section of 120 beds has remained with two large wards of 46 beds occupied by adults and the small ward of 28 beds for children.

The number of patients admitted during the year was 614, the total number of patient days being 37,405 and the average bed occupation 102. This includes 131 E.M.S. cases, accounting for 7,233 patient days and an average bed occupation of 20. The waiting list on the 31st December, 1946, was 45.

Acute fracture cases are received at the request of the City and Prince of Wales's Hospitals.

The number of cases admitted under the provisions of the Plymouth and South-West Hospitals Contributory Scheme was 163, and 96 Plymouth school children were admitted under provisions of the Education Act, 1944.

Admissions for the past five years are tabulated for comparison :—

Plymouth Cases.	1946	1945	1944	1943	1942
Tuberculosis Department	75	68	58	61	65
M. & C.W. Department	–	5	7	8	9
School Medical Department	96	19	6	18	16
Other Plymouth Cases	214	180	127	148	134
Total Plymouth Cases	385	272	198	235	224
Non-Plymouth Cases.					
Devon County Council ...	54	34	24	19	22
Cornwall County Council	7	5	9	13	9
Devonian Orthopædic Association	5	1	–	4	4
Other Cases	32	17	8	16	29
Total Non-Plymouth Cases	98	57	41	52	64
E.M.S. Cases					
Service	87	132	129	178	85
Civilian	44	51	50	90	59
Total E.M.S. Cases ...	131	183	179	268	144
Grand Total of Admissions	614	512	418	555	434
Total Discharges	667	513	439	554	388

The following table classifies the types of cases admitted during the last five years :—

	1946	1945	1944	1943	1942
1. Tuberculosis of Bones and Joints	90	97	114	68	92
2. Poliomyelitis					
(*a*) Acute	2	–	–	–	–
(*b*) Chronic	11	14	11	6	6
3. Congenital Deformities	53	38	26	25	35
4. After results of Injuries	51	52	37	26	32
5. Osteomyelitis—					
(*a*) Acute	11	–	–	–	–
(*b*) Chronic	9	18	12	21	11
6. Chronic Arthritis ...	29	24	21	25	28
7. Rickets	–	–	2	2	2
8. Peripheral Nerve Injuries	8	34	–	–	–
9. Fractures	214	135	148	313	129
10. Other Conditions ...	136	101	41	75	61

Operating Theatre. A total of 570 operations and manipulations were performed during the year. The classification of operations being as follows :—

	Ordinary	*E.M.S.*
Arthrotomy	3	–
Arthroplasty	6	–
Arthrodesis	33	2
Amputations	19	2
Spinal Bone Graft	17	–
Operative reduction of fractures	36	3
Manipulative reductior of fractures	6	–
Manipulations under anæsthesia	174	5
Other operations	247	17

The following is a summary of the work of the last five years :—

	1946	1945	1944	1943	1942
Surgical Operations	391	270	208	183	157
Manipulations under anæsthesia	179	54	99	139	95
Aspirations	12	7	19	57	28
Pathological Examinations ...	10	120	145	159	35

X-Ray Department. Pending the delivery of the Watson " Roentgen Four " Unit the makers have supplied a " Double Twin " model generator which is now giving satisfactory service. It is hoped the complete unit will be delivered within the near future.

A total of 1,903 X-rays were taken and 3,827 films were used. An analysis of the work is given below :—

	1946	1945	1944	1943	1942
Tuberculosis Department ...	463	335	338	284	236
M. & C.W. Department ...	73	38	48	26	19
School Medical Department	105	88	90	65	23
Other Plymouth Cases	920	376	410	464	320
Devon County Council	12	13	22	29	38
Cornwall County Council ...	4	7	7	12	11
E.M.S.	186	383	520	739	245
Others	140	28	48	88	78
Totals	1903	1268	1483	1707	970

Orthopaedic Clinics. Mr. Capener holds an out-patient clinic on the second Friday of each month and Mr. Lillie on each Thursday afternoon. The Thursday afternoon clinic is held temporarily in the Astor Institute, pending the provision of an out-patient department.

Fracture clinics are held by Mr. Lillie on Tuesday afternoons.

The following table shows the increase in out-patient attendances during the past four years :—

	1946	1945	1944	1943
Number of initial examinations by the surgeons	441	278	285	336
Number of subsequent examinations by the surgeons ...	3883	1643	1435	856

In addition to these, 38 fracture cases and 192 other injuries were treated as out-patients.

Patients who attended during 1946 :—

	New Patients.	*Old Patients.*
Tuberculosis Department	11	390
M. & C.W. Department	61	82
School Medical Department ...	45	440
Other Plymouth Cases	359	1285
Plymouth Public Assistance ...	1	7
Devon County Council	5	38
Cornwall County Council	3	25
Devonian Orthopædic Association ...	1	19
E.M.S.	32	296
Private	23	124
Others	2	18

Physiotherapy Department. During the year 194 in-patients and 441 out-patients received treatment in this department. There were 10,408 attendances in all. The full establishment of five Physiotherapists was not reached during 1946, but it is anticipated that this establishment will be attained during 1947.

The table shows the various departments from which the patients were sent :—

	In-Patients.	*Out-Patients.*
Tuberculosis Department	17	23
M. & C.W. Department	1	49
School Medical Department ...	6	19
Other Plymouth Cases	109	265
Devon County Council	4	1
Cornwall County Council	2	9
Devonian Orthopædic Association ...	2	–
Others	5	12
Staff	4	2
E.M.S.	44	61
Total treatments given	4475	5933

Orthopaedic Hospital School. Classes are held in the Children's Ward, and for older girls of school age in the Women's Ward. The School re-opened on the 14th January, 1946, with 26 pupils (13 girls and 13 boys). During the year there were 28 new entries (17 boys and 11 girls) making a total of 54 children who have received instruction during the year. Of these, 33 were discharged, leaving 21 on the register on the 20th December. Of the 54 who attended school during the year 34 were of normal school age and 20 of nursery school age.

The school was opened 377 times with a total attendance of 7,928, making an average attendance of 21.01 out of a possible attendance of 22.84.

A link with outside activities is maintained through the Leaders of the Girl Guides, Brownies and Scout Troops.

Occupational Therapy. During the year 358 patients received training in Occupational Therapy. 3,437 articles have been made. The scope of the work is limited by its having to be carried out in the Wards, and is confined to stool seating, leatherwork, plastic work, lampshade making, embroidery, glove making, weaving, toy making, felt work, rug making and dressmaking.

A report on the Orthopædic Hospital would not be complete without expressing the sincere regrets of the whole hospital staff and patients alike, at the retirement of Mr. Charles Kennedy from his appointment as Consulting Orthopædic Surgeon.

The best wishes of all go with him, and hopes that the hospital will not lose contact with him have been fulfilled by his visiting as a Consulting General Surgeon.

Pulmonary Tuberculosis Section. During the year 125 patients have been admitted, of whom 41 were Ex-Service men. 79 cases have been discharged, 4 transferred to Didworthy Sanatorium and 2 transferred to the Orthopædic Hospital. There have been 34 deaths during the year. The total number of in-patient days was 29,439 and the average bed occupation was 81. The following table is comparative for the last five years:—

	1946	1945	1944	1943	1942
Admissions	125	147	125	136	120
Discharges	79	96	48	47	59
Deaths	34	57	57	50	41

44 patients received treatment with gold preparations. Artificial Pneumothorax was induced in 4 cases and 505 refills were given. Nine cases were treated by Pneumoperitoneum. Four cases were treated by combined Phrenic evulsion and Pneumoperitoneum.

Surgical treatment was recommended and carried out by Mr. Wilson as follows:—

Phrenic Evulsion	4
Phrenic Crush	1

319 out-patient attendances were made for supervision and continuation of pneumothorax therapy.

Mr. R. Belsey, the Consulting Thoracic Surgeon, visited the hospital for the first time in December, 1946.

Instruction in Occupational Therapy is given to those cases in which it is indicated or desired by the patient.

The patients' library has been kept well up to date with the able help of the Hon. Librarian. Thanks are expressed to Mrs. Trethewey for her excellent work in building up the library service. Financial help from the Tuberculosis Care and After-Care Committee is gratefully acknowledged.

Didworthy Sanatorium

REPORT OF THE MEDICAL SUPERINTENDENT.

Total beds available—107 (61 for men and boys and 46 for women and girls.

Admissions. The total number of admissions for the year was 130 ; 74 men, 47 women, 6 boys and 3 girls, of whom 118 were sent by the City of Plymouth, and 12 (9 men and 3 women) were sent by the County of Cornwall.

Classification of Admissions :—

	Men.	*Women.*	*Boys.*	*Girls.*	
Pulmonary minus cases ...	43	34	6	3	66.15%
Pulmonary plus 1 cases...	5	2	–	–	5.38%
Pulmonary plus 2 cases...	20	8	–	–	21.53%
Pulmonary plus 3 cases...	6	3	–	–	6.92%

N.B.—Of the cases admitted " Pulmonary minus," 25 were found to be " Pulmonary plus " on investigation at the Sanatorium, this represents 29.07% of the " Pulmonary minus " cases admitted and 19.23% of the total number of patients admitted during the year.

Discharges. The total number of discharges for the year was 127 ; 68 men, 57 women and 2 boys, of whom 120 were sent by the City of Plymouth, and 7 (6 men and 1 woman) were sent by the County of Cornwall.

Classification of Discharges :—

		Men.	*Women.*	*Boys.*
Pulmonary minus cases	Quiescent	18	18	2
	Very much improved	4	8	–
	Not improved ...	–	–	–
Pulmonary plus 1 cases	Quiescent	5	5	–
	Very much improved	1	1	–
	Not improved ...	–	–	–
Pulmonary plus 2 cases	Quiescent	9	3	–
	Very much improved	21	16	–
	Not improved ...	–	1	–
Pulmonary plus 3 cases	Quiescent	1	–	–
	Very much improved	4	2	–
	Not improved ...	2	1	–
Non-Pulmonary cases	Quiescent	–	–	–
	Very much improved	1	–	–
	Not improved ...	–	–	–
Deaths ...	... ...	2	2	–
		68	57	2

Summarising this we get the following :—

48.03% cases discharged " Quiescent."
45.7 % cases discharged " Very much improved."
3.15% cases discharged " Not improved."
3.15% cases died in the Institution.

The total number of patients treated during the year was 227.

Bed Occupation. The total number of patient days for the year was 37,314. An average struck over the whole year shows the average bed occupation to have been 102.23 patients each day.

The average length of stay of cases discharged during the year was 354.27 days.

The total number of bed patient days was 19,776, which represents 52.99% patients in bed daily of the total number of cases treated.

Pathological Tests. The total number of sputum examinations during the year was 485.

The total number of urine examinations during the year was 530.

The total number of Erythrocyte Sedimentation tests during the year was 620.

Other pathological examinations such as Pleural fluids, etc., during the year was 56.

Specialised Treatments.

(*a*) *Artificial Pneumothorax Therapy.*

Total number of patients treated during the year	56
Total number of attempted inductions	25
Number of successful inductions	22
Number of unsuccessful inductions	3
(Due to adherent Pleura.)	

This has necessitated a total of 774 refills.

N.B.—Three of the above cases were bilateral Artificial Pneumothorax cases.

(*b*) *Pneumo Peritoneum Therapy.*
Since we have had our X-ray Plant we have been able to undertake this type of treatment.
During this year we induced Pneumo-Peritoneum in 22 patients.
In 7 of these cases the Pneumo-Peritoneum was combined with Phrenic Crush.
This form of treatment has necessitated 181 refills.

(*c*) *Phrenic Crush*—17 cases.

(*d*) *Thoracoplasty*—6 cases.
These patients were temporarily transferred to Frenchay Hospital, Bristol, for this operation, under the care of Mr. Ronald Belsey, the Thoracic Surgeon.

(*e*) *Division of Adhesions.*
Number of division of adhesions in cases of Artificial Pneumothorax—7.

(*f*) *Aspirations of Chest.*
Aspirations of Chest for Pleural effusions, etc., 18.

(*g*) *Aurotherapy.*
During the year we treated 11 patients by injections of gold salts (Aurotherapy).

(*h*) *Tuberculin Injections.*
During the year we have treated a number of non-Pulmonary Tuberculosis lesions by the above method.

This year we have been successful in obtaining the services of Mr. Ronald Belsey, M.S., F.R.C.S., of the Thoracic Surgery Unit, Frenchay Hospital, Bristol.

Now that we are equipped, minor surgery such as Adhesion Section and Phrenic Crushes are undertaken at the Sanatorium, and patients needing major surgery such as Thoracoplasty are temporarily transferred to Frenchay Hospital. This is a great advantage as all forms of modern treatment are now being given to our patients.

Treatment Block. During this year B1 Block, a large Ward which was constructed during the war, was converted into a Treatment Block which consists of an X-ray Department, Operating Theatre Dental Surgery and Examination Room.

X-ray Department.—This new Department was opened on the 23rd April, 1946, with the installation of a Watson Rontgen 4 X-ray Unit with rotating Anode Tube and R50 Tilting Couch.

This installation has greatly increased the scope and safety of collapse therapy, and at present about 40% of our patients are undergoing collapse therapy.

We are now able to undertake bilateral Artificial Pneumothorax work and Pneumo-Peritoneum work on an extensive scale.

The number of X-ray photographs taken from the date of installation until the end of the year was 570, and the number of Screen examinations was 1,120.

I may say that all members of the staff are X-rayed at least every six months.

Operating Theatre.—We now have a modernly equipped Theatre and we were fortunate in obtaining much of our equipment from Manadon U.S. Emergency Hospital.

Dental Clinic.—The Treatment Block is also equipped with a Dental Clinic complete with a Ritter Unit.

Mr. A. Maughan, L.D.S., attends at the Sanatorium for one day each fortnight, and all new cases have a dental inspection and appropriate dental treatment is given.

Examination Room.—This Block also contains an Examination Room in which patients are interviewed and examined.

Ear, Nose and Throat Treatment.—We have also had the services of Mr. Howarth, the Ear, Nose and Throat Specialist, who visits the Institution at least once a month.

Ward Kitchens.—Since the construction of the Treatment Block we have been able to release the rooms on the various Wards that were used for medical and dental treatment and these rooms have now been converted into Ward Kitchens and Duty Rooms.

This improvement has greatly helped our catering facilities and the Nurses in their work on the Wards.

During the year electrical sterilizers have been installed in the Ward Kitchens and in the main pantry in order that all patients' crockery and utensils may be sterilized.

Nurses' Training. During the month of November we were inspected by a representative of the General Nursing Council and passed as a Training School within the comprehensive training scheme for the Municipal Hospitals.

Occupational Therapy. As the patient's health improves, the urge and desire comes to undertake something to relieve the boredom of bedrest, and to this end a programme is evolved to encourage the patient to interest himself or herself in handicraft work and thus proceed through easy stages to a return to normal working life.

When the patient is considered fit enough, he or she is permitted to undertake interesting handicraft work under the experienced guidance of our Handicrafts Instructor. For the first stage the patient is invited to choose a handicraft of a light nature which may be undertaken while the patient rests in bed, such as tapestry work, rug-making, leatherwork, soft toy-making and needlecraft of all kinds. When the patient is fit enough to get up all day he commences a further stage which entails more exercise with the ultimate object of being able to undertake a normal working life on his discharge from the Sanatorium.

The work undertaken by the men patients included repairs to articles of furniture, minor repairs to buildings and huts, e.g. locks, bolts, window sashes, flooring and roofing. During this year in particular the patients renewed over 70 square feet of flooring, including new joists, etc., in one of the cubicles on E Block.

The patients also make new bed-rests, bed tables, screens and other items of furniture for the Sanatorium use.

Of special mention was the fitting out by the Handicrafts Department of the Ward Kitchens with plate racks and cupboards, the equipping of Duty Rooms with dressers and medicine cupboards and the fitting up of the sluices with toilet racks.

The patients also made new fire appliance lockers throughout the Institution.

Classes are given for the women patients each afternoon. Instruction is given in light woodwork, and the patients have made such articles as light tables, small cupboards, fire-screen stands, photograph frames, small boxes of various shapes and wooden toys.

The women are keenly interested in this type of work and are more than pleased with the articles they have been allowed to make, especially as they are permitted to purchase their own handiwork at cost price for the materials used.

Patients' Entertainment. Patients' entertainment has been well catered for this year.

With the accrued dividends of the Bolitho Trust Fund we purchased a Gaumont British Sound Film Projector of the latest type at a cost of £250 including accessories, and we are now able to give weekly film exhibitions for the patients and staff.

The patients express a decided preference for film shows to concert parties. We have, however, had on an average one concert party per month arranged by Mr. S. F. Gale, the Methodist Lay Reader, to whom we should like to express our appreciation for his efforts.

A mixed Whist Drive is held for the patients every fortnight. The cost of the prizes, which are given in the form of Savings Stamps, is defrayed by the Patients' Canteen Fund.

Many comforts for our patients such as bed jackets, various articles of clothing, handicraft material, cigarettes and honey have been supplied by the British Red Cross Society and Order of St. John and the W.V.S.

The representative of the British Red Cross Society visits the patients at least once a week.

Many comforts for our Service patients have also been supplied through the kind offices of Major C. S. Griffin, O.B.E., the Military Registrar for this District.

He or his representative visits the Institution once a week and helps or advises where necessary, all our Service cases.

Redecoration and Building Construction. During the year we have redecorated all the Male Patients' Wards, the Men's Recreation Room, the Kitchens and the ground floor of A Block which is occupied by women patients.

Staff Bungalows. Owing to the difficulty in obtaining staff and being unable to offer accommodation to married men, the Committee purchased a field opposite the Sanatorium and on the site eight four-roomed bungalows are in course of construction.

We feel that this innovation will greatly help us in obtaining staff.

For many years we have felt that our greatest difficulty in obtaining good staff was due to the fact that we could not offer accommodation for married men.

———

The City General Hospital

REPORT OF THE MEDICAL SUPERINTENDENT.

The following table summarises certain statistics of a general nature on the work of the City General Hospital during the year ended 31st December, 1946 :—

(1)	Number of admissions, including infants born in the Hospital	6007
(2)	Number of discharges	5452
(3)	Number of deaths	526
(4)	Patients treated to a conclusion	5978
(5)	Duration of stay of patients treated to a conclusion :	
	(*a*) Under four weeks	5281
	(*b*) Over four weeks and under thirteen weeks	582
	(*c*) Thirteen weeks or more	115
(6)	In-patient days	120,594
(7)	Average duration of stay	20.08 days
(8)	Number of available beds	450
(9)	Number of beds occupied :	
	(*a*) Average	330.39
	(*b*) Highest—on 11/12/46	368
	(*c*) Lowest—on 5/6/46	302
(10)	Number of women confined in Hospital ...	814
(11)	Number of live births	784
(12)	Number of stillbirths	46
(13)	Deaths of newly born (under 4 weeks)	53
(14)	Number of maternal deaths	6
(15)	Number of surgical operations	2163
(16)	Number of X-ray investigations	4008
(17)	Number of pathological investigations	4923
(18)	Number of patients treated in Dental Department	48

Nurses' Training School. The following results were obtained in the Nurses' Training School during the year :—

(A) State Registration Examinations.

	Entered.	*Passed.*	*Re-entries.*
Preliminary Examination	26	24	4
State Final Examination	16	15	3

(B) Certificate of the Central Midwives Board. Part I.

Entered.	*Passed.*	*Re-entries.*
53	44	7

Statistical Tables.

Patients remaining in hospital—1st Jan., 1946 ...	295	
Patients admitted	5223	
Births	784	
		6302
Patients discharged	5452	
Patients died	526	
Patients treated to a conclusion		5978
Patients remaining in hospital—31st Dec., 1946 ...		323

Admissions—Age and Sex Distribution.

	Male.	*Female.*	*Total*
Births	408	376	784
Under 1 year	180	77	257
1–3 years	53	39	92
3–5 years	60	38	98
5–11 years	354	251	605
11–16 years	134	128	262
Adults	1255	2654	3909
	2444	3563	6007

Thus of 4,193 patients admitted for treatment during the year (excluding maternity cases and births), 1,314 were under the age of 16 years (31.33%) and 1,052 were under the age of 11 years (25.08%).

Analysis of Deaths in Age Groups.

Total number of deaths=526.

Ages.	*Male.*	*Female.*	*Total.*
Under 1 year	70	33	103
1 to 5 ,, ...	4	2	6
5 to 10 ,, ...	–	2	2
10 to 15 ,, ...	5	1	6
15 to 25 ,, ...	1	5	6
25 to 35 ,, ...	5	7	12
35 to 45 ,, ...	9	11	20
45 to 55 ,, ...	16	14	30
55 to 65 ,, ...	57	31	88
65 to 75 ,, ...	56	53	109
Over 75 ,, ...	66	78	144
	289	237	526

Deaths within 24 hours of admission—98=18.63%.

Causes :—

Neonatal 25

Terminal—

Acute disease 40

Chronic Disease 33

ANALYSIS OF WORK OF DEPARTMENTS.

General. The inset table gives details of the work of all the departments of the hospital in the form of a classification of all patients treated to a conclusion.

OPERATIONS IN MAIN THEATRE:

Abdominal: Major	333
Gynæcological:	
Major	238
Minor	307
Cæsarean Operations	87
Genito-Urinary:	
Major	67
Minor	119
Ear, Nose and Throat	581
Minor operations not included above ...	403
Others:—Thoracic	20
Amputations	8
Emergency operations	359
(22.7%, excluding E.N.T. operations).	
Total number of surgical operations ...	2163

MATERNITY DEPARTMENT.

Number of available beds	36
Number of patients admitted	1030 (including babies)
Number of patients delivered by:	
(*a*) Midwives	653
(*b*) Doctors	161
Number of patients discharged undelivered	93

Mothers:

814 mothers gave birth to 832 children. There were 18 cases of twin birth. 528 mothers received gas and air analgesia.

How Admitted:

Through Ante-Natal Clinic	649
Emergency	165

Parous State:

Primipara	382
Multipara	432

Presentations:

Vertex	751
Breech—Complicated	39
,, Uncomplicated	37
Shoulder	1
B.B.A.	4

Obstetrical Operations:

Instrumental deliveries	58
Surgical induction of labour ...	45
Cæsarean operations	87
Internal Version	1
Maternal deaths	6

Whether Admitted from A.N. Clinic.	*Mode of Delivery.*	*Cause of Death.*	*Number of Cases.*
No.	Cæsarean delivery.	Cardiac failure. Pulmonary embolism following Cæsarean operation for shoulder presentation...	1
No.	Cæsarean	Toxæmia of pregnancy. Hysterotomy; hypostatic penumonia ...	1
No.	Undelivered.	Sepsis. Placenta prævia. Pelvic thrombophlebitis	1
No.	Undelivered.	Eclampsia. Bilateral necrosis of kidney	1
Yes.	Undelivered.	Shock. Concealed accidental hæmorrhage	1
Yes.	Hysterotomy.	Cerebral hæmorrhage. Hyperpiesia. Chronic nephritis	1

Number of cases of puerperal pyrexia among women confined in the hospital=32.

Infants.

Births :—

(*a*) Premature	149	
(*b*) Mature	683	
Survivals :—		
(*a*) Born and survived	733	
(*b*) Born and died :—		
(i) within 4 weeks	53	(6.37%)
(ii) within 10 days	34	(4.08%)
Stillbirths	46	(5.52%)

Thus of 532 infants born, 53 died and 46 were stillborn. Of 786 infants born alive, 53 died.

Causes of neonatal deaths (i.e. within ten days of birth) :—

Prematurity	21
Obstetrical traumatism	4
Atelactasis	2
Malformations	2
Rh. factor	2
Congenital syphilis	2
Fœtal distress	1

(A) Ante-Natal Department.

Number of sessions	136
Number of attendances	5047
Number of attendances per session ...	37.0
Number of expectant mothers seen ...	1343
Average number of attendances made by each	4
Number referred for X-ray examination...	228
Number referred to Consultant Obstetrical Clinic	40

Consultant Obstetrical Clinic :

New Cases	155
Total attendances	186

(B) Post-Natal Department.

Number of Sessions	39
Number of new cases	718
Number of attendances...	758

(C) Anti-Sterility Clinic.

Number of Sessions	24
Number of attendances	183
Number of attendances per session ...	7.5
Number of patients seen	92
Average number of attendances made by each	2
Number of patients referred for in-patient treatment	18
Number of patients referred for X-ray examination	55

CLASSIFICATION OF IN-PATIENTS WHO WERE TREATED TO A CONCLUSION IN THE CITY HOSPITAL DURING THE YEAR ENDED 31st DECEMBER, 1946.

(EXCLUDING PATIENTS TREATED UNDER THE EMERGENCY MEDICAL SERVICES SCHEME)

Disease Groups.	*Children*		*Adults*	
	Discharged.	*Died.*	*Discharged.*	*Died.*
Acute Infectious Disease ...	4	—	1	—
Influenza	2	—	6	—
Tuberculosis—				
Pulmonary	7	2	37	7
Non-pulmonary ...	6	5	6	2
Malignant disease ...	-	—	66	82
Rheumatism—				
Acute rheumatism (rheumatic fever) together with sub-acute rheumatism and chorea	12	1	4	—
Non-articular manifestations of so-called "rheumatism" (muscular rheumatism, fibrositis, lumbago and sciatica) ...	—	—	5	—
Chronic arthritis ...	—	—	10	—
Venereal disease	6	—	505	—
Puerperal Pyrexia				
Patients confined in hospital	—	—	33	—
Patients confined at home	—	—	35	—
Other diseases and accidents connected with pregnancy and childbirth	24	74	384	6
Mental diseases—				
(*a*) Senile Dementia ...	—	—	3	—
(*b*) Others	—	—	12	—
Senile decay	—	—	16	14
Accidental injury and violence	105	—	221	14
In respect of cases not included above :—				
Disease of the Nervous System and Sense Organs ...	59	3	71	55
Disease of the Respiratory System	121	19	144	40
Disease of the Circulatory System	13	2	101	142
Disease of the Digestive System	172	10	392	30
Disease of the Genito-urinary System	25	1	530	17
Disease of the Skin ...	92	—	68	—
Diseases not classified ...	8	—	8	—
Tonsil and Adenoid patients	527	—	3	—
Nursery Children	53	—	—	—
Patients discharged from Maternity Ward				
Mothers	—	—	808	—
Infants	747	—	—	—
TOTALS ...	1983	117	3469	409

Radiological Department.

Total Radiographic Examinations ...	4008
Chest Radiographs	1859
Lipiodol Examinations	67
Opaque Meal Examinations ...	187
Opaque enemata	42
Cholecystograms	34
Intravenous pyelograms	75
Retrograde pyelograms	14

Dental Department.

Patients examined	48
Patients treated	32
Teeth extracted	159
Anæsthetics—local	18
general	9
Appliances	1

ANNUAL PATIENT STATISTICS.

	Year ending 31/12/44	*Year ending* 31/12/45	*Year ending* 31/12/46
Admissions	2616	4047	5223
Births	327	626	784
TOTALS ...	2943	4673	6007
Discharges	2499	4056	5452
Deaths	438	572	526
TOTALS ...	2937	4628	5978
Patient days	93,029	104,731	120,594
Daily average Beds occupied	254.17	287.14	330.39
Highest Number ...	298	323	368
Lowest Number ...	205	235	302
Average duration of stay	31.6 days	22.41 days	20.08 days

Comments by the Medical Superintendent.

The number of patients treated during the year 1946, is the highest recorded for the hospital ; the average length of stay, 20.1 days, is the lowest yet achieved. It is unlikely to go lower as there is a steadily increasing demand for accommodation for long-stay cases.

Chronic Sick.

The return of its inhabitants to Plymouth and the difficulties of housing have brought the problem of the care of chronic sick and the aged infirm back to what it was before the War. There are, indeed, prospects of its aggravation, with the additional difficulty that damage to the hospital by enemy action has lessened the accommodation available. The problem, though now receiving more widespread attention, is not a new one ; it has been the subject of reference in Annual Reports before the War, and has, for a long time, been very real to those who have most frequently encountered it.

Last year it was reported that plans had been made to increase the accommodation for the aged sick. Unfortunately this increase has not yet been found possible, though a great deal has been done to improve the wards at present in use. By alterations in the lay-out of the wards, by improved lighting, heating and ventilation, and by bright decoration, two wards have been much improved and a third is in the process of being renovated. This reconstruction will continue until all the wards in the building now known as Wards 14/15, have been completed. The pre-War accommodation will thus be restored ; it is likely to prove insufficient in the winter period when demands for such accommodation are invariably heavy.

The problem is not merely one of bed accommodation, however. Equally pressing is the recruitment of adequate nursing staff. This question, which is a National one, has been the subject of official and unofficial enquiry, newspaper comment and debate for so long that its many difficulties are well known. Efforts are being made to bring back into Nursing on a part-time basis, trained Nurses who have hitherto been lost to the profession in consequence of their outside responsibilities.

Maternity Department : Ante-Natal and Post-Natal Clinics. The attendances at these Clinics are now regulated on an Appointments basis with considerable improvement in the comfort and convenience of the arrangement. There is still room for improvement, however, but it waits largely upon structural developments.

Structural Developments No new buildings have been erected. Reference has been made to the reconstruction of Wards 14/15.

Plans have been made for the reconstruction of Wards 5 and 7 which were in part destroyed by enemy action in 1941. These wards will be reconstructed on modern lines for infants and children. The work should be completed in 1947.

Rehabilitation. The Physiotherapy Department has been rehoused and a Short Wave Therapy Set installed.

An Occupational Therapist has been added to the Staff. Adequate accommodation for both these Departments is a pressing need.

The value of Rehabilitation in the complete restoration to normal of the sick or injured individual is now more widely understood and appreciated. Under present circumstances the Hospital cannot develop its facilities so fully as it should.

Nursing Staff. Miss N. Nicholls joined the Staff as Matron of the Hospital in September, 1946.

Nurses' Memorial Bursary. This was awarded for the year 1946 to Nurse B. Wright.

I should like to thank all members of the nursing staff, both female and male, for their willing and efficient labours in the duties of the hospital. It would be invidious to individualise, but I am conscious of, and should like to draw attention to, the specially arduous work of the Maternity Department and the Operating Theatre. In each the volume of work has been beyond the resources of the Department and has put a severe strain on the Staff.

Port Health Department

Report of the Senior Assistant Port Medical Officer

Dr. W. N. M. Mason.

I. Amount of Shipping entering the Port during the Year.

One thousand two hundred and twenty-six vessels, with a total tonnage of 1,035,809, visited the Port during 1946. Eighty of the vessels carried passengers.

Seventy of the vessels were inspected by the medical officers, and nine hundred and sixty-five by the inspector.

TABLE A.

Amount of Shipping entering the Port during the Year 1946.

		No.	Tonnage.	No. Inspected.		No. reported to be defective.	No. of vessels on which defects were remedied.	No. of vessels on which defects were found and reported to Ministry of Transport Surveyors.	No. of vessels reported as having or having had during the voyage infectious diseases on board.
				By the M.O.	By the Port Health Inspector.				
Foreign	Steamers	159	587,236	70	197	22	19	–	12
	Motor	108							
	Sailing	–							
	Fishing	–							
Total Foreign		267	587,236	70	197	22	19	–	12
Coast-wise	Steamers	604	448,573	–	768	41	35	2	1
	Motor	355							
	Sailing	–							
	Fishing	–							
Total Coast-wise		959	448,573	–	768	41	35	2	1
Total Foreign and Coast-wise		1226	1,035,809	70	965	63	54	2	13

II. Character of the Trade of the Port.

(*a*) *Passenger Traffic.* The number of persons passing through the Port was 3,976, including 1,006 Aliens. The number of passengers embarked during the year was 1,218, and the number of passengers landing was 3,976.

(*b*) *Cargo Traffic. Coastwise.* General cargoes of foodstuffs arrive regularly from London, Bristol, Liverpool and Glasgow, and coal from the North-East and Bristol Channel Ports.

Foreign. Cargo traffic consisted mainly of timber from Canada, Sweden and Germany; fertilizers from Holland, and Phosphates from Holland and North Africa.

TABLE B.

(*a*) Passenger Traffic during the Year 1946.

	No. of Passengers.
Inwards	3,976
Outwards ...	1,218

(*b*) Cargo Traffic.

The principal imports were :—

Foreign.

Phosphates from North Africa and Antwerp.
Grain and Timber from Canada and Sweden.
Fertilizers from Antwerp.
Fuel Oil from Abadan.
Timber from Hamburg.
Iron Ore from Canada and Africa.
Potash from Antwerp.
Fruit from Palestine and West Indies.
Fruit from Antwerp, South Africa and Australia.
Root Crops from Amsterdam.

Coastwise.

Coal from South Wales and North-east Ports.
Vapourising Oil from Southampton, Fowey, Dartmouth, Thameshaven and Hull.
Fertilizers from Blyth, Middlesbrough, London, Hull and Grimsby.
China Clay from Cornwall.
Grain from Exmouth, Truro, Avonmouth, Sharpness and Cardiff.
Flour from Bristol, Penzance, Cardiff and Avonmouth.
Cement from London.
Sugar from London and Falmouth.
Timber from Tyne.
Basic Slag from Grimsby, Boston and Middlesbrough.
Petroleum from Hamble and Truro.
Wool from Liverpool.
Phosphates from Middlesbrough, Hull, Liverpool, Birkenhead and Portsmouth.
Potash from London, Liverpool and Avonmouth.
Peas, Apricots, Sugar, Biscuits, Salt, Fats, Flour and Margarine from Liverpool.
Syrup, Tea, Flour, Barley, Oats, Mustard and Sugar from London.
Coffee from Belfast and Glasgow.
Apples from Glasgow and Belfast.
Potatoes from Belfast.

(*c*) Foreign Ports from which Vessels Arrive.

Asia & Australasia.	*Europe,*	*America.*	*Africa.*
Haifa.	Ghent.	River Plate.	Sousse.
Huelva.	Amsterdam.	Porto Delgada.	Beira.
Curacao.	Cartagena.	Halifax, N.S.	Sfax.
Calcutta.	Kotka.	Buenos Aires.	Matadi.
Sydney.	Antwerp.	New York.	Camerat.
Hongkong.	Brest.	Trinidad.	Zanzibar.
Abadan.	Le Havre.	Newport.	Oran.
Wabana.	Rotterdam.	Baltimore.	Freetown.
Singapore.	Gothenburg.	St. Johns, N.B.	Alexandria.
Newcastle.	Emden.	Vancouver.	

Asia & Australasia.	*Europe.*	*America.*	*Africa.*
Colombo.	Copenhagen.	Port Churchill.	
Bombay.	Lisbon.	Monati (Cuba).	
Istanbul.	Bremen.	Campbeltown.	
Port Arthur.	Sundsvaal.	New Westminster.	
Mersina.	Pitea.	Las Palmas.	
	Munksend.	Houston.	
	Hankepudas.	Newark.	
	Stockholm.		
	Carlsborg.		
	Kristenhaven.		
	Hamburg.		
	Kristisham.		
	Hudiksvaal.		
	Bremerhaven.		
	Oldenburger.		
	Gdynia.		
	Stettin.		
	Dublin.		

MEDICAL INSPECTION OF ALIENS.

ANNUAL RETURN BY THE MEDICAL INSPECTOR OF ALIENS FOR THE YEAR ENDED 31ST DECEMBER, 1946.

	TOTAL.	*Number inspected by the Medical Inspector.*	*Number subjected to detailed examination by the Medical Inspector.*	*Certificates Issued*					*Transmigrants.*
				Lunatic idiot or M.D.	*Undesirable for Medical reasons.*	*Physically incapacitated.*	*Suffering from acute infectious disease.*	*Landing necessary for adequate medical examination.*	
(*a*) Total number of Aliens landing at the Port ...	1006	1006	180	–	–	–	1	–	–
(*b*) Aliens refused permission to land by Immigration Officer ...	–	–	–	–	–	–	–	–	–
(*c*) Transmigrants ...	–	–	–	–	–	–	–	–	–
Total Aliens arriving at the Port ...	1006	1006	180	–	–	–	1	–	–

Total number of vessels carrying Alien passengers : 41.

Number of vessels dealt with by the Medical Inspector : 41.

III. Water Supply.

(1) *Source of Supply.*

(*a*) *For the Port* (Great Western Docks, Cattedown and Sutton Harbour). Plymouth Corporation Water Department from hydrants on the wharves.

(*b*) *For Shipping.* The City's supply mains extend to the Port, and there are hydrants on the wharves for the use of shipping.

(2) *Water Boats.* The only water boat supplying fresh water to shipping in the Port is the *Ena.* The tanks were found to be in a clean and wholesome condition.

IV. Port Health Regulations, 1933 and 1945.

(1) *Arrangements for dealing with Declarations of Health.*

Declarations of Health are inspected and collected by the Boarding Medical Officers in the case of passenger liners and vessels from infected ports. In the case of other vessels, the Declarations of Health are inspected and collected by the Port Health Officer or by Officers of H.M. Customs, who forward the forms immediately to the Port Health Authority Office.

(2) *Boarding of Vessels on Arrival.*

All mailboats and passenger vessels from foreign ports are boarded by the Port Medical Officer on arrival. The Medical Officer normally goes off in the G.W.R. tender with the Customs Officers and other Port Officials. On boarding the vessel, the Medical Officer investigates any case of reported sickness before the other shore officials go on board, and takes appropriate action. If no case of infectious disease is reported, and the Boarding Medical Officer is satisfied that all is well, the other shore officials board from the tender.

All vessels reporting illness of an infectious nature are boarded in the Sound by the Medical Officer and the Inspector, who go off in the Port Health launch ready to land any cases if necessary. Vessels also request the services of the Port Medical Officer for cases of illness other than infectious disease, and services are readily given.

Vessels from infected ports are either boarded in the Sound by the Port Medical Officer from the Port Health launch, or on berthing.

Cargo vessels entering the Port are boarded by an officer of Customs or by the Port Health Inspector.

(3) *Notification to the Authority of Inward Vessels requiring special attention.*

(*a*) *Wireless Messages.* Vessels landing passengers, and any vessels requiring the attention of the Port Medical Officer, usually wireless their time of arrival at the Port and the state of health on board to the Agents. The latter then inform the Port Health Authority, and in the case of vessels landing passengers, give the time that the tender will be leaving the wharf.

(*b*) *Pilots.* The Chief Pilot is sent weekly a list of the infected ports. Usually the tender leaves the wharf with the Medical Officer before the Pilot has boarded the vessel outside the Breakwater.

(*c*) *Customs Officers.* A list of infected ports is supplied weekly to the Customs Officers, who do not issue pratique until vessels arriving from such ports are boarded by the Port Medical Officer. Shipping arrivals are notified daily to the Department by the Customs.

(4) *Mooring Stations designated under Article* 10.

(*a*) Within the Docks.

(*b*) Outside the Docks.

Jennycliffe Bay is used as a mooring station in the case of vessels which intend entering the Docks. As the larger liners " lie off " in Cawsand Bay, or just inside the Breakwater, the usual anchorage is regarded as a mooring station.

(5) *Particular of any standing exemptions from the provisions of Article* 14.

A standing exemption from detention has been granted in respect of vessels with infectious disease on board other than Cholera, Plague, Yellow Fever, Typhus and Smallpox, and for vessels otherwise clean arriving from ports in areas listed under Article II.

(6) *Experience of working Article* 16.

No difficulty has been experienced in the working of Article 16.

(7) (*a*) *Premises and Waiting Rooms for medical examination.*

No special waiting rooms or premises are provided for medical examination at the Plymouth Docks, but can, if necessary, be carried out at the Port Health Department's offices in the Docks.

(*b*) *Cleansing and disinfection of ships, persons, clothing and other articles.*

When cases of infectious disease are removed from ships in the motor launch *Golden Hind* to hospital ashore, the quarters on board are disinfected with Formalin. Clothing, bedding, etc., are conveyed to the City Isolation Hospital, Swilly, for disinfection. Facilities are provided at the Exmouth Road Cleansing Station for the cleansing of persons.

(*c*) *Premises for the temporary accommodation of persons for whom such accommodation is required for the purposes of the regulations.*

Cases of acute infectious disease requiring isolation are accommodated at the City Isolation Hospital.

(*d*) *Hospital accommodation available for Plague, Cholera, Yellow Fever, Smallpox and other infectious diseases.*

Beds can be made available at the City Smallpox Hospital, Lee Mill, near Plymouth.

(*e*) *Ambulance Transport.*

Cases of infectious disease are brought ashore in the Authority's launch *Golden Hind*, and conveyed to the City Isolation Hospital in the Health Department Ambulance. Other cases are removed by the St. John Ambulance Brigade.

(*f*) *Supervision of Contacts.*

If a case of infectious disease is landed from a vessel, all persons on board are regarded as contacts, and are kept under surveillance throughout the incubation period during their stay in port. When there are persons landing, their names and addresses are taken and forwarded to the Medical Officer of Health of the district to which they are proceeding, so that they may be kept under observation until the quarantine period has elapsed. Reply cards are issued to the contacts so that they may notify any change of address to the Department's office.

In the case of Smallpox, unless in the opinion of the Medical Officer the contact is recently protected by vaccination or by a previous attack of Smallpox, the following procedures are available :—

(*a*) the person be offered vaccination and placed under surveillance for a period not exceeding fourteen days after the date of arrival of the ship, or

(*b*) be placed under surveillance for the said period without vaccination, or

(*c*) be offered vaccination and isolated until the result of the vaccination is known, and thereafter kept under surveillance until the fourteenth day after the date of arrival of the ship, or

(*d*) be isolated for a period of fourteen days after the date of arrival of the ship.

8. *Arrangements for the bacteriological examination of Rats for Plague.*

These examinations are carried out by the City Pathologist at the Prince of Wales's Hospital, Greenbank, Plymouth.

9. *Arrangements for other bacteriological or pathological examinations.*

The City Pathologist carries out all other bacteriological or pathological examinations required such as water samples, sewage effluents, shellfish samples, throat swabs and other clinical material.

10. *Arrangements for the diagnosis and treatment of Venereal Disease among Sailors under International arrangement.*

All ships coming into the Docks are boarded by the Port Medical Officer or Inspector, and where necessary, any information is supplied concerning venereal diseases. Pamphlets are provided to seamen setting out the times and days of the Venereal Disease Clinics at the City Hospital, together with directions showing the route from the Docks to the Clinic.

11. *Arrangements for the interment of dead.*

Agents make their own arrangements for the interment of the dead.

Where deaths have occurred from any of the five major diseases, cremation is advised.

12. *Other matters, if any, requiring or receiving attention.*

A Clinic for the treatment of Scabies and the cleansing of verminous persons is available for seamen daily between the hours of 9 a.m. and 12 noon, excepting Sundays.

Parrots (Prohibition of Import) Regulations, 1930.

Four Orders were issued during 1946, three of which were served on members of the crews of H.M. Ships, and one on the master of a private yacht.

TABLE C.

CASES OF INFECTIOUS SICKNESS LANDED FROM VESSELS.

Disease.	*No. of cases during the year.*		*No. of vessels concerned.*	*Average No. of cases for previous 5 years.*
	Passengers.	*Crew.*		
Pneumonia ...	1	–	1	–
Typhoid ...	–	1	1	–
Malaria	–	2	2	1
Scarlet Fever ...	–	1	1	–
Dysentery ...	–	1	1	–
Tuberculosis ...	1	–	1	-

TABLE D.

CASES OF INFECTIOUS SICKNESS OCCURRING ON VESSELS DURING THE VOYAGE BUT DISPOSED OF PRIOR TO ARRIVAL.

Disease.	*No. of cases during the year.*		*No. of vessels concerned.*	*Average No. of cases for previous 5 years.*
	Passengers.	*Crew.*		
Pneumonia ...	–	1	1	–
Malaria	2	2	3	–
Tuberculosis ...	1	–	1	–
Smallpox ...	–	1	1	–

Infectious Diseases.

On 29th April, 1946, H.M.S. *Fencer* arrived in the Sound with a ship's company and passengers on board totalling 1,200. Of these, 5 civilians and 87 naval ratings for demobilization were due to land at Plymouth.

On 19th April, 1946, a naval rating had been disembarked at Port Said said to be suffering from Dengue Fever or Plague, but subsequently reported on 26th April, 1946, as having died of Smallpox. Vaccination of all personnel on board commenced on this date at Gibraltar.

As the vessel arrived on the tenth day, and vaccination had not been carried out until seven days after the case had been landed, and as personnel were due to land for dispersal or demobilization, it was considered that an exceptional risk of introduction of Smallpox into the country existed.

In consultation with the Naval Health Officer, the Commander-in-Chief was advised to quarantine the ship until the 3rd May, 1946, fourteen days from the date of disembarking the case at Port Said. The quarantine passed uneventfully, no cases of Smallpox being detected in the daily medical inspection of all persons on board. The Medical Officers of Health of districts to which personnel landing at Plymouth were proceeding, were notified of the circumstances, but no cases of Smallpox were reported.

During the year vessels reporting infectious disease on board were as follows :—

Cases landed at the Port.

On 21st January one case of Pneumonia on board the S.S. *Noah Webster* was removed to the City Isolation Hospital.

On 22nd February one case of Malaria and Mental Depression was removed to Ford House from the S.S. *Copacabana.*

On 11th May a seaman from the Russian ship *Krilcon* was removed to the Prince of Wales's Hospital, Plymouth, suffering from a Pyrexia of unknown origin, which was subsequently diagnosed as Typhoid Fever. All the ship's drinking water was chlorinated, and the seamen's quarters disinfected. No further cases developed.

On 22nd May one case of Dysentery was removed from the S.S. *Modasa.*

On 26th July a seaman was landed from the American ship *Fort La Traite*, and removed to the City Isolation Hospital suffering from Malaria.

On 19th September the "Bosun" of the L.C. 21 was landed suffering from Streptococcal Tonsillitis, and removed to City Isolation Hospital.

On 4th October a female British passenger suffering from Pulmonary Tuberculosis was landed from the American ship *Washington* and admitted to Mount Gold Hospital, Plymouth.

On 29th December a seaman from the British ship *Chemong* was landed suffering from Scarlet Fever. Disinfection of the crew's quarters was carried out.

Cases of non-infectious disease were dealt with as follows :—

One seaman was landed from the British ship *Fort St. Croix* suspected of suffering from Appendicitis, and removed to the Prince of Wales's Hospital, Plymouth.

One of the crew of the British vessel *Empire Springfjord* suffering from Hæmatemesis was landed and removed to hospital.

One male passenger suffering from Coronary Thrombosis was landed from the S.S. *Washington* and removed to Hospital.

During the year 21 British seamen and 40 Foreign seamen were treated at the Venereal Disease Clinic.

The nationalities were as follows :—

British ...	... 21	Danish ...	... 2
American ...	... 11	Swedish ...	... 2
Russian ...	... 5	Spanish ...	... 1
Greek ...	... 5	Estonian ...	... 1
Indian ...	... 5	Chinese ...	... 1
Norwegian ...	... 3	West African	... 1
Dutch ...	... 2	Lithuanian ...	... 1

Total : 61.

Two seamen were treated for Scabies.

V. Measures against Rodents.

(1) *Steps taken for the detection of Rodent Plague.*

(*a*) *In Ships in the Port.* Ships from infected ports are subjected to close enquiries by the Port Health Inspector. Dead rats recovered during the working of the cargo are collected by the ratcatcher and sent to the City Pathologist for detailed microscopical examination.

(*b*) *On Quays, Warehouses, Wharves in the Vicinity of the Port.* Frequent visits were made to warehouses during the year for the purpose of ascertaining the rat prevalence and the condition of the rat population. A percentage of rats found killed, poisoned or trapped by the ratcatcher are sent to the City Pathologist for examination for Plague.

(2) *Measures taken to prevent passage of rats between ship and shore.*

All vessels found to be rat infested are required to have rat guards fixed on all mooring ropes from ship to shore. Plague infected or suspected vessels may be required to undergo a preliminary fumigation to destroy rats before commencing to discharge cargo. After discharge, a complete and thorough fumigation is carried out. During discharge the following precautions are enforced :—

(*a*) Vessels to be moored not less than six feet from the quay.

(*b*) Efficient rat guards to be fixed to all mooring ropes or hawsers and ropes wrapped with canvas and freshly tarred every night.

(*c*) One gangway only to be used, which must be well lighted at night.

(*d*) Gangways used for the discharge of cargo to be removed when the vessel is not working.

(3) *Methods of Deratisation.*

(*a*) *On Ships.* Six ships were found to be infested with rats during the year. Two were fumigated with HCN by private firms, and the remainder by trapping or poisoning.

(*b*) *Premises in the vicinity of docks or quays.* During the year rat campaigns were carried out by the Authority's staff with considerable success along the foreshore, including sea walls, cliffs, beaches, warehouses and premises in the following areas : Ocean Quay, Richmond Walk, Newport Street, Devil's Point, Stonehouse Pool and Creek, Sutton Harbour and Coxside. A thorough survey was made to find runs and holes suitable for baiting points. These points were then pre-baited for four days, and if there were satisfactory takes the bait was then poisoned. All the sewers in these areas were dealt with in a similar manner. The total number of rats killed as a result of these campaigns was 699, and subsequent visits confirmed that the rat population had been reduced to a minimum.

Very little rat infestation occurred in the sheds and warehouses in the Millbay Dock area. Slight infestations occurred from time to time, and where this was evident, pre-baiting and poisoning were carried out.

Daily visits continue to be made to warehouses and premises in order to ascertain whether rat infestation is existent.

(4) *Measures taken for the detection of rat prevalence in ships and on shore.*

All ships berthing at the various wharves are visited by the Port Health Inspector, and questions are asked of officers and crews regarding evidence of rat infestation. Information is also obtained from stevedores, and where the rat population is suspected to be large, the vessel is thoroughly searched by the ratcatcher. Periodical inspections are made of all warehouses by the Port Health Inspector and ratcatcher for evidence of rat infestation.

(5) *Rat-Proofing.*

(*a*) *To what extent are docks, wharves, warehouses, etc., rat-proof.* The majority of warehouses which have been damaged by enemy action in the Millbay Docks area are not rat-proof. The grain silo is a concrete structure with raised concrete loading platforms, and designed on most up-to-date lines to prevent the ingress of rats.

(*b*) *Action taken to extend rat-proofing.*

(i) *Ships.* In the course of routine inspection of vessels, the Port Health Inspector gives advice concerning any particular part

in need of rat-proofing. There must be no place where rats may remain undisturbed and make their nests, and no available food or water supply. Rats should not be allowed to travel freely from one part of a vessel to another. In order to accomplish this, advice has been given regarding the fixing of expanded metal around pipes, electric cables, etc., where they pass through bulkheads from one compartment to another. Masters have been instructed to rat-proof provision rooms and other compartments where found to be necessary.

(ii) *On Shore.* It has been found to be impracticable to rat-proof many of the damaged buildings in the dock area. Rebuilding will be necessary in many instances. The Port Health Inspector makes periodical inspections of stores to ensure that they are kept clean and tidy, and that no rubbish is allowed to accumulate.

RATS DESTROYED DURING YEAR.

TABLE E.—(1) On Vessels.

No. of Rats.	*Jan.*	*Feb.*	*Mar*	*Ap.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Total in year.*
Black	9	7	29	–	–	–	1	–	–	–	1	–	47
Brown ...	–	–	–	–	–	–	–	–	–	–	–	–	–
Species not recorded ...	–	–	–	–	–	–	–	–	–	–	–	–	–
Examined ...	–	2	3	–	–	–	–	–	–	–	–	–	5
Infected with Plague ...	–	–	–	–	–	–	–	–	–	–	–	–	–

TABLE F.

(2) In Docks, Quays, Wharves, Warehouses.

No. of Rats.	*Jan.*	*Feb.*	*Mar*	*Ap.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Total in year.*
Black	–	–	–	–	–	–	–	–	–	–	–	–	–
Brown ...	50	–	440	40	10	8	4	1	116	10	20	–	699
Species not recorded ...	–	–	–	–	–	–	–	–	–	–	–	–	–
Examined ...	–	–	–	–	–	–	–	–	–	–	–	–	–
Infected with Plague ...	–	–	–	–	–	–	–	–	–	–	–	–	–

TABLE G.

MEASURES OF RAT DESTRUCTION ON PLAGUE "INFECTED" OR "SUSPECTED" VESSELS OR VESSELS FROM PLAGUE INFECTED PORTS ARRIVING IN THE PORT DURING THE YEAR.

Total No. of such Vessels arriving.	*No. of such Vessels Fumigated by SO_2.*	*No. of Rats killed.*	*No. of such Vessels Fumigated by HCN.*	*No. of Rats killed.*	*No. of such Vessels on which Trapping, Poisoning, etc., were employed.*	*No. of Rats killed.*	*No. of such Vessels on which Measures of Rat Destruction were not carried out.*
1	2	3	4	5	6	7	8
11	–	–	–	–	2	38	9

TABLE H.

DERATISATION CERTIFICATES AND DERATISATION EXEMPTION CERTIFICATES ISSUED DURING THE YEAR.

Net Tonnage.	*No. of Ships*	*No. of Deratisation Certificates Issued*					*No. of Deratisation Exemption Certificates issued.*	*Total Certificates Issued.*
		After fumigation with			*After Trapping Poisoning, etc.*	*Total.*		
		HCN.	*Sulphur.*	*HCN. and Sulphur.*				
1	2	3	4	5	6	7	8	9
Ships up to 300 tons	5	–	–	–	–	–	5	5
Ships from 301 to 1,000 tons ...	6	–	–	–	–	–	6	6
Ships from 1,001 to 3,000 tons ...	9	1	–	–	–	1	8	9
Ships from 3,001 to 10,000 tons ...	8	–	–	–	1	1	7	8
Ships over 10,000 tons	–	–	–	–	–	–	–	–
TOTALS ...	28	1	–	–	1	2	26	28

TABLE J

Classification of Nuisances.

Nationality of vessel.	*No. inspected during year.*	*Defects of original construction.*	*Structural defects through wear and tear.*	*Dirt, vermin and other conditions prejudicial to health.*
British	704	16	63	103
Other Nations ...	261	9	8	15

Sixty-three vessels were found to have defects during 1946. Seven of these vessels were fumigated for bug infestation, and eleven were disinfested after being found to be heavily infested with cockroaches.

Conditions found in most of the older type of coasting vessels visiting the Port during the year were similar to those reported last year. Very little has been done to improve the standard of crews' accommodation. A few of the vessels inspected, which previously had oil lamps in the sleeping accommodation, have recently had electric lighting installed. Some improvement in the cleanliness of bedding was noticed, but in the majority of the ships no sheets, mattress covers or pillow-slips were provided. The following two tables have been prepared giving details concerning the result of the inspection of 177 British ships and 40 Foreign ships. 159 British ships of under 2,000 tons net register were inspected, and 17 were found to be without electric light. Only two of the 36 foreign ships of this tonnage inspected were without electric light. 43 of the British ships were without separate messrooms, and 47 were without wash-places.

TABLE I.

	Ships under 500 tons nett register.							*Ships between 501 and 2,000 tons nett register.*							*Ships over 2,000 tons nett register.*			
	Br.	*Du.*	*Sw.*	*Bel.*	*Nr.*	*Fr.*	*Da.*	*Br.*	*Gk.*	*Sw.*	*Rus.*	*Fr.*	*Nr.*	*Du.*	*Br.*	*U.S.*	*Nr.*	*Du.*
Number inspected	87	13	4	1	1	2	2	72	1	7	1	1	2	1	18	2	1	1
No. with crew's accommodation under forecastle	41	8	2	–	1	2	2	23	–	5	–	1	–	–	1	–	–	–
No. with crew's accommodation under amidships	4	–	–	–	–	–	–	4	–	1	–	–	–	–	–	2	–	–
No. with crew's accommodation aft	42	5	2	1	–	–	–	45	1	1	1	–	2	1	17	–	1	1
No. with messrooms separate from sleeping quarters	56	8	4	–	1	–	1	60	1	6	1	1	2	1	18	2	1	1
No. without separate messrooms ...	31	5	–	1	–	2	1	12	–	1	–	–	–	–	–	–	–	–
No. with clothes drying rooms ...	21	2	–	1	–	–	–	28	–	1	–	–	2	1	13	2	–	1
No. with separate sleeping accommodation for each watch or 2-berth cabins	34	5	4	–	1	–	–	39	1	5	1	–	1	–	17	2	1	1
No. without separate sleeping accommodation for each watch	53	8	–	1	–	2	2	33	–	2	–	1	1	1	1	–	–	–
No. with wash-places	53	11	3	1	1	1	–	59	–	5	1	1	2	1	18	2	1	1
No. without wash-places	34	2	1	–	–	1	2	13	1	2	–	–	–	–	–	–	–	–
No. without water laid on in wash-places	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–
No. provided with electric light ...	70	12	4	1	1	2	–	72	1	7	1	1	2	1	18	2	1	1
No. lit by oil lamps	17	1	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–
No. heated by coal bogeys ...	33	8	–	–	–	2	2	18	–	–	–	–	–	–	1	–	–	–
No. with central heating	54	5	4	1	1	–	–	54	1	7	1	1	2	1	17	2	1	1
No. with ice box or refrigerator for food	20	5	4	1	–	–	–	47	1	7	–	1	2	1	18	2	1	–
No. without above	67	8	–	–	1	2	2	25	–	–	1	–	–	–	–	–	–	1
Average nett. registered tonnage of vessels inspected	268	182	266	305	345	140	268	935	1698	655	998	891	1273	1684	3950	4160	5074	2020
Average number of crew carried ...	11	8	13	12	14	6	9	22	29	19	27	27	24	38	43	40	40	39

TABLE II

	Ships under 500 tons nett register.		*Ships between 500 and 2,000 tons nett register.*	
	British.	*Foreign.*	*British.*	*Foreign.*
No. of ships inspected	87	23	72	13
Without separate messrooms ...	36%	39%	16%	8%
Without separate sleeping accommodation for each watch ...	61%	56%	46%	38%
Without wash-places	39%	26%	18%	23%
With coal bogeys for heating accommodation	38%	52%	25%	100%
Without ice box or refrigerator for food storage	77%	56%	34%	7%

VII. Food Inspection.

(1) During 1946 there were 69 vessels dealt with under the Public Health (Imported Food) Regulations, 6 from foreign ports and 63 coastwise. The total amount of foodstuffs voluntarily surrendered and condemned as unsound, unwholesome and unfit for human consumption was 5 cwt. 1 qr. 26 lbs

No action was taken under the Public Health (Imported Milk) Regulations, 1926, and Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1940.

There were no samples of food taken during the year.

(2) *Shell-fish.* Under the Public Health (Shell-fish) Regulations, 1934, the following are prohibited areas for taking of mussels, cockles, winkles, limpets and other shell-fish :—

Hooe Lake.
The Hamoaze, including West Mud.
St. John's Lake.
Off Torpoint Institution.
Weston Mill Lake.
Off Rat's Island.
Mouth of St. Germans River.
Off Saltash.
River Tamar and its tributaries.

Notice Boards are fixed in these areas warning persons not to gather shell-fish from these polluted areas.

Two samples of mussels and one of cockles, gathered outside the area of the Port but offered for sale in Plymouth were submitted to the Bacteriologist for examination. Of the mussels one sample contained 25 Bacillus Coli, and the other 180 plus Bacillus Coli. The content of the cockles was 180 plus Bacillus Coli.

The Medical Officer of Health of the area in which the shellfish were gathered was informed of the likelihood of pollution.

School Health Service

REPORT OF THE SENIOR MEDICAL OFFICER.

DR. T. H. HARRISON.

The work of the School Health Service was somewhat hampered during 1946 by both shortage and changes of medical, dental and clerical staffs.

The numbers of children on the registers of schools maintained by the Authority when the schools closed in December for the Christmas vacation were as follows :—

Primary Schools			14,150
Secondary Schools—Grammar Schools		2,551	
Technical Schools		322	8,283
Modern Schools		5,410	
Day Special Schools—For Educationally Sub-normal Children		288	434
Open Air—For Delicate Children		126	
For Deaf and Partially Deaf Children		20	
Total			22,867

This compares with a total of 22,371 at the same date in 1945, showing an increase of 496 children during 1946.

Various decisions affecting the Service were made by the Authority during the year.

In January it was decided to appoint a Senior Dental Officer, the first appointment of such an officer, additional to the four dental officers already employed. It was also decided to make an agreement with the Devon County Council that Plymouth boys on remand should be accommodated at the Devon County Remand Home at Ashburton, and to convert the Plymouth Remand Home, " Plymleigh," at Laira, on the outskirts of the City into a boarding home for educationally subnormal boys, with accommodation for 22. It was also decided that the Open Air School at Efford should not meet in future on Saturdays.

In April it was agreed, on application from the Governors, to extend medical inspection and treatment to the pupils attending the Notre Dame High School for Girls, a direct grant Grammar School. It was also decided to confer with Cornwall, Devon and Exeter Education Authorities on the provision of Child Guidance facilities in the area.

In September it was decided to provide free medical treatment through the School Health Service for all pupils maintained by the Authority at direct grant Grammar Schools. It was also agreed to send representatives to a conference at Exeter of Local Education Authorities in the South-West region and the Ministry of Education on the provision of special school, particularly boarding school, accommodation for handicapped pupils.

In November it was decided to enter into agreements with the two Plymouth Voluntary Hospitals, viz. the Prince of Wales's Hospital, Plymouth, and the Plymouth Royal Eye Infirmary for the provision of medical treatment at these hospitals for pupils for whom the Authority are responsible, including at the Plymouth Royal Eye Infirmary the treatment of defective vision and other conditions at present carried out at the Ophthalmic Clinic at the School Health Department, which will be discontinued.

In December it was decided, with the Cornwall, Devon and Exeter Education Authorities, to purchase "Ravenscroft," at Harrowbeer, Yelverton, as a joint Remand Home for Girls, with accommodation for approximately 20. This, however, was not approved by the Minister of Education.

Staff.

The Senior Medical Officer continued the duties of Acting Deputy Medical Officer of Health and Port Medical Officer, in addition to his duties in the School Health Service, until May, when he returned to whole-time duty in the School Health Department. One of the permanent whole-time assistant school medical officers, Dr. Carter, who returned from military service in October, 1945, was engaged part-time during the year on public health duties. Another permanent assistant medical officer, Dr. Harvey, returned from military service in May, to his normal duties, part-time in the School Health Service and part-time on public health duties. Three temporary medical officers gave varying time to the Service during the year. The total time

given by all medical officers was approximately equivalent to that of three and a half whole-time medical officers, the size of the normal peace-time medical staff. This medical staff had become somewhat inadequate before the recent war and the clinics were becoming overcrowded and more sessions were necessary. With the extension of the Service to scholars at all types of schools by the Education Act, 1944, and at the same time extension of the scope of treatment made available through the Service it was found impossible in 1946 with the medical staff available to carry out all the examinations required. The clinics became too overcrowded for proper attention to be given to the number of children attending, and the special examinations of handicapped children became increasingly delayed. The Education Committee considered the position in January, 1947, and decided to appoint an additional whole-time Assistant School Medical Officer from 1st April, 1947.

A Senior Dental Officer, Mr. John A. Smyth, L.D.S., was appointed by the Education Committee in September, to commence duty on 1st January, 1947. The temporary part-time assistant dental officer resigned in June and the temporary whole-time officer in August, and two permanent whole-time assistant dental officers were appointed to replace them, Mr. R. A. Currie, L.D.S., who commenced duty in July, 1946, and Mr. F. R. Maynard, L.D.S., in September, 1946, completing the normal peace-time staff of 4 assistant dental officers. The dental staff during the year was approximately equivalent to three and three-quarter whole-time officers. Four dental attendants were engaged whole-time during the year.

Two of the ten nurses retired on reaching the age limit during the year. It was found impossible to obtain nurses with Health Visitor's qualifications, and two State Registered Nurses were eventually appointed to replace them. A temporary nurse was engaged during the interval. The time given to the Service by all the nurses was equivalent to that of nine and a half whole-time nurses throughout the year. Two of the nurses hold a Health Visitor's qualification. Two nursing assistants were engaged whole-time during the year, mainly in the clinics.

One of the three Physiotherapists retired on reaching the age limit in September and was not replaced before the end of the year.

A whole-time Speech Therapist, Miss M. McCombie, was appointed in April, 1946, replacing the temporary part-time Speech Therapist, who had resigned.

The part-time Specialists continued to attend the Ophthalmic, Ear, Nose and Throat, and Orthopædic Clinics as previously.

Routine Medical Inspection. Every school and department was visited for routine medical inspection during the year and all children in attendance who were due for routine inspection in their age group at the time of the visit were medically examined. It was not, however, possible with the medical staff available to visit all the Secondary Schools in time to examine all Leavers before they left school, particularly those who left school before the end of the school year in July, nor was it possible to all do the re-examinations required. Each infant school was visited once during the year, and all children not previously inspected as Entrants were examined, but it was not possible to visit each infant school each term, which is necessary if Entrants are to be examined as soon as possible after their admittance. Some difficulty was experienced in following up for re-inspections Leavers from Primary Schools because they transferred to various Secondary Schools and it would be more satisfactory if these children were examined as Entrants to Secondary Schools instead of as Leavers from Primary Schools.

Six thousand nine hundred and ninety-one children were given a routine medical inspection during the year, comprising 3,021 Entrants to Primary Schools, 2,089 Leavers at Primary Schools, and 1,881 Leavers at Secondary Schools. The total of 6,991 compares with 5,469 in 1945 and 3,068 in 1944. Parents were present at 4,141 of the 6,991 examinations.

Three thousand three hundred and thirteen re-examinations were made at schools by the medical officers, compared with 416 in 1945.

Special inspections, most of them at clinics, totalled 15,752, compared with 15,029 in 1945.

Results of Routine Medical Inspection.

Of the 3,021 Entrants to Primary Schools examined at routine medical inspections, 844 or 27.9% were found to have one or more defects requiring treatment, and of the 2,089 Leavers at Primary Schools, there were 632 or 30.2%, and of the 1,881 Leavers at Secondary Schools there were 370 or 19.7%. Of the total of 6,991 children examined 1,846 or 26.4% were found to require treatment, compared with 37.1% in 1945 and 30.9% in both 1944 and 1943.

The following table gives the numbers of the various defects found during 1946 to require treatment and the numbers per 1,000 children inspected in 1946, 1945 and 1944.

Disease.	*Number of defects requiring treatment.*			
	Number found in 1946	*Per* 1,000 *children inspected.*		
		1946	1945	1944
Skin				
Ringworm—Scalp	0	0	0.55	0.35
Body	10	1.43	2.19	4.20
Scabies	40	5.72	7.28	14.33
Impetigo	15	2.14	6.58	6.64
Other Skin Diseases (Non-tubercular)	176	25.17	38.95	18.18
Total Skin Defects	241	34.46	55.55	43.70
Eye				
Blepharitis	77	11.01	8.04	5.25
Conjunctivitis	33	4.72	8.41	3.85
Keratitis	1	0.14	0.18	0.35
Corneal Opacities	0	0	0	0
Other conditions (excluding Defective Vision and Squint)	42	6.00	4.55	4.54
Defective Vision (excluding Squint)	184	26.32	13.53	10.14
Squint	80	11.44	19.56	21.68
Total Eye Defects	417	59.63	54.27	45.81
Ear				
Defective Hearing	17	2.43	7.86	3.85
Otitis Media	43	6.15	7.86	5.94
Other Ear Diseases	26	3.72	3.27	5.94
Total Ear Defects	86	12.30	18.99	15.73
Nose and Throat				
Chronic Tonsillitis only	255	36.47	73.69	54.89
Adenoids only	28	4.00	9.69	16.08
Chronic Tonsillitis and Adenoids	155	22.17	43.15	46.85
Other Conditions	65	9.30	29.62	4.90
Total Nose and Throat Defects	503	71.94	156.15	122.72

Disease.	Number of defects requiring treatment.			
	Number found in 1946	Per 1,000 children inspected.		
		1946	1945	1944
ENLARGED CERVICAL GLANDS (Non-Tuberculous)	9	1.29	10.42	22.37
DEFECTIVE SPEECH	23	3.29	2.55	2.45
HEART AND CIRCULATION				
Heart Disease—Organic	7	1.00	0.91	4.20
Functional ...	15	2.14	0.91	2.10
Anæmia	99	14.16	29.12	10.62
Total Heart and Circulation Defects	121	17.30	30.94	19.92
LUNGS.				
Bronchitis	75	10.73	9.50	13.28
Other Non-Tuberculous Diseases ...	48	6.86	4.94	4.54
Total Lung Defects	123	17.59	14.44	17.82
TUBERCULOSIS				
Pulmonary—Definite	0	0	0	0
Suspected	10	1.43	2.01	2.10
Glands	5	0.71	0.36	3.15
Bones and Joints	0	0	0	0
Skin	0	0	0	0
Other forms	0	0	0.18	0.35
Total Tuberculosis Defects ...	15	2.14	2.55	5.60
NERVOUS SYSTEM				
Epilepsy	2	0.29	0.18	0.70
Chorea	3	0.43	0	0.35
Other conditions	32	4.58	5.10	1.75
Total Defects of Nervous System	37	5.30	5.28	2.80
DEFORMITIES				
Rickets	15	2.14	4.02	4.90
Spinal Curvature	133	19.02	28.52	11.20
Others	302	43.20	103.13	49.30
Total Deformities	450	64.36	135.67	65.40
OTHER DEFECTS AND DISEASES (excluding defects of nutrition, uncleanliness and dental diseases ...	263	37.62	29.12	13.62
GRAND TOTAL OF ALL DEFECTS ...	2268	324.42	516.36	384.26

From the above figures it will be seen that of the 2,268 defects found to require treatment the largest numbers were 503 defects of the Nose and Throat, mainly chronic tonsillitis, with and without adenoids, or 22.2% of the total, 450 deformities mainly posture and flat feet, or 19.8%, 417 eye defects, or 18.4%, and 241 skin defects, or 10.6%, the four groups accounting for 71% of all defects found to require treatment.

Compared with 1945 and 1944, there was an increase in the number of eye defects found to require treatment for each 1,000 children examined, mainly defective vision with twice the numbers found in 1945, and a slight increase in blepharitis. There was also a slight increase in the number of cases of defective speech. Lung defects and defects of the nervous system were about the same as previously, but all other defects showed a decrease, particularly nose and throat defects and enlarged cervical glands.

Ascertainment of Handicapped Pupils.

Included in the 15,752 Special Inspections carried out during the year are 262 special examinations under Section 34 of the Education Act, 1944. A hundred and thirty-three of the children were examined for a disability of mind. Sixteen were found not to require special educational treatment. Eighty-seven were ascertained to be Educationally Subnormal Pupils, 19 of them requiring special educational treatment in ordinary schools, 61 education in a Day Special School for Educationally Subnormal Pupils, and 7 in a Boarding Special School for Educationally Subnormal Pupils. Three children were ascertained to be Maladjusted Pupils requiring education in a Boarding Special School for Maladjusted Pupils. Three were found to require further examination and in the meantime were temporarily incapable of receiving education at school. Twenty children were found to be permanently incapable of receiving education at school and required reporting to the Local Authority for the purposes of the Mental Deficiency Act under Subsection 3. The 4 remaining children were referred for further opinion to a psychiatrist or a pædiatrician.

Of the 129 other children specially examined 30 were ascertained to be Physically Handicapped Pupils, 19 of them requiring admission to Mount Gold Orthopædic Hospital School, 4 education in a Boarding Open Air School, 4 education in a Boarding Special School for Cripples, 1 education at home under Section 56 of the

Education Act, 1944, and 2 were unfit for any form of education. One child was ascertained to be an Epileptic Pupil, two children to be Partially Sighted Pupils, and 2 Deaf Pupils, all requiring education in Special Schools. Two were ascertained to be Partially Deaf Pupils requiring Special Educational Treatment in ordinary schools. Fifty-seven children were ascertained as Delicate or Physically Handicapped Pupils requiring education in a Day Open Air School. Thirty-six children were found not to be Handicapped Pupils and appropriate advice was given on various questions raised in connection with them.

The parents were invited to be present at the examinations and the advice given to the authority by the medical officers was communicated to them. No certificates were required by parents or the authority.

The total number of children of school age in the City at the end of the year ascertained as handicapped pupils in the various categories and the numbers per 1,000 registered pupils were as follows :—

	Numbers of Children.	*Per 1,000 Registered Pupils.*
A. Blind Pupils	12	0.52
B. Partially Sighted Pupils ...	5	0.22
C. Deaf Pupils	13	0.57
D. Partially Deaf Pupils	9	0.39
E. Delicate Pupils	88	3.85
F. Diabetic Pupils	0	0
G. Educationally Subnormal Pupils	335	14.65
H. Epileptic Pupils	3	0.13
I. Maladjusted Pupils	11	0.48
J. Physically Handicapped Pupils...	48	2.10
K. Pupils Suffering from Speech Defects	0	0
L. Pupils Suffering from Multiple Disabilities	12	0.52
	536	—

Inspections by School Nurses. Routine cleanliness inspections were continued by the nurses at all schools under the same arrangements as before and as described in last year's report. The nurses also continued the annual surveys and vision testing on the same lines as previously and paid special visits to schools when required in connection with infectious and contagious diseases. The usual following up of defects was also continued as previously.

The following is a summary of the work of the nurses :—

Number of cleanliness inspections made at school ...	142,021
Number of individual pupils found unclean	3,020
Number of children cleansed by nurses	78
Average number of visits paid to every school during the year for uncleanliness, etc.	18.7
Number of surveys carried out at school	8,401
Number of children referred from surveys to medical officers, at clinics	845
Number of vision tests carried out at school	13,361
Number of children referred from vision tests to medical officers at clinics	692
Number of children specially inspected at school for infectious disease, etc.	1,609
Number of visits to homes, for following up defects, neglect, etc.	4,766

The number of individual children found unclean during the year, 3,020, was 13.2%, compared with 8.3% in 1945 and 9.9% in 1944.

MEDICAL TREATMENT

A. Hospital Treatment.

The arrangements with the Public Health Committee for the provision of all forms of In-Patient and Out-Patient Hospital Treatment at the City (General) Hospital and Mount Gold Orthopædic Hospital worked satisfactorily throughout the year and the numbers of school children who were treated were as follows :—

City Hospital—In-patients	... ...	788
Out-patients	... ...	364
Mount Gold Hospital—In-Patients	...	105
Out-Patients	...	176

No arrangements had been made with the Plymouth Voluntary Hospitals by the end of the year.

B. Minor Ailment Clinics.

At the Central Clinic a new medical officer's inspection room was made by conversion of a shed adjoining the old inspection room, which was too small and cramped.

The minor ailment treatment clinic at Honicknowle School was transferred in October to a new clinic made by the Public Health Committee at Crownhill by conversion of the former Gas Cleansing Station there. The Crownhill clinic is used jointly with the Maternity and Child Welfare Service, on separate sessions, being open as a School Clinic on four afternoons and Saturday mornings. The arrangements are not entirely satisfactory as the room used for the treatment of minor ailments is not available on a Wednesday, and on the other days dressings and equipment have to be put out at the beginning of the session and cleared away at the end. A separate treatment room for minor ailments is required and the conversion of one of the rooms for this purpose is being considered.

The Honicknowle minor ailment clinic has been converted into a dental clinic to accommodate the dental surgeon who has been transferred from the Central Dental Clinic, which is required for the Senior Dental Officer.

The North Prospect Clinic gets very congested, particularly on the medical officer's days, and re-arrangement of the rooms is required involving removal of a partition wall and the provision of a new dental recovery room. It may not, however, be possible to do the alterations until 1948.

There were no other changes in the arrangements at the clinics.

Four thousand six hundred and thirteen new cases were seen at these clinics during the year by the medical officers as follows :—

Ringworm of Scalp	38
Ringworm of Body	102
Scabies	257
Impetigo	161
Minor Injuries	428
Other skin diseases	343
Ear diseases	190
Eye diseases	253
Miscellaneous	2,841
	4,613

Fifty-three of the children were referred to a private doctor, hospital, etc.

Sixteen of the 38 cases of ringworm of the scalp were treated by X-ray by the Authority's Specialist at Torquay. The clinical diagnosis was confirmed in all cases, chiefly by Wood's Glass, and child contacts were examined.

Scabies cases were referred to the Special Scabies Clinic at Exmouth Road where 1,677 attendances were made by school children.

Five thousand nine hundred and six new cases were treated at the Minor Ailments Clinics, and a total of 66,680 attendances made during 1946 compared with 69,875 in 1945.

C. Ophthalmic Clinic.

There were no changes in the arrangements at the Ophthalmic Clinic during the year.

One hundred and forty sessions were held by the School Oculist and 2,957 refractions were done and 701 other defects treated. Spectacles were prescribed for 904 children and supplied by the Authority to 759.

D. Ear, Nose and Throat Clinic.

There were no changes in the arrangements at the Ear, Nose and Throat Clinic during the year. 76 sessions were held by the Authority's Ear, Nose and Throat Surgeon who saw 858 new cases and 929 old cases.

Four hundred and fifty-six children were admitted to the City (General) Hospital for operative treatment for the removal of tonsils and adenoids under the Authority's Tonsil and Adenoid Scheme on the recommendation of the Ear, Nose and Throat Surgeon. 62 other children were also admitted for operative or other treatment of other defects of the Ear, Nose and Throat. The total of 518 admittances for all Ear, Nose and Throat conditions is included in the total of 788 children admitted as In-Patients to the City (General) Hospital for all conditions. In addition 121 children received other forms of treatment at the Ear, Nose and Throat Clinic.

E. Orthopaedic Clinic.

Mr. C. M. Kennedy, F.R.C.S., the Authority's Orthopædic Surgeon, retired at the end of May, and Mr. G. J. Lillie, F.R.C.S., was appointed to replace him both at the School Orthopædic Clinic at Hartley House and at Mount Gold Orthopædic Hospital. With the appointment of Mr. Lillie it was decided that the Orthopædic Surgeon should attend the clinic twice a month to see all cases referred to the Clinic instead of the Senior Medical Officer seeing all cases and selecting certain of them for further examination by the Orthopædic Surgeon.

Five hundred and five new orthopædic cases were examined at the clinic during the year and 836 re-examinations were made. This compares with 587 new cases and 841 re-examinations in 1945.

The number of children treated at the clinic for orthopædic defects was 707. The following is a summary of the defects treated :—

Flat feet ; Valgus ankles	306
Poor posture ; Kyphosis ; Scoliosis ; Lordosis ...	270
Genu valgum ; Genu varum	99
Hallux valgus ; Hammer toes	25
Defective Gait	10
Infantile Paralysis	7
Erb's Paralysis	1
Hemiphlegia	2
Pes Cavus	9
T.B. Spine	1
Torticollis	2
Talipes ; Tight Tendo Achilles	7
Schlatter's Disease ; Apophysitis	2
Crooked fingers ; Curved toes ; Over-riding toes ; Curved Tibia	18
Fibrositis ; Sprains ; Injuries	10
Other defects	4

Plasters were applied in 37 cases, and 24 celluloid splints were made and 9 repaired at the clinic.

Two hundred and sixty-seven children were also treated at the clinic by ultra-violet light for a variety of conditions including anæmia, debility, adenitis, asthma, bronchitis, alopecia, chilblains, dermatitis, blepharitis, etc. Special breathing exercises were given for chest conditions.

Ninety-five children were examined for ringworm of the scalp under the Wood's glass.

The total attendances at the clinic during the year were 19,539 compared with 20,637 in 1945, and the total number of treatments 24,342 compared with 27,979 in 1945.

F. Speech Therapy.

The temporary part-time Speech Therapist continued to hold classes twice a week at three of the school clinics until the schools closed for Easter. With the appointment at the end of April of Miss M. McCombie as whole-time Speech Therapist on the staff of the School Health Service in accordance with Administrative Memorandum No. 101, it was decided that she should continue the same classes until the end of the year and spend the remainder of her time on a speech survey of all children in infants schools.

The following report has been made by Miss McCombie :—

" The Speech Clinics opened on a full-time basis on April 29th, 1946 : one at Rowe Street, one at High Street, Stonehouse, and one at North Prospect.

The clinics are closed during the school holidays, providing time for home visiting, admissions for the following term, and treatment for a few special cases.

The number of patients admitted and attending regularly has maintained a steady level, and progress has been good in many cases. The children are admitted on a three months' probation ; if, during that time, their attendance and/or progress are unsatisfactory, and there is obviously no chance of success in treating them, then they are discharged.

Stammerers form the bulk of the patients, but there are also Cleft Palate cases and various types of Speech Defects (Sigmatism, Excessive Nasality, etc.). Most of the children attend twice a week—the stammerers in small groups of not more than five for forty-five minutes' treatment, and the other cases either individually or in small groups for treatment of twenty to thirty minutes ; all groups are classified according to age as well as the particular speech defect or disorder.

The children, accompanied by their mother or guardian, are first interviewed by the Speech Therapist. If they have not been

recommended by one of the School Doctors or Specialists, they are referred for medical approval and for any other treatment which may be necessary ; they are also referred to the School Doctor for discharge. During the interview with the Speech Therapist, the plan of treatment is outlined, and the necessity for home practice and co-operation is emphasized ; both parents are invited to attend the clinic at least once (the possible temporary embarrassment to the children being balanced by the chance of helping in the parents' understanding of the treatment). Some parents have responded favourably, the children showing correspondingly good progress.

Both the homes and schools are visited regularly, close contact between the Speech Therapist, parents and teachers being essential, particularly with younger children, if successful results are to be achieved within a reasonable period.

General Clinical Analysis.

On Register 29/4/46 ...	29	(18 Stammerers ; 3 Cleft Palate ; 8 Speech Defects).
Admitted	30	(17 Stammerers ; 2 Cleft Palate ; 11 Speech Defects).
Discharged	23	(12 Stammerers ; – Cleft Palate ; 11 Speech Defects).*
On Register 31/12/45...	36	(23 Stammerers ; 5 Cleft Palate ; 8 Speech Defects).

Total number attended	59
Total number sessions	177
Total number attendances	1,459

**Stammerers.*	*Speech Defects.*
4 cured.	6 cured.
2 left school.	1 left school.
1 transferred to Cornwall.	—
5 unsatisfactory attendance.	4 unsatisfactory attendance.

School Survey.

During the period April 29th -December 31st, 1946, twenty-four Infant Departments were visited and approximately 3,500 children were examined—373 being in need of treatment. Most of these cases have speech defects of a purely functional nature, but there are also a number of serious Delayed Speech cases, a few

Stammerers, and two Cleft Palate cases. The schools having the greatest number of children in need of speech treatment are those in the slum-clearance areas such as Swilly and parts of St. Budeaux.

After a preliminary selection from May–July, when nine schools were visited, treatment of 125 children was commenced in September ; owing to the difficulties involved in clinical attendance for these small children, it was decided that the treatment should be given in the schools, and as only Tuesday of each week could be allotted to this (the rest of the week being divided between the regular Speech Clinics and the continued School Survey), it was not possible to visit each school more than three times, at intervals of about four weeks, during the period September–December, 1946.

This time limitation made help from the home most necessary ; although the teachers' help can be a considerable factor in treatment, it is in the home that real assistance and encouragement can be given as a complement to the Speech Therapist's work. It was decided, therefore, to invite each mother to the school at the beginning of the treatment for a practical demonstration of the exercises to be done at home, and for some advice as to how to help the child to overcome his speech difficulty. The parents were requested to make every endeavour to attend, and an alternative appointment was suggested should it be inconvenient to attend on the date stated. Failure to respond would seem to indicate complete indifference, and, consequently, a minimising in the chances of successful treatment.

The response of the parents was about equal in all areas, eighty attending, most showing interest and willingness to help, with the following results in the children (eighteen of whom had a serious disorder of speech) :—

35	cured	No serious cases.
26	improved	9 ,,
14	no improvement	4 ,,
2	absent for subsequent treatment ...	2 ,,
3	clinical treatment	3 ,,

(In the case of the last three children, the parents were prepared to guarantee regular clinic attendance and, owing to the severity of the defect, arrangements were made for their admission.)

Of the forty-five parents who did not respond, where eleven of the children had a serious disorder of speech :—

None cured
13 improved
27 no improvement (11 serious cases.)
1 absent for subsequent treatment
4 had left school

These results showed that, with good home practice and encouragement, it is possible to correct a slight functional speech defect within three months with only occasional supervision by the Speech Therapist. In the case of the more pronounced Speech Defects and serious Speech Disorders, a better arrangement is definitely needed. Even with the best practice and encouragement at home, these children still need skilled treatment at regular and frequent intervals to enable them to overcome their speech difficulty as quickly as possible. Often, too, the parents, although anxious to help, may, for many reasons, only be able or capable to give a little aid, which is lost unless balanced by the Speech Therapist's constant supervision of the children.

Where parents have not responded it has been possible to help only the slight cases—very little could be done for the others, but with more frequent treatment some response might occur—although indifference at home would always prove a barrier to any final cure.

In all cases the children should be seen at least twice each week —the serious cases either individually or in pairs—most of those now under treatment have to be in larger groups owing to time limitation.

Of the 248 children waiting for treatment, arrangements have been made for the really serious cases, including the two Cleft Palate cases, to receive clinical treatment where possible ; the majority will probably have to wait for three months before anything can be done for them, since 83 of the original 125 children need continued treatment.

Several Infant Departments remain to be visited—four main and seven smaller ones. When all these children have been examined, it is hoped that a Survey of the Junior and Senior Schools can be made, and the Infant Departments will, of course, have to be visited regularly for re-examinations as new children enter the schools."

Dental Inspection and Treatment. As the number of dental surgeons employed during the year was equivalent to only three and three-quarter whole-time officers, each dental surgeon was responsible for rather more than 6,000 children on the average, and the arrangements recommended in Circular 1523 were therefore continued.

Sixteen thousand three hundred and two children received a routine dental inspection at school compared with 14,065 in 1945. In addition 723 were inspected as specials, at the dental clinics, making a total of 17,025 inspected or 74.4% of the children on the registers. 10,299 children or 60.5% of those inspected were found to require treatment.

Three dental clinics were open whole-time throughout the year, and a fourth half-time until the end of June, after which it was open whole-time. 7,096 children were actually treated at the clinics giving an acceptance rate of 68.9% of those requiring treatment. 13,521 attendances were made, an average of 1.9 attendances per child, 7,110 fillings were done, approximately 1 per child treated, 13,171 extractions were done, or 1.8 per child treated and 4,820 general anæsthetics administered. 6,476 permanent teeth were filled and 2,748 extracted, a ratio of 2.4 teeth saved for each one lost. The average attendance per session was 7.4 children and the average number of cases completed per session 3.9.

The consent of the Minister of Education was received in January, 1946, to the supplementation of the dental scheme by the provision of orthodontic treatment. Some orthodontic treatment had previously been given by means of suitable extractions, and during the year this was supplemented by the fitting of a limited number of appliances, mostly of a simple type.

The following report was given by Mr. J. A. Smyth, after a survey of the School Dental Service which he made shortly after commencing duty in January, 1947, as the first Senior Dental Officer to be employed by the Authority :—

" This Survey is intended to give as briefly as possible a factual statement of the condition of the School Dental Service, including some suggestions for further improvement.

CLINICS.

I. *General.*

In view of the difficulties of the present situation the five clinics used for the dental treatment of school children are reasonably satisfactory. Some equipment will need renewal or replacement in the next few years, and a good deal could be and is being done to render the surgeries and waiting rooms more cheerful for children and parents.

In some areas (for example Laira and Devonport) children have to go some way to the nearest dental clinic. The disadvantage of this is not so apparent in such clinics as Medical minor ailment ones, and those for casual dental cases, but during the routine treatment of schools a great deal of school time is lost in going to and from school and clinic. Experience also shows that, generally speaking, the nearer the dental clinic is to the school the higher is the acceptance rate and the better the attendance of children for appointments. Branch clinics with portable equipment for part-time use are often a useful solution where the needs of a district do not justify a fully equipped permanent clinic. One set of portable equipment might well serve three or four such clinics, which could be used only when the schools in those areas were receiving their annual routine treatment. The dental needs of the schools need consideration in any future building plans, and in particular infants deserve special consideration, since parents with large families are often deterred from bringing them if the distance is considerable, unless they are actually in pain.

II. *Rowe Street Clinic.*

The surgery and recovery room are well adapted for their respective uses, and the installation of one of the American Dental Units brings the equipment up-to-date. The waiting-room is most depressing, but essential renovations are to be undertaken.

III. *High Street, Stonehouse.*

Surgery, recovery room and waiting room are convenient for the purpose, but much of the equipment is out of date and the rooms are gloomy and shabby, and the building is dilapidated. The only approach and exit is by a wooden staircase, and in the event of fire children might be trapped. An entirely new clinic is required for this area.

IV. *North Prospect.*

Plans have been prepared to change over the medical and dental clinics. The resulting dental rooms should prove satisfactory, but some new equipment will be needed.

V. *City Hospital.*

This clinic is loaned by the Public Health Committee. The surgery is a good room and reasonably equipped, but there is no recovery room and gas cases are done at Rowe Street at one weekly session. The iron staircase by which it is approached would in any case be rather dangerous for children to descend after gas.

VI. *Honicknowle.*

The surgery has been well equipped with the outfit from the dental van presented to the City early in the war and loaned to Cornwall County Council. It serves a rapidly expanding area. The waiting room is small, dark and cold, but it could be improved greatly if transposed with the lavatory. There is no recovery room, and gas cases are done at North Prospect during one weekly session.

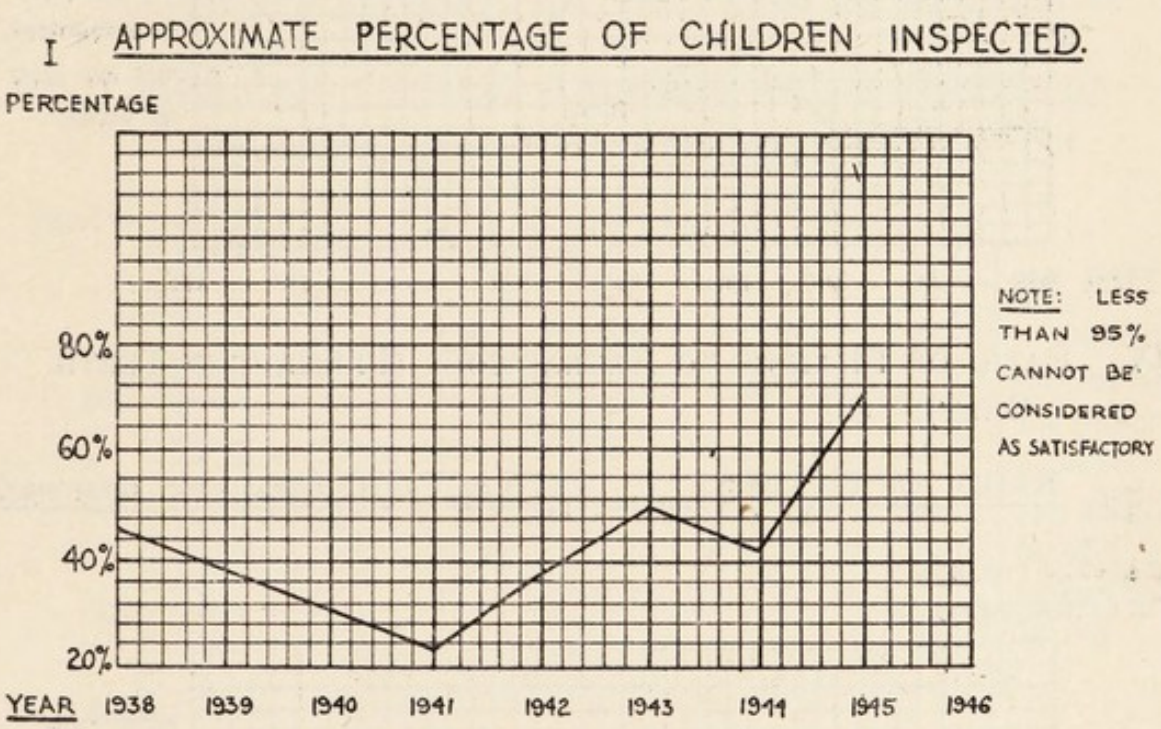
Staffing and Treatment.

A dental officer cannot give complete treatment to more than 2,000 children per year, evenly distributed over all the age groups. Where many children over 14 are treated, the number drops to 1,700 or 1,800. That is to say that each officer's area should include about 3,500 children, allowing for 75% needing treatment annually and 70% of these accepting it. The minimum satisfactory establishment for Plymouth is 6 dental officers at present, and with the raising of the school leaving age and the expected increase in the population of the City, 7 will be needed by the end of the year and probably 8 within the next two or three years. Although there is now a larger staff than at any time in the past, Plymouth is still understaffed, with the result that a fully satisfactory dental service cannot be given.

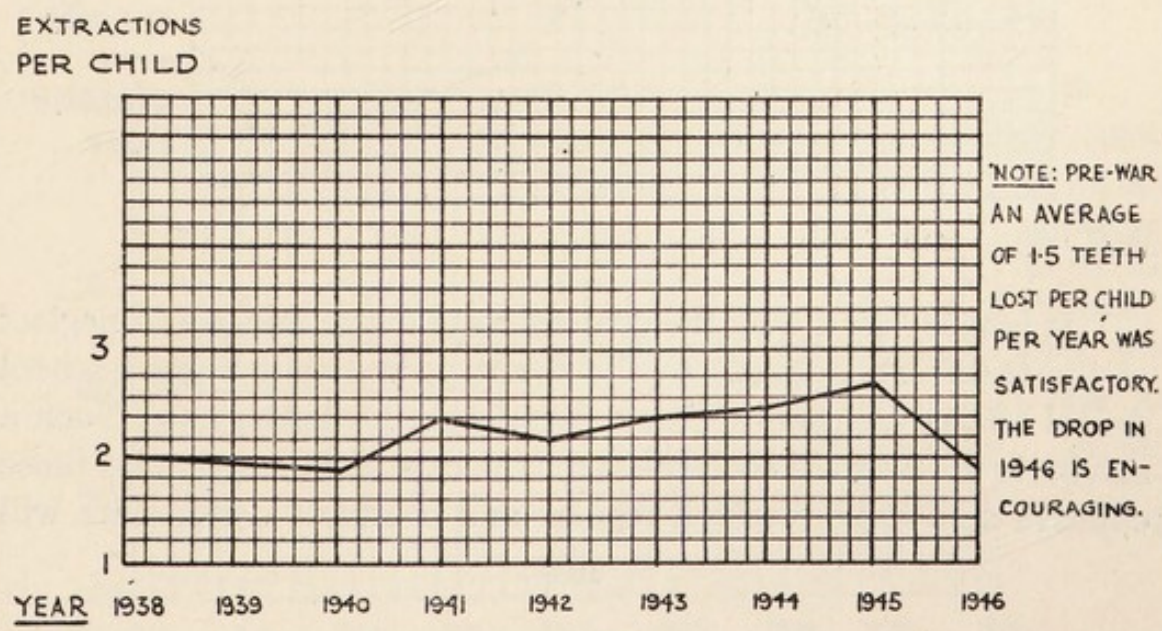
As has been pointed out in the Annual Reports of the School Medical Officer, the understaffing in past years has been serious, and the results of this inadequacy are shown in graph form. Up to 1940 the interval between dental inspections at schools was sometimes as long as three years. After that the policy recommended for understaffed areas by the Board of Education Circular 1523 was

adopted, and most schools were inspected annually, urgent cases being treated, extractions given priority and conservative work being done for a limited number only. In the circumstances this was clearly right, but the effect of it on the children's teeth is seen in Graphs II, III and IV. The teeth lost per child rise steadily up to 1946, whereas it is agreed that children's teeth have greatly improved during the war, and statistics for most areas where staffing was adequate show a steady drop in teeth lost per child from 1940 onwards. Similarly, the proportion of permanent teeth lost to those saved is bad, and deteriorated during the war.

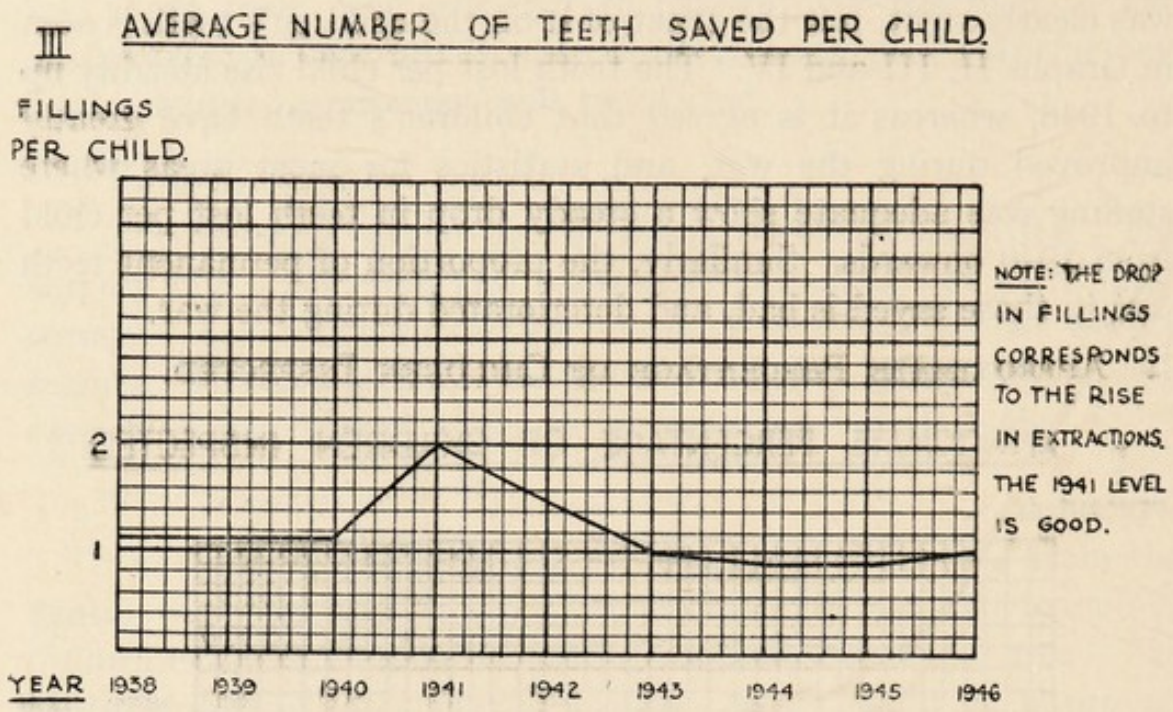
I. Approximate Percentage of Children Inspected.



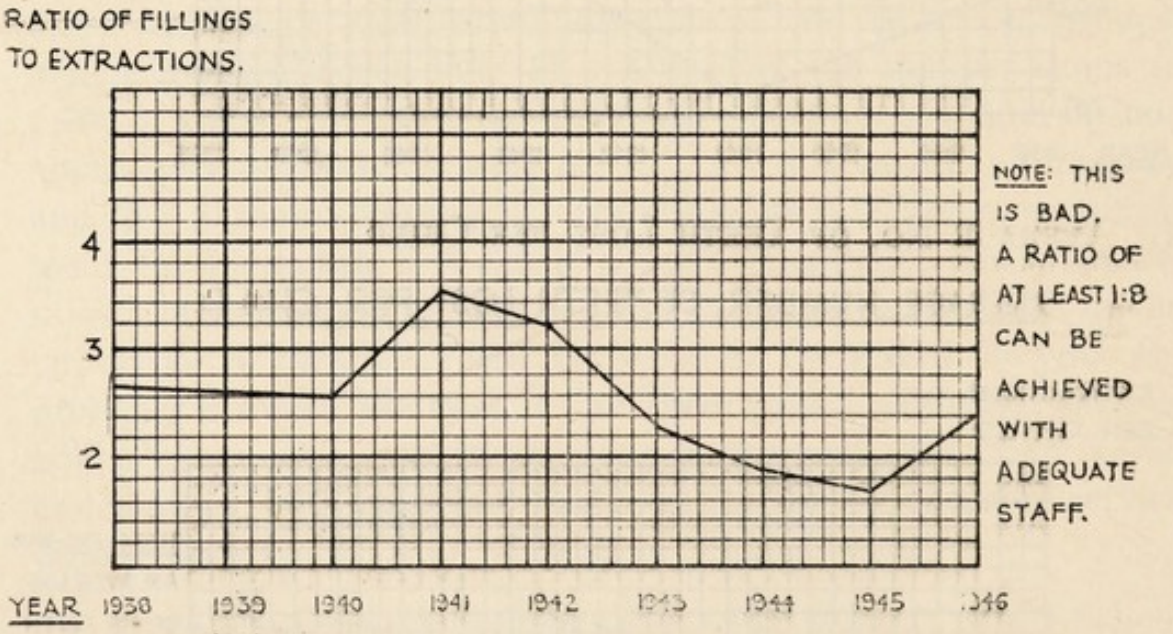
II. Average No. of Teeth Lost per Child.



III. Average No. of Teeth Saved per Child.



IV. Ratio of Fillings to Extractions (Permanent Teeth Only).



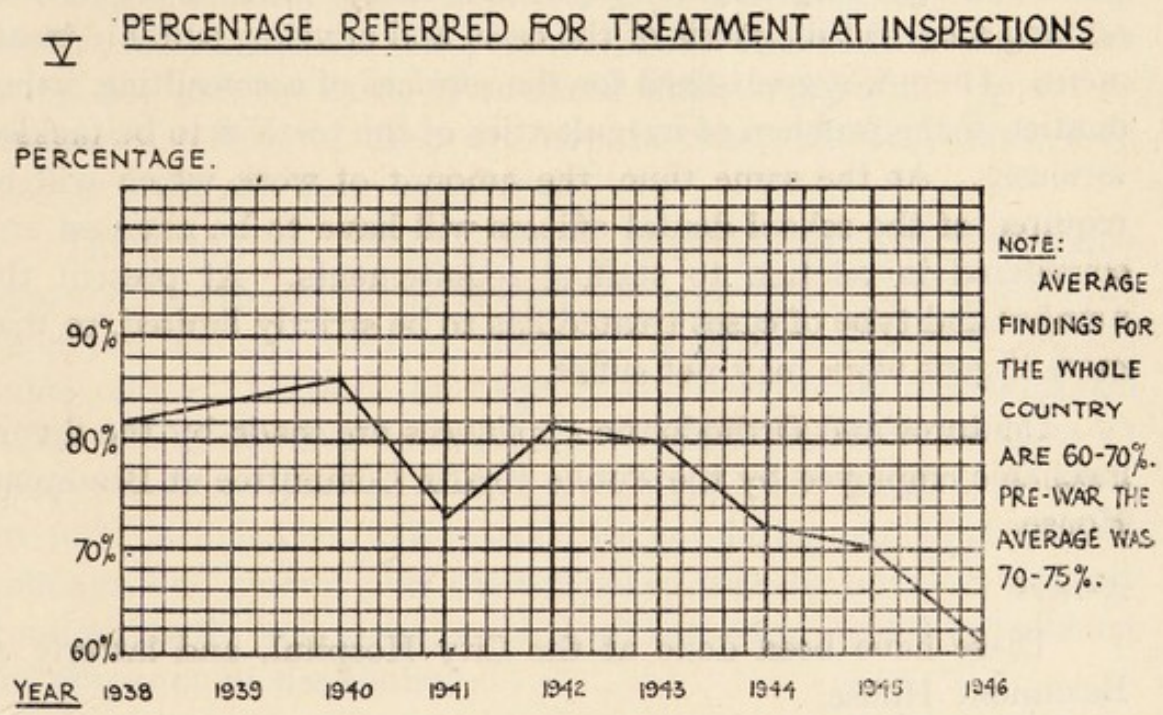
It is recognised that the present state of ignorance and neglect of the teeth is a disgrace to the country, and that a good school dental service can help to lay a foundation for better care. Such a service is the best advertisement for the care of the teeth, and those children who have received regular and complete dental care will

be more likely to value their teeth in later life. The condition of the teeth of young men and women has been shown by the inspection of Army recruits, where 93–98% were found to need dental treatment, much of it extensive (Teviot Report). Many regretted that their teeth had been neglected in childhood, and are now determined that their own children shall be better cared for in this respect.

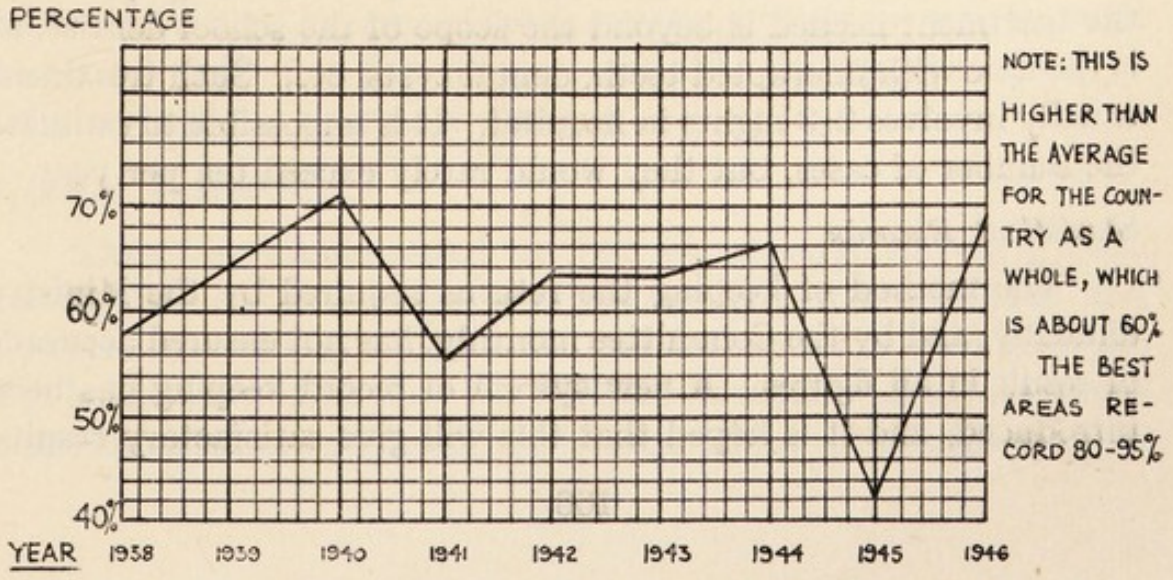
Results of Inspection.

The following graphs give a picture of the finding of the dental officers at inspections and the percentage treated of those who needed it.

V. Percentage referred for Treatment at Inspections.



VI. Percentage actually Treated of those referred.



Orthodontics.

Little or no orthodontic treatment with appliances has been done in the past, though it should be recognised that a great deal has been done wherever possible by means of suitable extractions. A limited number of appliances are now being fitted, mostly of a simple type. Orthodontics is a complex subject, demanding special experience and training, and it is possible to do a great deal more harm than good in many cases, if appliances are used wrongly. There is a growing demand for this type of treatment, but parents rarely realise the length of time needed to treat all but the simplest cases of irregularity and the expert knowledge which is required in making a correct diagnosis of the case, and advising suitable treatment. There is a great need for the services of a consulting orthodontist, if the problem of irregularities of the teeth is to be tackled seriously. At the same time, the amount of work which will be required of the school dental officers will have to be assessed and considered in relation to staffing requirements. At present the number and type of cases treated has to be strictly limited, so that more urgent work may not suffer.

Dentures and Orthodontic appliances are made by the dental mechanic employed by the Public Health Committee at Beaumont House.

X-rays.

These have been done at the City Hospital, and latterly at Beaumont House.

Hospital Treatment.

A few cases have been treated at the City Hospital by the surgeons there—e.g. sarcoma of the jaw. Provision is required for the services of a dental surgeon specializing in oral surgery, where the treatment needed is beyond the scope of the school dentist, as is the case with unerupted teeth, dental cysts, etc. Such treatment usually involves 2–3 nights in hospital. It is impossible to estimate the number of cases, but they would rarely exceed ten per year.

Statistical Records.

The method of keeping the returns required by the Ministry annually, and by the Committee monthly, has not ensured accuracy of result in all figures. A new system of record keeping has been introduced, and it is hoped that this will give satisfactory results.

Record Cards.

No particulars of transfers of children from one school to another have been available, so that the record cards for each school do not correspond with the children in the school except immediately after a dental inspection. As a result of this lack of information many children have three or four cards in different schools. The position can only be described as chaotic at the moment, and will be hard to remedy except by special measures. If a full-time clerk were to be employed in sorting all record cards, and finding missing cards by reference to the admission registers of schools, the records could be really satisfactorily put in order. It is estimated that this would take at least a month. At present valuable treatment records are being lost, and the cards of untraced children probably amount to thousands. Most of these are now in other schools, where they may or may not have new cards.

The Education Office are hoping to supply particulars of transfers, and this should enable cards to be kept up-to-date. Unless the cards are first set in order, however, such lists will be of limited value only. The work of keeping record cards of 20,000–25,000 children in order and up-to-date is considerable, and if it is to be done efficiently a part-time clerk is required. The dental attendants are fully occupied on routine work, except during part of the school holidays, and cannot give the necessary time to transfers without diminishing the help given to the dental surgeons, and thus reducing the efficiency of the clinics.

Casuals.

The Board of Education have in the past recommended that casuals should be as far as possible confined to a special session. Recently, the end of each afternoon has been reserved for such cases, but except in cases of special urgency, they are now required to attend at 9-30 on Saturday mornings, so that the week may be fully utilized for routine treatment.

General Anaesthetics.

These are administered by the dental surgeons, each clinic having one gas session per week normally. Nitrous Oxide and Oxygen administered with a Walton machine are used entirely. For longer anæsthesia than is given by a " straight " gas, continuous nasal administration is desirable for older children, and for younger

ones Vinyl Ether is largely used in many places with most satisfactory results. Nitrous oxide is not a good anæsthetic for children under 6 years of age.

Consent for Treatment.

Forms requesting consent for treatment and for gas are sent by the teachers to all children's homes before the routine inspection of the school. This system appears to be favoured in preference to sending forms after the inspection to those who require treatment only, and has certain advantages. A form of consent for dental treatment during the child's whole school life has been found advantageous in many places, and has much to commend it when entrants are inspected with their parents present.

Inspection of Entrants.

The Education Act, 1944, requires all new admissions to schools to be inspected with the parents present as soon after admission as possible. Normally it would appear that an inspection of entrants to infant schools should be made each term, but this is impossible at present. Parents of entrants are requested to attend at the routine inspections, and the response is not unsatisfactory.

Conclusion.

Sir Wilson Jameson aptly summed up the policy which should be pursued in a school dental scheme when he said : ' The aim of the school dental service should be to secure that as many children as possible shall leave school without the loss of permanent teeth, free from dental disease and trained in the care of the teeth.' This is the criterion on which the success of any service may be judged, and the end to which our policy should be directed."

Nutrition, Milk and Meals.

The percentage of children examined at routine medical inspections at school who were considered by the medical officers to be of subnormal nutrition was 8.9% in 1946 compared with 8.76% in 1945, 13.08% in 1944, and 18.69% in 1943. 6,991 children were inspected in 1946, 3,021 Entrants in their first year of school life, 2,089 Leavers from Primary Schools, and 1,881 Leavers from Secondary Schools, and it seems that the apparent improvement in nutrition in recent years was maintained during 1946.

When a return was made to the Ministry of Education on the number of pupils taking meals and milk at Primary and Secondary Schools on a day in October, 1946, 4,675 or 22.2% of the 21,014 children in attendance on that day were taking dinners and 19,968 or 95% were taking milk at school, compared with 20% taking dinners and 76.4% taking milk in 1945. 3,877 of the 4,675 dinners were supplied from former Ministry of Food Cooking Depots now belonging to the Education Authority, and 4 Schools or Departments were served from 3 School Canteens.

All the milk supplied to schools was pasteurised milk approved by the Medical Officer of Health, and the dietary, preparation, cooking, transport and serving of the meals were supervised by the School Meals Organiser and inspected from time to time by the Medical Officer of Health and the Senior Medical Officer.

Special Schools. There were no changes in the medical arrangements at the Day Open Air School, the two Day Special Schools for Educationally Subnormal Children, and the Day Special School for Deaf and Partially Deaf Children, and the children were kept under constant supervision by the medical and nursing staffs. 6,509 treatments for minor ailments were given at these schools by the nurses.

At the Day Special Schools for Educationally Subnormal Children, all the children were re-examined during the year and in 19 cases the Education Authority were advised to issue a report under Section 57 (5) of the Education Act, 1944, to the local authority for the purposes of the Mental Deficiency Act, 1913, that these children might require supervision after leaving school and in 7 cases to report under Section 57 (3) that the children had been found incapable of receiving education at school.

The children at the Day Open Air School were re-examined each term, and at the Day Special School for Deaf and Partially Deaf Children once during the year.

Boarding Home for Educationally Subnormal Boys. The former Remand Home for Boys, "Plymleigh," at Laira, was converted into a Boarding Home for Educationally Subnormal Boys early in 1946. The boys attend the Day Special School for Educationally Subnormal Boys and the Boarding Home is in charge of a Warden, who is also a

teacher at the Day Special School, and a Matron. It fulfils an urgent need, admitting boys who would otherwise be waiting two or three years for admittance to a Boarding Special School. The boys and the home were kept under constant supervision during the year, being visited weekly by a school nurse and whenever necessary by a medical officer, and medical attention provided when required.

Children's Home. There were no changes in the medical arrangements at the Children's Home at Astor Hall, Stoke, during the year, none being required as a result of consideration of the Curtis Report. The majority of the children were of school age and attended nearby day schools. The home was kept under constant supervision being visited and inspected by a school nurse at least weekly, and by a medical officer once a month, when all the children in the home were medically examined, and at other times when necessary.

Infectious Diseases. There was no serious outbreak of any infectious disease in any school in the City during 1946, but seven schools were specially visited in connection with infectious and contagious diseases, two Primary Schools for diphtheria where odd cases had occurred at intervals of several weeks, two for scarlet fever similarly, one for scabies, and two Secondary Grammar Schools for Girls for plantar warts. A total of 1,609 children was specially examined at the 7 schools.

Fifty-six cases of diphtheria in children attending maintained schools were notified in 1946, compared with 86 in 1945 and 103 in 1944, and 137 cases of scarlet fever compared with 209 in 1945 and 138 in 1944.

Diphtheria immunisation was carried out in schools by the medical officers under the same arrangements as previously, and 2,392 injections were given in 1946 compared with 989 in 1945, and 398 Schick Tests were done compared with 1,137 in 1945. 928 children were completely immunised during 1946.

Scabies decreased still further, and only 257 new cases were seen at the clinics during 1946 compared with 527 in 1945 and 753 in 1944.

Impetigo also decreased, 161 new cases being seen at the clinics in 1946 compared with 272 in 1945 and 282 in 1944.

Miscellaneous. Children were specially examined at the clinics for fitness for employment out of school hours under the Bye-Laws made under the Children's and Young Persons Act, 1933, and also for entertainment licenses under the same act. The numbers are included in the total of 15,752 special examinations done during the year.

Adult trainees taking courses at the Plymouth and Devonport Technical Colleges under the Ministry of Labour Scheme for the Training of Disabled Persons were kept under medical supervision by special request of the Ministry of Education.

Lectures and informal talks on the School Health Service were given by the Senior Medical Officer to Nurses training as Queen's Nurses with the Three Towns Nursing Association and to students from Teachers' Training Colleges, etc., and visits were arranged to various clinics and schools.

The schools nurses assisted at a Nursing Exhibition held in the City in December, and exhibited a model showing the work of the school nurses and their part in the School Health Service.

MINISTRY OF EDUCATION

MEDICAL INSPECTION AND TREATMENT RETURNS

TABLE I.

MEDICAL INSPECTION OF PUPILS ATTENDING MAINTAINED PRIMARY AND SECONDARY SCHOOLS.

A.—ROUTINE MEDICAL INSPECTIONS.

(1) No. of Inspections :—

Entrants	3021
Second Age Group	2089
Third Age Group	1881
Total ...	6991

(2) No. of other Routine Inspections ... ... —

Grand Total 6991

B. OTHER INSPECTIONS.

No. of Special Inspections and Re-Inspections 19,065

TABLE II.

CLASSIFICATION OF THE NUTRITION OF PUPILS INSPECTED DURING THE YEAR IN THE ROUTINE AGE GROUPS.

Number of Pupils Inspected.	*A.* (*Excellent*).		*B.* (*Normal*).		*C.* (*Slightly Sub-Normal*).		*D.* (*Bad*)	
	No.	%	*No.*	%	*No.*	%	*No.*	%
6991	2180	31.18	4189	59.92	618	8.84	4	.06

TABLE III.

Group I. Treatment of Minor Ailments (excluding uncleanliness).

Total Number of Defects treated or under treatment during the year under the Authority's Scheme ...	5906

Group II. Treatment of Defective Vision and Squint.

	Under the Authority's Scheme.
Errors of Refraction (including Squint) ...	2957
Other defect or disease of the Eyes (excluding those recorded in Group I.)	701
Total ...	3658
Number of pupils for whom Spectacles were :—	
(*a*) Prescribed	904
(*b*) Obtained	759

Group III. Treatment of Defects of Nose and Throat.

	Under the Authority's Scheme.
Received Operative Treatment	456
Received other forms of Treatment	121
Total number treated	577

TABLE IV.

DENTAL INSPECTION AND TREATMENT.

(1)	Number of pupils inspected by the Dentist :—	
	(*a*) Routine Age Groups	16302
	(*b*) Specials	723
	(*c*) Total (Routine and Specials)	17025
(2)	Number found to require treatment	10299
(3)	Number actually treated	7096
(4)	Attendances made by pupils for treatment ...	13521
(5)	Half-days devoted to—	
	Inspection	113
	Treatment	1817
	TOTAL	1930
(6)	Fillings—	
	Permanent Teeth	6476
	Temporary Teeth	634
	TOTAL	7110
(7)	Extractions—	
	Permanent Teeth	2748
	Temporary Teeth	10423
	TOTAL	13171
(8)	Administrations of general anæsthetic for extractions	4820
(9)	Other Operations—	
	Permanent Teeth	1790
	Temporary Teeth	42
	TOTAL	1832

TABLE V.

VERMINOUS CONDITIONS.

(i)	Total number of examinations of pupils in the Schools by School Nurses or other authorised persons	142,021
(ii)	Number of individual pupils found unclean ...	3,020

TABLE VI.

SCHOOL MEDICAL AND DENTAL STAFF.

Names of Medical Officers.	*Proportion of whole time (expressed as a percentage) devoted to*	
	School Health Service.	*Public Health.*
S.M.O. Dr. T. Peirson	20%	80%
Senior A.S.M.O.		
Dr. T. H. Harrison	81.0%	19.0%
A.S.M.O's.		
Dr. G. B. Carter	86.3%	13.7%
Dr. A. L. Thorburn (Temporary), resigned 17.8.46	84.6%	15.4%
Dr. D. I. Lishman (Temporary), left 4.5.46, resumed 9.9.46	86.1%	13.9%
Dr. H. M. Teitze (Temporary), left 4.5.46	30.2%	69.8%
Dr. M. S. Harvey, returned from Military Service 6.5.46	60.0%	40.0%

Names of Dental Officers.	*Proportion of whole time (expressed as a percentage) devoted to*	
	School Health Service.	*Public Health.*
Senior Dental Officer	—	—
Assistant Dental Officers		
Mr. E. Williams	100%	—
Mr. F. J. Gray	100%	—
Mrs. M. Owen (Temporary Part-Time), left 30.6.46	54.4%	—
Mr. G. E. Moore (Temporary), resigned 17.8.46	100%	—
Mr. R. A. Currie as from 1.7.46 ...	100%	—
Mr. F. R. Maynard as from 1.9.46 ...	100%	—

Nurses.	*Number of Officers.*	*Aggregate of time given to School Health Service work in terms of whole-time Officer.*
School Nurses	10	10 whole time.
District Nurses	—	—
Nursing Assistants	2	2 whole time.
Dental Attendants	4	4 whole time.

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A

B

C

W

X

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