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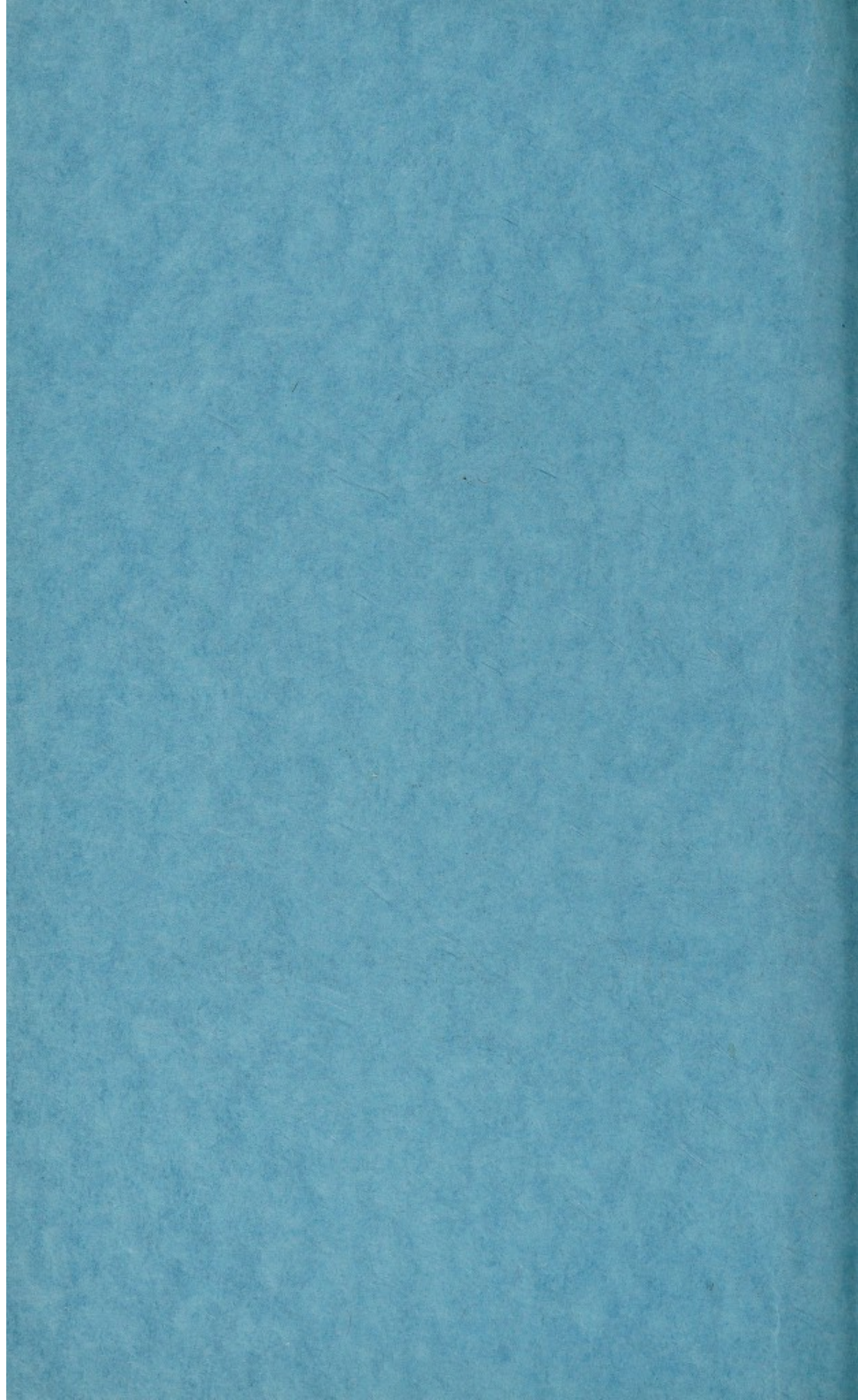


BOROUGH OF TORQUAY.

ANNUAL REPORT

OF THE

Medical Officer of Health
for 1938.





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ST. MARYCHURCH TOWN HALL,
TORQUAY.

*To the Worshipful the Mayor and to the Aldermen and
Councillors of the Borough of Torquay.*

MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour to submit my Annual Report for 1938, which is detailed in form and sequence in accordance with the instructions of the Minister of Health.

During the last two years, throughout the country prominence has rightly been given and concerted efforts made to promote and to improve national fitness, and to ensure that the best and full use is made of the facilities offered by the medical services. It was a fortunate coincidence that at the end of these campaigns a section of the annual meeting of the British Medical Association was held in Torquay, the subject of which was National Fitness; coming as an opportune climax this helped to attract the attention of the medical profession and of the public alike, and to illustrate the many complex aspects of the problems involved. For there is no short-cut to success, no panacea which if widely applied will guarantee health, no single measure which will produce and maintain fitness; but as knowledge of the essential facts evolves and as the education of the public proceeds, the trend towards fitness will continue like a chain of events in the formation of a mosaic until the complete harmonious whole is realised and achieved. And after all as Pasteur said, the only way to see a thing clearly is to see the whole of it.

It has been aptly said that physical, mental, and spiritual welfare does not consist in a code of rules drawn up to produce a standard article, but is a vital part of a way of living, which, when attained, means not only human happiness, but all that is best in human nature. And a health resort is in a peculiarly fortunate position in being able to offer both to its residents and to its numerous visitors the best conditions for re-creation and for learning this practice of a hygienic way of life.

In the year under review, a number of developments have taken place; in the Maternity and Child Welfare service arrangements were made for the preparation of a list of medical practitioners to be called in by midwives and for the

formation of a professional advisory committee in connexion with this. Following the report of the Board of Education on children with defective hearing, an aural scheme was prepared and approved in which pre-school children, school children and patients at the Isolation Hospital will share; and facilities will be available for the early recognition of ear disease or defective hearing, and for the appropriate specialist treatment. The extensions to the Isolation Hospital were started and will be completed during the coming year, thus providing further very valuable facilities for the control and treatment of infectious disease.

No measure of preventive medicine or of anything else can remain static in a changing world; and consequent upon the development of the town and other associated factors, a comprehensive scheme prepared by the Borough Engineer for bringing the sewerage system up to modern requirements was approved, and this essential work has commenced. Our forefathers at the end of last century concentrated largely on sanitation and environment and have given us the valuable heritage of healthy conditions of living, a sound protection against many of the epidemics of former times; and rearmament and modernisation of defence are as essential in the fight against disease as in any other sphere, and must be carried out as regularly, as efficiently and as expeditiously.

Progress in Housing continues to be very satisfactory, and work on the new Watcombe Estate is well advanced; an outstanding feature is the erection on a convenient section of this Estate of a block of twelve small houses for aged persons, constituting a very valuable and opportune piece of social service.

The provision of a Health Centre has been approved and the various branches of the Health Services will welcome the opportunity of being able to link up on the same premises, to the mutual advantage of all concerned. But more than that, a Health Centre is of symbolic significance, and should serve as a constant reminder, a continuous practical object lesson that health both of the public and of the individual is something worth having, something worth caring for,—especially when so many of the services are for the benefit of the children, upon whom depend the prosperity, the well-being, yes the very existence of future Torquay.

On the whole the year was healthy and free from very exceptional influences ; the most outstanding feature is in the meteorological records which show the unprecedented storm and rainfall of over six inches in approximately twelve hours on the 4th August. Thunder and rain of such violence are without parallel, and much flooding occurred ; but apart from material damage there were fortunately no other ill-effects.

These are some aspects of the year's record, and the growing volume of routine work in all its manifold activities is detailed throughout the various sections of the report ; and it will be seen that the maintenance of public health and the promotion of national fitness are subjects of widening importance. Indeed this must be so, for

*Nothing on earth—no Arts, no Gifts, nor Graces—
No Fame, no Wealth—outweighs the want of it.
This is the Law which every law embraces—
Be fit—be fit ! In mind and body be fit !*

In conclusion, it is with appreciation that I acknowledge the co-operation and spirit of mutual helpfulness of the Medical Profession of the Borough, both individually in the many contacts of daily work, and collectively through the local Division of the British Medical Association. Early in the year a new feature was introduced, comprising a weekly confidential statement of epidemiological details and other appropriate notes, sent to the medical practitioners in Torquay, and to some doctors (who have specially asked for it) in neighbouring areas ; and this is proving a useful and helpful adjunct.

I also acknowledge with gratitude both the encouraging support given to me by the Chairman and members of the Public Health Committee, and the loyal co-operation of every member of the staff ; for upon these factors depends the continued march of progress towards the victories that are yet to come.

I have the honour to be,

Your obedient Servant,

J. V. A. SIMPSON.

STAFF.

(a) Medical

Medical Officer of Health, School Medical Officer and Medical Superintendent of Isolation Hospital.

J. V. A. SIMPSON,

M.D.LOND., B.S., M.R.C.S., L.R.C.P., D.P.H.CAMB.

Deputy Medical Officer of Health and Assistant School Medical Officer.

W. J. HOGG, M.D.ABERD., L.M.DUB., D.P.H.ABERD.

Medical Officer, Ante-Natal Clinic and Post-Natal Clinic.

*P. A. MCCALLUM, M.B.GLASG., CH.B., D.P.H.CAMB.

Obstetric Consultants.

*P. A. MCCALLUM, M.B.GLASG., CH.B., D.P.H.CAMB.

*B. VENN DUNN, M.D.ED., F.R.C.S.ED.

Ophthalmic Surgeon (School Medical Service and Maternity and Child Welfare).

*J. MASTERTON THOMSON, M.B.GLASG., CH.B., D.O.M.S.ENG.

Aural Surgeon (School Medical Service, Maternity and Child Welfare, and Isolation Hospital).

*W. H. BRADBEER, M.S.LOND., D.L.O.ENG.

Pathologist and Bacteriologist.

*H. A. FIELDEN, M.D.DURH.

(b) Dental

School Dental Officer and Dental Officer for Maternity and Child Welfare.

N. HARRIS, L.D.S., R.C.S.ENG.

(c) Nursing

Health Visitors, Child Protection Visitors.

†Miss P. MULLINEAUX, S.R.N., S.C.M., H.V.CERT.R.S.I.

†Miss M. E. CARTER, S.R.N., S.C.M., H.V.CERT.R.S.I.

†Miss V. E. POWELL, S.R.N., S.C.M., H.V.CERT.R.S.I.

Matron, Isolation Hospital.

Miss M. J. STEWART, S.R.N.

(The staff at the Isolation Hospital includes the Matron, three nurses and three probationers)

(d) Sanitary*Chief Sanitary Inspector.*

G. E. BODY, C.R.S.I. and Meat Cert.

District Sanitary Inspectors.

G. J. LOVELESS, C.R.S.I. and Meat Cert.

A. THOMPSON, C.R.S.I.

J. F. H. SMITH, C.R.S.I. and Meat Cert.

H. T. BEECHEY, C.R.S.I. and Meat Cert.

(e) Other*Orthoptist (School Medical Service and Maternity and Child Welfare).*

*Miss M. B. DAVIES, B.A.

Borough Meteorologist.

*C. BELLINGER, F.R.MET.S.

Veterinary Surgeon.

*C. MASSON, M.R.C.V.S. (Resigned 31/3/38)

*Clerks.**(Public Health Department)*

W. H. NICKELS, P. H. BURGE, W. D. WHITE.

(Maternity and Child Welfare)

Miss K. HUDSON, *Mrs. V. KNAPMAN.

(*) Part Time.

(†) Also a School Nurse.

SECTION A.

STATISTICS AND SOCIAL CONDITIONS
OF THE AREA.

Area (in acres)	-	-	-	6,244
Registrar-General's estimate of resident population, mid-1938	-	-	-	44,440
Number of inhabited houses (end of 1938) according to Rate Books	-	-	-	12,418
Rateable value (end of 1938)	-	-	-	£531,706
Sum represented by a Penny Rate (end of 1938)	-	-	-	£2,090

PHYSICAL FEATURES AND CLIMATE.

Torquay is recognised as one of the most beautiful marine resorts in Britain; it enjoys a very sheltered position upon the coast and its reputation as a health resort is due to its equable climate. Originally built under the shelter of the hills which encircle the eastern end of Torbay, its boundaries have gradually extended over the crest of the hills to more bracing sites up to 500 feet above sea level; this affords great variety and choice of climate according to the elevation and exposure that may be selected.

The soil is mainly derived from limestone, red sandstone and grit; the sub-soil is composed of disintegrated portions of limestone grit and igneous rocks. The generally faulted nature of the rock and the fissures in the limestone allow of quick drainage, which is further helped by the undulating nature of the surface. Clay is almost absent, only small pockets of sandy clay being found in a few valleys and depressions.

The climate is characterised by a low mean daily range of temperature, by abundant sunshine with a high percentage of physiologically active ultra-violet rays, by moderate rainfall, by low humidity and by a dry soil. The mean annual temperature of the sea is 55 deg. F., and the shelter of the hills gives protection from northerly and easterly winds.

The air is pure, there being no factories to cause any pollution; fogs are extremely rare and sea fogs are only occasional. The temperature averages show very mild

conditions (a mean temperature of 57.4 deg. F. in Summer and of 44.5 deg. F. in Winter), with a small daily range of only 9.5 deg. F. in the Winter and of 11 deg. F. for the whole year. Rainfall averages 35 inches a year, but the number of rain days is not high, and 63 per cent. of the rain falls between 6 p.m. and 8 a.m. Much of the rain is sub-tropical in nature, a large amount falling in a few hours; and this, associated with the sub-soil, tends to atmospheric purity. The relative humidity is about 78 per cent., being higher in Winter than in Summer, which assists in maintaining the mild and equable conditions. The sunshine averages 1,743 hours a year; and the Winter sunshine is about 29 per cent. of the possible, which is a high figure for this country. The ultra-violet rays are high, daily measurements having been carried out for ten years; in addition to the rays directly from the sun and reflected from the sky as "sky shine," there is at a seaside resort the extra amount due to reflection from the sea—a fact which was first proved by your Medical Officer at Torquay. The biologically active rays (about 300 uu.) are plentiful and are shown by the difference between the quartz tube reading and the glass tube reading, both of which are measured daily in Torquay.

The following is a summary supplied by the Borough Meteorologist of the climatic conditions for 1938, which are illustrated by a chart at the end of the Report:—

	1938	Average 1911-1938
Mean maximum temperature	57.6 deg. F.	57.4 deg. F.
Highest shade temperature	77.0 "	—
Mean minimum temperature	46.5 "	46.4 "
Lowest shade temperature	23.0 "	—
Mean temperature	52.1 "	51.9 "
Mean range of temperature	11.1 "	11.0 "
Total rainfall	36.37 inches	35.58 inches
Number of days on which rain fell	154	175
Number of days on which a trace only was recorded	... 29	—
Mean humidity (percentage)	... 75	78
Hours of bright sunshine	... 1722.8	1743.14
Number of sunny days	... 312	—
Mean ozone (percentage)	... 33%	—
Prevailing winds	N.W., W.S.W., S.E., W.	
Mean daily units of ultra-violet rays	... 2.64	

The type of person for whom the climate is especially suitable is the case in which it is desired that life shall be rendered as easy as possible, expenditure of energy reduced to a minimum and opportunity given for accumulating reserves upon which to draw in time of stress or effort. The inherently delicate, the elderly, young children and the convalescent all derive great benefit; the climate also suits persons who have returned from the tropics and those who require sedative effects after residence in more northerly climates or after the strain of modern business life and an exacting complex civilisation.

The soft air and freedom from dust are eminently suitable for persons suffering from irritable throats, catarrhal infections, chronic bronchitis or other affections of the respiratory system. In addition, patients suffering from nephritis or with degenerative changes of the circulatory system, appreciate the absence of cold and are thereby enabled to spend the winter months in comparative comfort; and cases of functional or organic diseases of the nervous system usually derive great benefit from the soothing influences of the climate and its surroundings. Rheumatic conditions also do well in Torquay, with the dual advantage of climate and of balneological facilities.

THE MEDICAL BATHS.

From the balneological aspect it is recognised that a well-equipped baths establishment is a real asset to a health resort; and as Dr. Fortescue Fox said, "The marine health resort is the place *par excellence* for physical treatment, that is to say, for the scientific use and combination of physical energies operating on the surface of the body." Torquay is fortunate in possessing a thoroughly up-to-date establishment, which is under the control of the Corporation. The equipment is modern, and most of the baths, douches and accessory treatments which have the support of the medical hydrologists are available, treatments being given (with a few simple exceptions) only on medical prescription. There is a large cooling lounge in addition to the requisite number of dressing rooms and resting rooms; and attached to the Medical Baths there is a large vita-glass sun lounge facing south. Owing to

the favourable climatic conditions baths can be taken in Torquay at all seasons, which is a great advantage to invalids during the winter months.

Fully certified attendants, holding the C.S.M.M.G. and Bio-physical qualifications, are retained upon the staff. The chief forms of treatment in the Medical Section are

(a) *Balneological*: Aix and Vichy Douches, Spray Douches, Needle Baths, Sea Water Baths, Torbay Seaweed Baths, Plombières, Nauheim Baths, Pine Baths, etc.

(b) *Electrical*: Radiant heat, diathermy, high frequency, galvanic, faradic and sinusoidal currents, ionisation, infra-red and ultra-violet radiation.

(c) *Accessory*: Dartmoor peat packs, paraffin wax, massage and exercises.

TORQUAY NATURAL MINERAL WATER.

The source of this water is the Meadfoot Spring, owned by the Torquay Corporation, and it is derived from the lower Devonian grits and shales. It is a natural cold water of the highest degree of organic and bacterial purity, belonging to the same class as Evian and Vittel Drinking Waters. The water is carefully bottled at the spring.

Samples of the water have been analysed by S. Judd Lewis, D.Sc. (Tubingen), D.Sc. (Lond.), F.I.C., Ph.C., in accordance with the Approved Directions given in the "International Register of Spas and Medicinal Waters," issued by the International Society of Medical Hydrology in 1931.

Classification of the water (international Standard Measurements)—

Chemical Composition	Magnesium, Calcium, Bicarbonate
Ionic Concentration	N/1000, Total=28. Mg. 6.0. Ca. 5.5. HCO ₃ 7.9.
Reaction	Normal; pH = 7.6.
Physical	Cold, 54 deg. F.; hypotonic
Medicinal	Diuretic and Alterative
Indications	Bladder and Urinary Conditions Gastro-Intestinal Disorders, Rheumatism, Gout and Metabolic Disturbances.

THE VITA-GLASS SUN LOUNGE.

It may be claimed that the special features of this Lounge place it among the finest of its type to be found anywhere; the view from the interior embraces the whole of Torbay with its excellent coast line, and the situation provides an ideally restful atmosphere away from the noise of all traffic. It is 200 feet in length, partly built on rock and partly cantilevered over the sea, and all the windows are fitted with vita-glass, allowing penetration of ultra-violet rays which have been measured by the acetone-blue gauge. The heating system for the cooler months of the year is installed on the thermostatic control principle; and for warmer days there is adequate ventilation, the air movement being periodically assessed by the kata-thermometer.

SOCIAL CONDITIONS,

*Including the chief industries carried on in the area
and the extent of unemployment.*

Torquay is a residential town and health resort, and there are no factories or industries. In addition to the villa residents there are a number of hotels and boarding houses, such as befit a modern health resort to accommodate the many visitors who seek recreation during a change of air after illness or during the annual holiday after the stress of work.

Much of the employment of the working classes is regular, but a certain amount has a seasonal variation.

The following figures were kindly supplied by the Manager of the Ministry of Labour Employment Exchange and show the seasonal variation; the extent of unemployment is given for January (1938 and 1939) when it is highest, and in July (1938) when it is probably lowest:—

		Men	Women	Boys	Girls	Total
January, 1938	...	1120	407	83	117	1727
July, 1938	...	660	85	56	24	825
January, 1939	...	1385	455	78	86	2004

EXTRACTS FROM VITAL STATISTICS OF THE YEAR,
*which relate to the net births and deaths after correction for
inward and outward transfers as furnished by the Registrar-
General.*

		Total	Males	Females		
Live Births	{ Legitimate	461	226	235	Birth-rate per 1,000 of the estimated resident population	11.2
	{ Illegitimate	35	18	17		
Stillbirths	...	21	15	6	Rate per 1,000 total (live and still) births	40.6
Deaths	...	611	284	327	Death-rate per 1,000 of the estimated resident population	13.8

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 sepsis	0	0.00
No. 30	Other puerperal causes	2	3.87
Total	...	2	3.87

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

All infants per 1,000 live births	...	40.3
Legitimate infants per 1,000 legitimate live births	...	41.2
Illegitimate infants per 1,000 illegitimate live births	...	28.6

Deaths from Cancer (all ages)	...	...	108
„ Measles (all ages)	...	...	4
„ Whooping Cough (all ages)	...	...	0
„ Diarrhoea (under two years of age)	...	...	4

*Particulars of any unusual or excessive mortality during
the year which has received or required special comment.*

During the year there has been no unusual or excessive mortality.

*Any causes of sickness or invalidity which have been
specially noteworthy during the year ; any conditions of
occupation or environment which appear to have had a prejudicial
effect on health ; and any evidence, statistical or otherwise, that
unemployment has exercised any significant influence on the
health or physique of children or adults.*

There have been no noteworthy conditions upon which to report under this section. It is difficult to obtain evidence of the influence of unemployment on the health or physique of adults ; but in the case of children in Torquay it can be stated that there has been no deleterious effect on nutrition. From the annual reports of the School Medical Officer it is seen that the number of cases of malnutrition has not

increased during the past ten or twelve years. Many of these cases arise as the result of unsatisfactory home management, and all cases found are sent to the open-air school, where the restoration to good nutrition and efficient physique is speedily obtained. The open-air school has, fortunately, a satisfactory proportion of places to the total elementary school population compared with many other areas.

Population.

The supplementary County Census Volume gives the revised particulars affecting districts which have been altered between 26th April, 1931, and 30th June, 1935. The area of Torquay was increased on 1st April, 1935, from 5,377 acres to 6,244 acres, the 867 acres being transferred from the Newton Abbot R.D.; the census population of 46,165 was increased by this transfer to the extent of 187 persons, making a new total of 46,352.

The age and sex distributions given show that there were 19,471 males and 26,881 females; of these 39 per cent. of the total, 7,040 males and 10,999 females were over 45 years of age, and there were only 5,173 married women between 15 and 44 years. More than three-quarters, 76 per cent. of the population were over 20 years of age, and there were only 24 per cent., 5,371 males and 5,864 females, between 0 and 19 years. These are striking and significant facts.

The deaths exceed the births in the Borough and in the intercensal period the percentage decrease from this was—1.0, but migration amounts to 17.3 per cent., and this gives a net increase in population of +16.3 per cent.

The Registrar-General's estimate for the population at the middle of 1938 is 44,440: this figure is used in calculating the marriage-rate, birth-rate, death-rate and other statistical returns.

Marriages.

There were 259 marriages registered in 1938 and the marriage-rate was 5.8 per 1,000 population; the marriage-rate for England and Wales was 17.5. The exceptional character of Torquay, with the numerous residents who come to spend their retirement here, explains the low Torquay rate.

Births.

The number of live births registered during the year, corrected for transfers, is 496, of which 244 were male and 252 female; there were 461 legitimate births and there were 35 (6.8 per cent) illegitimate births. There were 21 stillbirths registered, 20 legitimate and 1 illegitimate.

The birth-rate was 11.2 per 1,000 population compared with 11.4 in 1937, the rate for England and Wales in 1938 being 15.1, and for the 148 small towns 15.4. The stillbirth-rate was 0.47 per 1,000 population compared with a rate of 0.60 for England and Wales, the rate for the small towns being 0.60. The stillbirth-rate per 1,000 total (live and still) births was 40.6 compared with 38 for England and Wales.

The birth-rate in Torquay is low because of the age and sex distribution of the population; out of the total population there are only 5,173 married women between 15 and 44 years of age.

The ward distribution *as given by the Local Registrar*, (i.e., without correction for transfers) is:—

	Males	Females	Illegitimate
Torre	37	43	5
Waldon	11	26	6
Upton	33	36	5
Ellacombe ..	36	39	3
Strand	17	16	3
Torwood	11	12	3
St. Marychurch ..	45	36	6
Babbacombe ..	18	22	3
Chelston	63	62	5
Totals	271	292	39

Notification of Births Act.

During the year the number of births (adjusted by transfers) *notified to the Medical Officer of Health*, was 496, of which 470 were notified by midwives and 26 by parents and doctors; there were 476 notifications of live births and 20 notifications of stillbirths.

Deaths.

The total number of deaths registered in the Borough in 1938 was 643; of these 127 were non-residents and were transferred to their own districts, while inward transfers numbered 95. The net total is 611, 284 being males and 327 females.

The crude death-rate is 13.8 per 1,000 population compared with 14.9 in 1937; the death-rate for England and Wales in 1938 was 11.6 and the rate for 148 smaller towns (with population from 25,000 to 50,000) was 11.0. In order to make adjustments for the age and sex distributions of Torquay, the Registrar-General supplies an "areal comparability factor" (A.C.F.) with which to multiply the local crude death-rate; this A.C.F. for Torquay in 1938 was 0.76 and gives an adjusted local death-rate of 10.5.

The age distribution of the deaths is shown by the adjoining table, which includes the previous year:—

Age Group		1937	1938
Under 1 year	...	23	20
1 and under 2	...	5	3
2 and under 5	...	2	6
5 and under 15	...	4	11
15 and under 25	...	15	7
25 and under 45	...	46	36
45 and under 65	...	157	147
65 and upwards	...	412	381
Total Deaths (all ages)		664	611
Death-rates		14.9	13.8

The ward distribution of deaths was:—

Ward	Deaths at all ages	Under 1 year	Inquests	Uncertified
Torre ..	79	6	3	—
Waldon ..	60	—	2	2
Upton ..	75	3	5	—
Ellacombe ..	67	2	3	—
Strand ..	31	—	1	—
Torwood ..	55	1	—	—
St. Marychurch ..	80	7	1	1
Babbacombe ..	75	—	2	—
Chelston ..	89	1	4	—
Totals ..	611	20	21	3

The Zymotic death-rate during the year was 0.20; this is the rate due to small-pox, measles, whooping cough, scarlet fever, diphtheria, enteric fever, and diarrhoea under two years of age. The four previous years are included for comparison.

Death from :		1934	1935	1936	1937	1938
Smallpox	...	—	—	—	—	—
Measles	...	—	4	—	—	4
Whooping Cough	...	1	1	—	3	—
Scarlet fever	...	1	—	—	—	—
Diphtheria	...	1	1	2	3	1
Enteric, etc., fever	...	—	—	—	—	—
Diarrhoea (under 2 years)		3	1	2	—	4
Zymotic death-rate		0.13	0.15	0.09	0.13	0.20

The causes of death are given in this table supplied by the Registrar-General :—

CAUSES OF DEATH					MALES	FEMALES
All Causes					284	327
1	Typhoid and Paratyphoid Fevers	..	..	..	—	—
2	Measles	..	..	..	2	2
3	Scarlet Fever	..	..	..	—	—
4	Whooping Cough	..	..	..	—	—
5	Diphtheria	..	..	..	1	—
6	Influenza	..	..	..	—	—
7	Encephalitis Lethargica	..	..	..	—	—
8	Cerebro-spinal Fever	..	..	..	—	—
9	Tuberculosis of Respiratory System	..	..	..	17	14
10	Other Tuberculous Diseases	..	..	..	1	1
11	Syphilis	..	..	..	—	—
12	General Paralysis of the Insane, Tabes Dorsalis	..	..	..	1	—
13	Cancer, Malignant Disease	..	..	..	40	68
14	Diabetes	..	..	..	2	4
15	Cerebral Hæmorrhage, etc.	..	..	..	18	37
16	Heart Disease	..	..	..	77	68
17	Aneurysm	..	..	..	3	3
18	Other Circulatory Diseases	..	..	..	23	41
19	Bronchitis	..	..	..	6	10
20	Pneumonia (all forms)	..	..	..	8	9
21	Other Respiratory Disease	..	..	..	8	4
22	Peptic Ulcer	..	..	..	3	1
23	Diarrhœa, etc. (under 2 years)	..	..	..	2	2
24	Appendicitis	..	..	..	2	3
25	Cirrhosis of Liver	..	..	..	1	1
26	Other Diseases of Liver, etc.	..	..	..	4	2
27	Other Digestive Diseases	..	..	..	6	5
28	Acute and Chronic Nephritis	..	..	..	11	6
29	Puerperal Sepsis	..	..	..	—	—
30	Other Puerperal Causes	..	..	..	—	2
31	Congenital Debility, Premature Birth, Malformations, etc.	..	..	..	10	4
32	Senility	..	..	..	1	8
33	Suicide	..	..	..	4	3
34	Other Violence	..	..	..	9	6
35	Other Defined Causes	..	..	..	23	22
36	Causes Ill-defined or Unknown	..	..	..	1	1
Special Causes (included in No. 35 above)						
	Smallpox	..	..	..	—	—
	Poliomyelitis	..	..	..	—	—
	Polioencephalitis	..	..	..	—	—
Death of Infants under 1 year					14	6
{ Total					14	5
{ Legitimate					—	1
{ Illegitimate					15	6
Stillbirths					14	6
{ Total					1	—
{ Legitimate						
{ Illegitimate						

The following table gives the birth-rates, death-rates, an analysis of mortality, maternal death-rates, and case-rates for certain infectious diseases in 1938; the rates are for England and Wales, for 126 County Boroughs and Great Towns, for 148 Smaller Towns, for London and for Torquay to show the comparison:—

Birth-rates, Death-rates, Analysis of Mortality, Maternal Death-rates,
and Case-rates for certain Infectious Diseases in the year 1938.

England and Wales, London, 126 Great Towns,
148 Smaller Towns, and Torquay.

(Provisional Figures based on Weekly and Quarterly Returns).

		Torquay	England and Wales	126 County Boro's and Great Towns including London	148 Smaller Towns (Resident Populations 25,000 to 50,000 at 1931 Census)	London Adminis- trative County
Rates per 1,000 Population						
BIRTHS:						
Live	..	11. 2	15. 1	15. 0	15. 4	13. 4
Still	..	0.47	0.60	0.65	0.60	0.48
DEATHS:						
All Causes	..	13. 8	11. 6	11. 7	11. 0	11. 4
Typhoid and Paratyphoid fevers..		0.00	0.00	0.00	0.00	0.00
Smallpox	..	—	0.00	—	0.00	—
Measles	..	0.09	0.04	0.05	0.03	0.06
Scarlet fever	..	0.00	0.01	0.01	0.01	0.01
Whooping cough	..	0.00	0.03	0.03	0.02	0.03
Diphtheria	..	0.02	0.07	0.07	0.06	0.05
Influenza	..	0.00	0.11	0.10	0.11	0.06
NOTIFICATIONS:						
Smallpox	..	0.00	0.00	0.00	0.00	—
Scarlet fever	..	1.91	2.41	2.60	2.58	2.05
Diphtheria	..	0.50	1.58	1.85	1.53	1.90
Enteric fever	..	0.00	0.03	0.03	0.04	0.05
Erysipelas	..	0.36	0.40	0.46	0.39	0.46
Pneumonia	..	0.54	1.10	1.28	0.98	0.98
Rates per 1,000 Live Births						
Deaths under 1 year of age		40	53	57	51	57
Deaths from Diarrhoea and Enteritis under 2 years of age	..	8.1	5. 5	7. 8	3. 6	13. 1
MATERNAL MORTALITY:						
Puerperal Sepsis	..	0.00	0.89	Not available		
Others	..	4.03	2.19			
Total	..	4.03	3.08			
Rates per 1,000 Total Births (i.e. Live and Still)						
MATERNAL MORTALITY:						
Puerperal Sepsis	..	0.00	0.86	Not available		
Others	..	3.87	2.11			
Total	..	3.87	2.97			
NOTIFICATIONS:						
Puerperal fever	..	34.81	14.42	18.08	12.51	3.53
Puerperal pyrexia	..					15.46

The chief causes of death in Torquay will be seen to have been (1) Heart disease, (2) Cancer, (3) Other circulatory diseases.

Cancer.

There were 108 deaths registered from cancer, and the age and sex distribution was :—

Age Group	Under 30	30-35	35-45	45-55	55-65	65-75	75 and over	Totals
Males	—	—	—	4	8	17	11	40
Females	1	—	2	6	22	23	14	68
Totals	1	—	2	10	30	40	25	108

The death rate from cancer is 2,430 per million population, compared with 1,664 per million for England and Wales; and the high rate is accounted for by the age-distribution of the population, 39 per cent. (7,040 males and 10,999 females) being over 45 years of age.

Infant Mortality.

There were 20 deaths in infants under one year of age, which gives an infant mortality-rate of 40 per 1,000 live-births; the rate for England and Wales was 53, and the rate for the small towns was 51.

In the statistical review of the Registrar-General for 1935 it is suggested "that it ought to be possible for every northern town to achieve a rate below 50 and for every other town a rate below 40." The average infant mortality-rate for the last five years in Torquay was 45.

The following tables are of interest :—

LIVE BIRTHS, INFANT DEATHS AND INFANT MORTALITY FOR A SERIES OF FIVE YEARS

Year	Live births recorded	Deaths of Infants under 1 year	Infant Mortality for Torquay	Infant Mortality for England and Wales
1934	493	24	48	59
1935	535	21	39	47
1936	543	28	52	59
1937	507	23	45	58
1938	496	20	40	53

PRINCIPAL CAUSES OF DEATHS AMONG INFANTS

		1938	1937	1936	1935	1934
Measles	...	2	—	—	—	—
Whooping Cough	...	—	—	—	1	—
Influenza	...	—	1	—	—	—
Diarrhoea	...	3	—	2	1	2
Tuberculous diseases	...	—	1	—	—	—
Bronchitis	...	—	2	3	—	—
Pneumonia	...	1	2	5	1	7
Premature births	}	14	13	14	12	14
Congenital defects						
Other defined causes	...	—	3	3	5	—
All other causes	...	—	1	1	2	—
		20	23	28	21	24

It is seen that the infant mortality-rate is approaching what is (until further research can elucidate the factors involved), an irreducible minimum ; the main causes of death are under the headings congenital defects and prematurity, which are but little influenced by preventive measures.

This is, however, all the more reason why every effort should be made to maintain all the available facilities for keeping the mortality-rate as low as possible.

Exact details of the causes of death are given in this table:—

INFANT MORTALITY DURING 1938.

CAUSES 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 Deaths
ALL CAUSES.	{ Certified .. Uncertified ..	13 .	. .	1 .	. .	14 .	1 .	1 .	4 .	. .	20 .
Measles ..	..	.	.	.	.	.	.	.	2	.	2
Whooping cough ..	..	.	.	.	.	.	.	.	.	.	.
Diphtheria ..	..	.	.	.	.	.	.	.	.	.	.
Influenza ..	..	.	.	.	.	.	.	.	.	.	.
Tuberculosis of nervous system ..	..	.	.	.	.	.	.	.	.	.	.
Tuberculosis of intestines and peritoneum ..	..	.	.	.	.	.	.	.	.	.	.
Other Tuberculous diseases	..	.	.	.	.	.	.	.	.	.	.
Syphilis ..	..	.	.	.	.	.	.	.	.	.	.
Meningitis ..	..	.	.	.	.	.	.	.	.	.	.
Convulsions ..	..	.	.	.	.	.	.	.	.	.	.
Bronchitis ..	..	.	.	.	.	.	.	.	.	.	.
Pneumonia ..	..	.	.	.	.	.	.	1	.	.	1
Other respiratory diseases	..	.	.	.	.	.	.	.	.	.	.
Inflammation of stomach	..	.	.	.	.	.	.	.	.	.	.
Diarrhoea and enteritis ..	..	.	.	.	.	.	1	1	1	.	3
Hernia, intestinal obstruction ..	..	.	.	.	.	.	.	.	.	.	.
Congenital malformations	..	1	.	.	.	1	.	.	.	.	1
Congenital debility ..	..	1	.	.	.	2	.	.	.	.	2
Premature birth ..	..	8	.	1	.	8	.	.	.	.	8
Injury at birth ..	..	2	.	.	.	2	.	.	.	.	2
Atelectasis ..	..	1	.	.	.	1	.	.	.	.	1
Icterus neonatorum ..	..	.	.	.	.	.	.	.	.	.	.
Disease of umbilicus ..	..	.	.	.	.	.	.	.	.	.	.
Pemphigus neonatorum ..	..	.	.	.	.	.	.	.	.	.	.
Other diseases of early infancy ..	..	.	.	.	.	.	.	.	.	.	.
Suffocation ..	..	.	.	.	.	.	.	.	.	.	.
Inattention at birth ..	..	.	.	.	.	.	.	.	.	.	.
Other Causes ..	..	.	.	.	.	.	.	.	.	.	.
TOTALS	..	13	.	1	.	14	1	1	4	.	20

Net infant deaths in the year 20 { Legitimate 19
Illegitimate 1

CAUSES OF, AND AGES AT DEATH DURING THE YEAR 1938 (Per Local Registrar).

CAUSES OF DEATH.		Net deaths at the subjoined ages of Residents whether occurring within or without the District												Total Deaths whether of Residents or non Residents in Institutions in the District
		All ages	under 1	1 and under 2	2 and under 5	5 and under 15	15 & under 25	25 & under 35	35 & under 45	45 & under 55	55 & under 65	65 & under 75	75 & over	
1		2	3	4	5	6	7	8	9	10	11	12	13	14
All causes	Certified Uncertified	608 3	20 -	3 -	6 -	11 -	7 -	17 -	19 -	49 -	96 2	167 1	213 -	156 -
1 Typhoid and Paratyphoid fevers		-	-	-	-	-	-	-	-	-	-	-	-	-
2 Measles		4	2	-	-	1	-	-	1	-	-	-	-	-
3 Scarlet fever		-	-	-	-	-	-	-	-	-	-	-	-	-
4 Whooping cough		-	-	-	-	-	-	-	-	-	-	-	-	-
5 Diphtheria		1	-	-	-	1	-	-	-	-	-	-	-	1
6 Influenza		-	-	-	-	-	-	-	-	-	-	-	-	-
7 Encephalitis lethargica		-	-	-	-	-	-	-	-	-	-	-	-	-
8 Cerebro-Spinal fever		-	-	-	-	-	-	-	-	-	-	-	-	-
9 Tuberculosis of respiratory system		31	-	-	-	1	5	8	5	6	3	2	1	26
10 Other Tuberculous diseases		2	-	-	1	-	-	1	-	-	-	-	-	3
11 Syphilis		-	-	-	-	-	-	-	-	-	-	-	-	-
12 General Paralysis of the insane, tabes dorsalis		1	-	-	-	-	-	-	1	-	-	-	-	-
13 Cancer (malignant disease)		108	-	-	-	1	-	-	2	10	30	40	25	24
14 Diabetes		6	-	-	-	-	-	-	-	2	2	-	2	1
15 Cerebral hæmorrhage, etc.		61	-	-	-	-	-	-	-	5	11	17	28	6
16 Heart disease		143	-	-	-	-	1	3	3	4	22	50	60	7
17 Aneurysm		5	-	-	-	-	-	-	-	1	1	2	1	-
18 Other circulatory diseases		63	-	-	1	-	-	-	1	1	6	19	35	4
19 Bronchitis		22	-	-	-	1	-	-	-	2	1	7	11	3
20 Pneumonia, (all forms)		24	1	-	1	-	-	1	-	3	5	5	8	9
21 Other respiratory diseases		10	-	-	1	-	-	-	1	2	2	1	3	6
22 Peptic ulcer		4	-	-	-	-	-	-	-	1	1	1	1	6
23 Diarrhoea, etc. under 2 years		4	3	1	-	-	-	-	-	-	-	-	-	1
24 Appendicitis		5	-	-	-	1	-	-	1	1	-	2	-	3
25 Cirrhosis of liver		2	-	-	-	-	-	-	-	1	-	-	1	1
26 Other diseases of liver, etc.		5	-	-	-	-	-	-	-	-	-	2	3	-
27 Other digestive diseases		9	-	-	-	-	-	-	1	1	2	3	2	5
28 Acute and chronic nephritis		17	-	-	-	-	-	-	1	-	4	6	6	5
29 Puerperal sepsis		-	-	-	-	-	-	-	-	-	-	-	-	-
30 Other puerperal causes		2	-	-	-	-	-	1	1	-	-	-	-	2
31 Congenital debility, premature birth, malformations, etc.		14	14	-	-	-	-	-	-	-	-	-	-	12
32 Senility		12	-	-	-	-	-	-	-	-	-	1	11	-
33 Suicide		7	-	-	-	-	-	1	-	3	2	-	1	-
34 Other violence		15	-	1	-	2	1	1	-	5	1	1	3	10
35 Other defined causes		31	-	1	2	1	-	1	1	1	5	9	10	20
36 Causes ill-defined or unknown		3	-	-	-	2	-	-	-	-	-	-	1	1
TOTALS		611	20	3	6	11	7	17	19	49	98	168	213	156

75-85	85-95	95-105
150	59	4

For the year ending 31st March 1900

No.	Description of Land	Acres	Value	Rent	Tax	Total
1	1. 1st Class	100	100	10	10	120
2	2. 2nd Class	200	200	20	20	240
3	3. 3rd Class	300	300	30	30	360
4	4. 4th Class	400	400	40	40	480
5	5. 5th Class	500	500	50	50	600
6	6. 6th Class	600	600	60	60	720
7	7. 7th Class	700	700	70	70	840
8	8. 8th Class	800	800	80	80	960
9	9. 9th Class	900	900	90	90	1080
10	10. 10th Class	1000	1000	100	100	1200
11	11. 11th Class	1100	1100	110	110	1320
12	12. 12th Class	1200	1200	120	120	1440
13	13. 13th Class	1300	1300	130	130	1560
14	14. 14th Class	1400	1400	140	140	1680
15	15. 15th Class	1500	1500	150	150	1800
16	16. 16th Class	1600	1600	160	160	1920
17	17. 17th Class	1700	1700	170	170	2040
18	18. 18th Class	1800	1800	180	180	2160
19	19. 19th Class	1900	1900	190	190	2280
20	20. 20th Class	2000	2000	200	200	2400
21	21. 21st Class	2100	2100	210	210	2520
22	22. 22nd Class	2200	2200	220	220	2640
23	23. 23rd Class	2300	2300	230	230	2760
24	24. 24th Class	2400	2400	240	240	2880
25	25. 25th Class	2500	2500	250	250	3000
26	26. 26th Class	2600	2600	260	260	3120
27	27. 27th Class	2700	2700	270	270	3240
28	28. 28th Class	2800	2800	280	280	3360
29	29. 29th Class	2900	2900	290	290	3480
30	30. 30th Class	3000	3000	300	300	3600
31	31. 31st Class	3100	3100	310	310	3720
32	32. 32nd Class	3200	3200	320	320	3840
33	33. 33rd Class	3300	3300	330	330	3960
34	34. 34th Class	3400	3400	340	340	4080
35	35. 35th Class	3500	3500	350	350	4200
36	36. 36th Class	3600	3600	360	360	4320
37	37. 37th Class	3700	3700	370	370	4440
38	38. 38th Class	3800	3800	380	380	4560
39	39. 39th Class	3900	3900	390	390	4680
40	40. 40th Class	4000	4000	400	400	4800
41	41. 41st Class	4100	4100	410	410	4920
42	42. 42nd Class	4200	4200	420	420	5040
43	43. 43rd Class	4300	4300	430	430	5160
44	44. 44th Class	4400	4400	440	440	5280
45	45. 45th Class	4500	4500	450	450	5400
46	46. 46th Class	4600	4600	460	460	5520
47	47. 47th Class	4700	4700	470	470	5640
48	48. 48th Class	4800	4800	480	480	5760
49	49. 49th Class	4900	4900	490	490	5880
50	50. 50th Class	5000	5000	500	500	6000
51	51. 51st Class	5100	5100	510	510	6120
52	52. 52nd Class	5200	5200	520	520	6240
53	53. 53rd Class	5300	5300	530	530	6360
54	54. 54th Class	5400	5400	540	540	6480
55	55. 55th Class	5500	5500	550	550	6600
56	56. 56th Class	5600	5600	560	560	6720
57	57. 57th Class	5700	5700	570	570	6840
58	58. 58th Class	5800	5800	580	580	6960
59	59. 59th Class	5900	5900	590	590	7080
60	60. 60th Class	6000	6000	600	600	7200
61	61. 61st Class	6100	6100	610	610	7320
62	62. 62nd Class	6200	6200	620	620	7440
63	63. 63rd Class	6300	6300	630	630	7560
64	64. 64th Class	6400	6400	640	640	7680
65	65. 65th Class	6500	6500	650	650	7800
66	66. 66th Class	6600	6600	660	660	7920
67	67. 67th Class	6700	6700	670	670	8040
68	68. 68th Class	6800	6800	680	680	8160
69	69. 69th Class	6900	6900	690	690	8280
70	70. 70th Class	7000	7000	700	700	8400
71	71. 71st Class	7100	7100	710	710	8520
72	72. 72nd Class	7200	7200	720	720	8640
73	73. 73rd Class	7300	7300	730	730	8760
74	74. 74th Class	7400	7400	740	740	8880
75	75. 75th Class	7500	7500	750	750	9000
76	76. 76th Class	7600	7600	760	760	9120
77	77. 77th Class	7700	7700	770	770	9240
78	78. 78th Class	7800	7800	780	780	9360
79	79. 79th Class	7900	7900	790	790	9480
80	80. 80th Class	8000	8000	800	800	9600
81	81. 81st Class	8100	8100	810	810	9720
82	82. 82nd Class	8200	8200	820	820	9840
83	83. 83rd Class	8300	8300	830	830	9960
84	84. 84th Class	8400	8400	840	840	10080
85	85. 85th Class	8500	8500	850	850	10200
86	86. 86th Class	8600	8600	860	860	10320
87	87. 87th Class	8700	8700	870	870	10440
88	88. 88th Class	8800	8800	880	880	10560
89	89. 89th Class	8900	8900	890	890	10680
90	90. 90th Class	9000	9000	900	900	10800
91	91. 91st Class	9100	9100	910	910	10920
92	92. 92nd Class	9200	9200	920	920	11040
93	93. 93rd Class	9300	9300	930	930	11160
94	94. 94th Class	9400	9400	940	940	11280
95	95. 95th Class	9500	9500	950	950	11400
96	96. 96th Class	9600	9600	960	960	11520
97	97. 97th Class	9700	9700	970	970	11640
98	98. 98th Class	9800	9800	980	980	11760
99	99. 99th Class	9900	9900	990	990	11880
100	100. 100th Class	10000	10000	1000	1000	12000

VITAL STATISTICS OF TORQUAY DURING 1938 AND PREVIOUS TEN YEARS.

YEAR.	Population estimated to Middle of each Year by Registrar General.	BIRTHS			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		Net Deaths belonging to the District.			
		Un-corrected Number.	Net.		Number.	Rate.	of Non-Residents registered in the District.	of Residents not registered in the District.	Under 1 year of age		At all ages.	
			Number.	Rate.					Number.	Rate per 1,000 Net Births		
	2	4	5	6	7	8	9	10	11	12	13	
1928	38170	559	557	14.5	539	14.1	74	81	28	50	547	14.3
1929	39480	547	529	13.3	605	15.3	74	82	27	51	613	15.5
1930	39480	556	539	13.6	637	16.1	92	69	37	68	614	15.5
1931	42700	594	571	13.3	613	14.3	85	93	32	54	621	14.5
1932	44050	532	499	11.3	628	14.2	19	87	25	50	626	14.2
1933	44050	565	529	12.0	628	14.2	97	104	26	49	635	14.4
1934	44040	544	493	11.2	619	14.6	102	91	24	48	608	13.8
1935	44700	577	535	11.9	623	13.9	112	100	21	39	611	13.6
1936	44830	582	543	12.1	637	14.2	98	111	28	52	650	14.5
1937	44630	545	507	11.4	680	15.2	114	98	23	45	664	14.9
1938	44440	563	496	11.2	643	14.5	127	95	20	40	611	13.8

SECTION B.

GENERAL PROVISION OF HEALTH SERVICES FOR
THE AREA.

1. (i) *Full particulars of the Public Health Officers of the Authority*, including their duties, are incorporated in the beginning of the Report.

In April, Dr. L. G. Anderson, Deputy Medical Officer of Health was appointed Medical Officer of Health to the Docking Rural District and Assistant Medical Officer to the County of Norfolk; and the vacancy was filled by Dr. W. J. Hogg, of Aberdeen, who took up his duties in July. During the intervening period Dr. A. E. Druitt acted as Temporary Assistant Medical Officer.

In December Mr. W. H. Bradbeer, M.S., was appointed part-time Aural Surgeon in the Aural Scheme which including as it does pre-school children, school children, and patients at the Isolation Hospital, was to come into operation at the beginning of 1939.

The vacancy on the Health Visiting Staff was filled by Miss V. E. Powell, who started work in January; and Miss M. B. Davies, B.A., succeeded Mrs. Grugeon as part-time Orthoptist in April.

(ii) (a) *Laboratory Facilities.*

Arrangements are made for swabs, sputa and other materials to be examined by Dr. H. A. Fielden, Honorary Pathologist and Bacteriologist to the Torbay Hospital.

A number of swabs, milk and other examinations are carried out by the Medical Officer of Health at the Municipal Laboratory; and certain specimens, with routine milk samples, are sent to the County Laboratory, Exeter (administered by the County Council).

The following table shows the work carried out during the year :—

Municipal Laboratory (by the Medical Officer of Health)—

Throat Swabs	359
Milk Examinations	191
Other Examinations	17

By Dr. H. A. Fielden—

Throat Swabs	83
Sputa, etc.	54
Other Examinations	27

(b) *Ambulance Facilities.*

The arrangements for the Joint Fire Brigade and Ambulance Service remain unchanged ; the personnel of the combined Service is the Chief Officer, 10 whole-time men trained in fire and ambulance work, 15 retained firemen and a night telephonist.

Both the personnel and the ambulances provide an adequate and efficient service for the needs of the area—a service which is maintained by the Corporation.

(c) *Nursing in the Home.*

The arrangements made with the Queen's Institute for District Nursing and the St. Marychurch and Babbacombe Nursing Association, in addition to other duties, provide for domiciliary nursing of minor ailments and of cases of infectious disease, like whooping-cough, measles, influenza and pneumonia. This should prove very valuable when institutional accommodation cannot be provided ; because skilled nursing is necessary in these diseases and is often not obtained.

(d) *Treatment Centres and Clinics.*

The following is a tabulated list of all clinics and treatment centres in the area :—

Service	Situation	Days open	Remarks
Controlled by Maternity and Child Welfare Committee.			
Maternity and Child Welfare	Barton School Clinic	Tuesday 2.30 p.m.	Infant Welfare Centres
	St. Marychurch Parish Hall	Thursday 2.30 p.m.	
	Primitive Methodist Schoolroom, Market Street	Friday 2.30 p.m.	
	Castle Road School Clinic	Friday 2 p.m.	M. and C. W. Dental Clinic
	Torbay Hospital	Thursday 2.30 p.m. 4.30 p.m.	Ante-Natal Clinic Post-Natal Clinic
Controlled by the Torquay Education Committee.			
School Medical	Castle Road	Tues., Wed., Thurs. and Sat. 9 a.m. Mon. and Fri. 2 p.m.	Minor Ailments Clinic
	Ditto	Thurs. 2 p.m.	Ophthalmic Clinic
	Ditto	Daily except Mon. afternoon	Dental Clinic
	Ditto	Mon. and Thurs.	Orthoptic Clinic
	Barton School Clinic	Daily at 9 a.m.	Minor Ailments Clinic
	Ditto	Monday at 2 p.m.	Dental Clinic
Controlled by the Devon County Council			
Tuberculosis	Whitecliff Hospital	Monday 2 p.m.	Tuberculosis Dispensary
Venereal Diseases	Torbay Hospital	Tues. and Wed., 5.30 p.m. Thur. 5 p.m.	Clinic for men only Clinic for women and children only
Controlled by the Voluntary Association, The Devonian Association for Cripples' Aid			
Orthopædic	Castle Chambers	Wednesday all day	Orthopædic Clinic ; Surgeon attends 2nd and 4th Wednesdays

(e) *Hospitals: Public and Voluntary.*

There has been no change in the Hospital arrangements of the Borough.

During the year the scheme for the extensions at the Isolation Hospital was approved and building operations are well advanced ; provision is being made for a block of twelve cubicles, a small operating theatre, addition to the Nurses' Home and administrative block, together with a new laundry, disinfector and mortuary. A hard tennis court for the nurses is also included.

3. (i) *Midwifery and Maternity Services. Midwives Acts.*

The Borough of Torquay is the Local Supervising Authority under the Midwives Acts, and the Medical Officer of Health is the Supervisor of Midwives.

During 1938 notice of intention to practise was received from 29 midwives ; of these 9 were on the staff of the Torbay Hospital, 7 were on the staff of the Queen's Institute for District Nursing, 5 were on the staff of the St. Marychurch and Babbacombe Nursing Association, 7 were in private practice, and one, a County District Nurse, practises occasionally within the Borough boundary.

The following table gives the number of cases attended during the year :—

	As Midwives	As Maternity Nurses
By staff of Torbay Hospital	181	35
* „ „ Queen's Institute for District Nursing	109	48
* „ „ St. Marychurch and Babbacombe Nursing Association	89	29
„ Midwives in private practice (Domiciliary)	1	9
„ „ „ (Nursing Homes)	8	54

(*Under arrangements made with the Local Supervising Authority in pursuance of Section 1 of the Midwives Act, 1936).

Under the rules of the Central Midwives Board the midwives are required to notify the Local Supervising Authority of certain circumstances, and the following notifications were received :—

(a) Sending for Medical Aid	...	...	86
(b) Notification of deaths:			
Mother	...	...	—
Infant	...	...	1
(c) Notification of stillbirths	...	...	1
(d) Notification of having laid out a dead body			—
(e) Notification of liability to be a source of infection	...	...	5
(f) Notification of artificial feeding	...	...	10

The following table gives the reasons for which medical aid was sought on the 86 occasions by midwives :—

(a) *Condition of Mother.*

During Pregnancy—

Ante-partum hæmorrhage	...	1
Albuminuria	...	—
Excessive vomiting	...	—
Purulent discharge	...	—
Abdominal pain and rise of temperature	...	—
Abnormal presentation	...	1

During Labour—

Prolonged labour and Uterine inertia	...	18
Abnormal presentations	...	10
Excessive hæmorrhage	...	1
Adherent Placenta	...	3
Rupture of perineum	...	24
Unsatisfactory condition of mother	...	2

During Lying in Period—

Rise of temperature to 100.4 deg., F.	...	4
Post-partum hæmorrhage	...	1
Phlebitis	...	4

(b) *Condition of Infant*

Any malformation or deformity endangering child's life	...	—
Dangerous feebleness	...	7
Discharging eyes	...	6
Cyanosis	...	1
Other Reasons	...	3

In June 1938 the Central Midwives Board, with the approval of the Minister of Health, rescinded Rule E.13, which required a midwife whenever possible to call in the doctor desired by the patient (or if the patient could not be

consulted, by the responsible relative of the family) ; and in connexion with Circular 1705, a list was prepared of medical practitioners who are willing to be called in by midwives. This list was circulated to the midwives employed under the arrangements made in accordance with Section 1 of the Midwives Act, 1936, with instructions to summon in an emergency a practitioner whose name is on the list, unless there are exceptional circumstances. Any alterations or amendments to the list are also notified to the midwives.

Furthermore an Advisory Committee was formed, which meets at intervals of six months (or more frequently if required), and makes appropriate recommendations to the Local Supervising Authority. The Advisory Committee consists of your Medical Officer of Health as Chairman, Dr. P. A. McCallum and Dr. B. Venn Dunn (Obstetric Consultants), Dr. A. E. Carver and Dr. E. Catford.

Midwives Act, 1936.

On 31st July, 1936, this Act became law, and the Local Supervising Authority was charged with the duty of preparing a scheme. The object of the scheme was to secure the organisation of a domiciliary service of salaried midwives, under the control of the Local Supervising Authority, to raise the status of the midwifery profession by providing adequate salaries and secured prospects with pension rights, and in general to make an important advance in the improvement of the maternity services in the essentially invaluable campaign for reducing maternal mortality and maternal morbidity.

The Scheme prepared under this Act began on 1st April, 1937, and has been in satisfactory operation during 1938 ; the arrangements in Torquay provide for the utilisation of the two voluntary organisations, the Queen's Institute for District Nursing and the St. Marychurch and Babbacombe Nursing Association, for which annual grants of £260 and £130 respectively are paid by the Borough.

As will be seen from the table showing the number of cases attended by midwives during the year, the whole of the domiciliary midwifery except for a few private cases is carried out by these two Associations.

(b) Ante-Natal Services.

The ante-natal clinic, which has been held for some years at the Torbay Hospital, is satisfactory and the general arrangements are unaltered ; but provision has now been made for one of the health visitors to attend this clinic each week to maintain contact and to follow up with home visits any cases in which this is required.

An extension of the ante-natal service was arranged as a general practitioner's section of the scheme whereby no case is dealt with by the midwives on the district without a medical examination at the ante-natal clinic or by a private doctor (except in the rare cases in which the woman refuses this). Two ante-natal examinations are arranged (a general examination early in pregnancy and an obstetrical examination at about the 36th week of pregnancy) ; and, if required, further examinations are available under the Midwives Act. Cases can also be sent by the practitioner to the ante-natal clinic for consultative opinion. A special form is filled up by the doctor and appropriate instructions, as the case may require, are given to the midwife ; and so far the scheme is working very satisfactorily, all cases having been seen at the clinic or by a doctor.

The following is a summary of the work carried out at the clinic and by the private practitioners :—

(i)	Total number of attendances at the Clinic during the year	794
(ii)	Total number of women who attended at the Clinic during the year	237
(iii)	Total number of expectant mothers examined ante-natally during the year, under arrangements made by the Council with private medical practitioners, excluding cases included under (ii)	112
(iv)	Percentage of total notified births (live and still) represented by the total numbers of women shown under (ii) and (iii)	69.0

In addition, two beds are now provided at the Torbay Hospital for ante-natal cases and the Local Authority is responsible for the cost ; during 1938, nine cases were admitted for ante-natal treatment.

(c) *Maternity Accommodation in Hospital.*

There is adequate accommodation at the Torbay Hospital for lying-in patients, nine beds being available and the Local Authority accepts responsibility for payment of maintenance and medical treatment on account of mothers who are unable to pay the full cost.

Cases are recommended for this provision because of probable complications, on account of previous difficult confinements, or owing to unsuitable home conditions or for other general reasons. Certain emergency cases sent from the district owing to unforeseen difficulties suddenly arising, are also paid for by the Authority when the patients are unable to meet the full charge of maintenance.

During 1938, 189 cases were admitted to the Maternity Ward, and 105 were Council aided.

(d) *Consultant Service and Emergency Units.*

Dr. P. A. McCallum, Hon. Obstetric Physician at the Torbay Hospital, and Mr. B. Venn Dunn, Hon. Assistant Surgeon at the Torbay Hospital, are Obstetric Consultants for the Borough; and an emergency unit (consisting of the consultant, anæsthetist, nurse, sterilised equipment and blood transfusion) is also available for any domiciliary case which might be too ill to move to hospital.

The services of the Consultants were utilised on five occasions during the year.

(e) *Post-Natal Services.*

A post-natal Clinic has been started at the Torbay Hospital; and arrangements have been made for cases requiring it to have the required gynæcological treatment either as out-patients or as in-patients.

A general practitioner's section of the post-natal service has also been established, and cases can also be sent to hospital for treatment after the post-natal examination at home.

The number of post-natal examinations is shown in the following table:—

(i)	Total number of attendances at the Clinic during the year	105
(ii)	Total number of women who attended at the Clinic during the year	88
(iii)	Total number of mothers examined post-natally during the year, under arrangements made by the Council with private medical practitioners, excluding cases included under (ii)	87
(iv)	Percentage of total notified births (live and still) represented by the total numbers of women shown under (ii) and (iii)	34.5

It is more difficult to get the mothers to appreciate the need for a post-natal examination, but by individual personal explanation to each mother it is hoped that this section will develop considerably. The day will then be appreciably nearer when every mother, within a reasonable time after her confinement, will be restored to full physiological activity and normal health.

(f) *Provision of Milk.*

The arrangements for the supply of milk to expectant and nursing mothers and to infants and children under 5 years of age have remained unchanged, and the scheme is working satisfactorily. During the year 7,824 gallons of milk were supplied at an approximate cost of £854.

This provision is of inestimable value, for the importance of milk in diet cannot be over estimated. As a Nation the consumption of milk is much too low; the needs of an expectant or nursing mother are great averaging two pints a day, while children need from one to two pints a day, and other members of the community at least half a pint.

Enough knowledge has been shed on the problem of nutrition, and the opportunities and potentialities are immense; and it has wisely been said that "If the new science of nutrition is about to be applied for the welfare of the people, we are on the eve of what will be the greatest social reform of the century."

(g) *Home Helps.* The provision of home helps has been arranged by which suitable women will act in this capacity and do the house-work while the mother is in hospital or at home in bed. The services of home helps were utilised on 8 occasions during the year.

It will be evident from the above sections that midwifery practice is essentially one for the close co-operation and the combined effort of all the personnel engaged in it; and moreover it is obvious that the facilities provided must be fully utilised by the mothers, and by the team of health visitors, midwives, general practitioners, medical officers of clinics, medical staffs of hospitals, consultants and the medical officer of health. To assist in maintaining co-operation, meetings are held periodically at which the consultants, practitioners, and your Medical Officer can discuss any matters in connexion with the Maternity Scheme.

The best results will only be obtained if all the workers act together as a team, and literally and metaphorically play the game, even though it means individual effacement here and there. And it is sincerely hoped that it will be true—

“ Where order in variety we see,

And where, though all things differ, all agree ; ”

for then success will be nearer, and then the maternity services can travel hopefully to reach the goal of safe motherhood.

(h) *Maternal Mortality.*

There were two maternal deaths and the maternal death-rate was 3.87 compared with 5.64 in 1937; the average for Torquay for the past five years was 3.73. The rate for England and Wales in 1938 was 2.97, the maternal mortality for puerperal sepsis being 0.86, and for other accidents and diseases of pregnancy and parturition 2.11; the average rate for England and Wales for the past five years was 3.62. Owing to what is statistically called paucity of data, it is not very satisfactory and may be misleading to compare the annual rates for Torquay and for England and Wales. The maternal death-rate is calculated on the number of deaths due to diseases of pregnancy, childbirth, and the puerperal period per 1,000 registered live and stillbirths; and as there are only just over 500 births in Torquay the maternal mortality is liable to rather wide variations, because each death increases the rate by approximately 2 per 1,000.

(i) *Infant Welfare Centres.*

The work at the three Centres held each week can be summarised as follows :—

		Total Attendances	Children under 1	Children 1 to 5	New Admissions
Barton Centre					
(Tuesday afternoon)	...	2997	1399	1598	105
St. Marychurch Centre					
(Thursday afternoon)	...	2163	1130	1133	80
Market Street Centre					
(Friday afternoon)	...	3392	1910	1482	179

The medical arrangements are unaltered, and the Deputy Medical Officer of Health is present at each Centre for consultation ; one of the Health Visitors is also present and acts as an important link between the medical consultation and home visiting, being able to follow up each case and ensure as far as possible that the advice is being carried out or that the necessary treatment is being obtained. A District Nurse from the Queen's Institute or from the St. Marychurch and Babbacombe Nursing Association also attends to weigh the children.

The Medical Officer sees each baby when normal progress is being made, weekly up to two months, fortnightly up to six months, monthly from six months to twelve months, and three-monthly from one year to school age ; and others are seen as occasion demands.

The social aspect of each Centre is in the hands of a Committee of Voluntary Workers, and your Medical Officer gratefully acknowledges the very willing assistance constantly given by all those helpers who so regularly attend. Perhaps much more satisfying than the gratitude which the Maternity and Child Welfare Service obviously owes for such courtesies, these voluntary workers can certainly feel that their efforts contribute in no small degree to the successful results which are obtained.

Children under School Age.

Maternity and Child Welfare Authorities have heavy responsibilities since much of their work has for its objective the preservation of infant life, the prevention of defects and the maintenance of good physique during the first few years of the growing child.

After the period of infancy has passed, many mothers do not appreciate the need for maintaining regular, even if less frequent, attendance at the Welfare Centres ; and every effort is made to ensure that as many "toddlers" as possible attend periodically for a full clinical examination by the Medical Officer. For by the medical supervision at the Centre, and by more frequent home visiting, any suspected defect or incipient disease will be ascertained at the earliest possible moment, and referred to private doctors or clinic for appropriate treatment ; while the mothers will be still further impressed with the necessary advice in the care and management of the children.

It is gratifying that all the School Clinic facilities are available for the pre-school children ; and the most recent addition to these facilities is the Aural Scheme. Following the Report of the Board of Education on children with defective hearing, a scheme was submitted by your Medical Officer and approved, in which pre-school children, school children and patients at the Isolation Hospital will share. Mr. W. H. Bradbeer, M.S. Lond., D.L.O., has been appointed Aural Surgeon and an aural clinic will be held once a fortnight, to which cases of defective hearing and ear disease will be referred for specialist treatment.

The best treatment of deafness is prevention, and the best age for prevention is the earliest possible age ; and this scheme should prove yet another invaluable addition to the Health Services of the Borough.

In addition, the Education Authority when considering the provision of new premises for their Open-Air School, have included an Open-Air Nursery School for 40 selected children ; the site has been acquired and the plans have received the preliminary approval of the Board of Education. A good home is always the best place for bringing up a child, but unfortunately this is not yet universally obtainable ; and enormous benefit will be obtained by the provision of an Open-Air Nursery School, supplemented later by nursery classes at the ordinary schools.

All these developments towards the full comprehensive scheme augur well for the rich harvest that awaits careful attention and efficient nurture during the pre-school age period.

(ii) *Institutional Provision for Mothers or Children.*

The arrangements for institutional provision for children are unaltered; there is no institutional provision for mothers other than that described under *Maternity Services*.

(iii) *Health Visitors.*

There are three Health Visitors, each of whom devotes a small part of her time to School Medical work; and taking the Nursing Staff of the Public Health and the School Medical Service there is the equivalent of $2\frac{1}{2}$ Nurses for health visiting and $1\frac{1}{2}$ for school work.

A summary of the work is shown in the following:—

RECORD OF WORK OF HEALTH VISITORS, 1938.

Visits paid by Health Visitors:—

To expectant mothers	(1) First visits	79	(2) Total visits	138
To infants under 1 year	(2) „	474	(2) „	1902
To infants under 1—5 years			„	3674
Still births investigated			„	16
Miscellaneous visits			„	219
Cases out when visited			„	1299
Cases removed			„	390
Cases under Children and Young Persons Acts (5 to 9 years)			„	83
Total visits				7721

Attendances at the Welfare Centres ... 146

Cases not considered necessary to visit ... 10

In cases of removal particulars are sent to the Medical Officer of Health of the district to which the parents have gone; records of 190 cases were sent to other Authorities and the cases of 87 children from other areas were enquired into, while 60 removals could not be traced.

Excellent work is being carried out by the Health Visitors, and it is not easy to over-estimate the value of their visits and of their advice to the individual mother. Possibly we expect too much of the average working-class mother; she is expected to be a capable housewife, to keep her house clean, to plan her money, to have a knowledge of food values, to buy in the right markets, to cook well, to clothe and care for her children—in short, she is expected to do the combined duties which are usually shared between several individuals in the so-called “better class” families, who in addition have the

advantage of more education. Small wonder is it that few attain this high standard. And it is only by the individual advice helpfully given, yes and repeatedly given, which the Health Visitor alone can do, that any progress is to be expected.

During the year, it was resolved that one of the Health Visitors should attend a refresher course each year; and this will be a valuable means of rekindling their enthusiasm and of renewing their knowledge with fresh interests and fresh ideas. And in addition, there is the benefit of the contacts formed with similar workers from other areas.

(iv) *Child Life Protection.*

The Borough of Torquay administers this work which provides for the supervision of all children under 9 years of age, who are placed as foster-children for payment apart from their parents.

The Health Visitors act as Child Protection Visitors, and their work in this capacity is summarised below. Generally it is found that the children are well cared for, although an occasional case arises when special vigilance is required to prevent unfortunate results. Foster-children are visited at much more frequent intervals than is the case with the routine health visiting.

No. of visits paid to and on behalf of foster-children	305
No. of persons on the Register who were receiving children at the beginning of the year	...
No. of persons on the Register who were receiving children at the end of the year	24
No. of foster-children at the beginning of the year	24
No. of foster children at the end of the year	28
	29

(v) *Dental Department.*

REPORT BY NORMAN HARRIS, L.D.S., R.C.S.

The work done at the Dental Clinic shows each year a steady increase. Compared with 1937, a larger number of patients have been seen, the number of fillings have increased, and the number of extractions, both temporary and permanent, have diminished. The figures for 1938 with those of the previous year in brackets, are appended herewith.

The number of patients who attended the Dental Clinic was 196 (189), most of these patients having been referred from the Medical Officer at the Infant Welfare Centre, or from the Ante-Natal Clinic. The patients made a total of 334 (297) attendances.

One afternoon session a week is devoted to Welfare work at the Castle Road Clinic, though in actual practice some patients are also seen at the Barton Clinic, that being more convenient for mothers and small children in that district. Extractions under nitrous oxide (gas) anæsthesia are performed on Wednesday mornings, during part of the session devoted to school children for that purpose.

The work done was as follows :—

	Fillings	Extractions	Other Operations
Permanent Teeth	31 (19)	509 (588)	126 (140)
Temporary Teeth	8 (7)	147 (198)	57 (57)

The Medical Officer administered general anæsthesia on 103 (126) occasions for the removal of 360 (397) permanent and 130 (206) temporary teeth. Whilst the number of extractions as compared with the number of fillings is large, the condition of a very large proportion of the mouths seen in the mothers referred to the Clinic, is so bad that only radical treatment is effective. It has however been gratifying during the last year to have some mothers requesting conservative work, and to find an increasing number of mouths where conditions justify filling.

It is still apparent that in the younger mothers, little, if any, dentistry has been performed during the period commencing at school leaving age. It can be well imagined that ten years spent without a visit to a dentist may lead in many cases to a disastrous condition in the mouth when the patient does eventually attend the Clinic. It is somewhat discouraging to look back at the record cards of the mothers when they were at school and to find that they had periodical inspections and treatment, leaving school with an excellent denture, and then to find all the good work nullified by lack of subsequent care. Undoubtedly the cost of conservative dentistry at a period when a young girl is not earning much money and probably contributes a proportion of her small income to her parents renders it a problem which will probably only be solved when insurance benefit is extended to those

who have just left school. At present a period of five years elapses before the insured person, under certain circumstances only, becomes eligible for treatment.

Talks on oral hygiene are given to patients at the chair-side, and advice has been given on 166 occasions, whilst 29 scaling operations have been performed. Two cases of Vincent's Angina (ulcerative stomatitis) have been treated and discharged as cured.

Patients who have had the necessary extractions performed, are advised with reference to the arrangements to provide dentures, and in a limited number of necessitous cases, assistance has been provided. Nine cases were referred to the Medical Officer of Health, in connexion with a scheme whereby the Public Health Committee authorise a grant towards the cost of dentures; six cases were referred to the Council of Social Service, and one to the League of Help, these organisations having very kindly afforded financial assistance.

(vi) *Orthopædic Treatment.*

The arrangements under this scheme are unaltered, and a Voluntary Association, the Devonian Association for Cripples' Aid is responsible for the organisation. The work is invaluable, for crippling is on the whole preventible; and with early ascertainment, prompt adequate treatment, continuous after-care, the day must surely be nearer when crutches, calipers and irons will lie as rusty relics on the walls of our museums.

A summary of the work is given below :—

No. of cases on Clinic Register at beginning of year	38
No. of new cases during year	30
Conditions under treatment were :—	
Rickets	7
Kyphosis and scoliosis	1
Genu valgum	17
Genu varum	5
Talipes varus	5
Pes planum	5
Calcaneo valgum	2
Intoeing	6
Polio-encephalitis	1
Infantile paralysis	1
Spastic hemiplegia and paraplegia	4
Erb's paralysis	1
Congenital dislocation of hip	4
Other congenital deformities	3
Torticollis	1
Nothing abnormal found	5

No. of transfers out and discharges during year	...	24
Transfers to Education Department	...	12
Discharged cured	...	3
„ improved	...	1
„ no orthopaedic treatment advised	...	2
„ refusing to co-operate	...	1
„ non-attendance	...	5
No. of cases in Hospital at beginning of year	...	1
No. of cases admitted to Hospital during year	...	5
No. of cases in Hospital at end of year	...	1
Total attendances at Clinic during year	...	228
No. of cases on Clinic Register at end of year	...	44

4. *Registration of Nursing Homes.*

(i) *State fully the arrangements made for the Supervision of Nursing Homes (including Maternity Homes) and for the Discovery of Unregistered Homes.*

During the year, bye-laws which had been approved by the Corporation and confirmed by the Minister of Health came into operation. The inspection of Nursing Homes is undertaken by your Medical Officer or his Deputy; and routine inspections are carried out each quarter, together with additional inspections when any special circumstances arise.

The co-operation of the local Division of the British Medical Association is welcomed in making the provisions of the Act known to any person who should apply for registration, and in assisting the Health Department in tracing unregistered Homes. A list of registered nursing homes is sent periodically to every doctor.

(ii) *State any action taken during the year in regard to unsatisfactory Homes*

During the year one case was discovered where premises had been used on one occasion as a Maternity Home; taking into account the circumstances, it was decided to send a strong warning with the intimation that proceedings would be instituted for any subsequent infringement of the Act.

(iii) *Note any difficulties which have arisen.*

There is nothing to report under this heading.

The following are the details of registration :—

(i) No. of applications for Registration during 1938	...	1
(ii) No. of Homes registered	...	1
(iii) No. of Orders made refusing or cancelling Registration	—	
(iv) No. of appeals against such orders	...	—
(v) No. of cases in which orders have been—		
(a) confirmed on appeal	...	—
(b) disallowed	...	—
(vi) No. of applications for exemption from registration	...	6
(vii) No. of cases in which exemption has been—		
(a) granted	...	6
(b) withdrawn	...	—
(c) refused	...	—
(viii) No. of Homes on the Register at the end of 1938	...	15

SECTION C.

SANITARY CIRCUMSTANCES OF THE AREA.

1. (i) *Water.*

The Borough Water Engineer, Mr. Norman G. Elliot, M.Sc., A.M.Inst.C.E., has kindly supplied the following details.

"No new sources of public water supply have been tapped during the last year.

Four miles of distribution mains have been laid in the Borough of Torquay.

In view of the possibility of contamination a procedure has been adopted for notifying the Medical Officer of Health when any service reservoir is emptied for inspection or repairs and, if workmen have been engaged in the reservoir while empty, it has been arranged that the reservoir shall be sterilised with bleaching powder before being put into commission and the Medical Officer of Health shall be notified.

The supply of water has been satisfactory (a) in quality, and (b) in quantity."

Chemical analysis and bacteriological examination are made each month; these analyses remain singularly consistent, and the following is a representative result:—

CHEMICAL RESULTS IN PARTS PER 100,000

Appearance	...	...	Bright and clear
Colour	...	...	Normal
Odour	...	...	Nil
Total Solids 180 deg. C.	...	...	6.5
pH	...	...	8.2
Chlorine in Chlorides	...	...	1.5
Nitrogen in Nitrates	...	...	0.04
" Nitrites	...	...	Nil
Hardness	Permanent 3.4	Temporary 1.8	
Free Ammonia	...	...	0.0002
Albuminoid Ammonia	...	...	0.0044
Oxygen absorbed in 3 hours at 37 deg. C.	...	...	0.072
Metals—Lead, Copper, Zinc	...	...	Nil

BACTERIOLOGICAL RESULT :

No. of bacteria per ml. :—

 on agar 3 days at 20 deg. C. 7

 " " 2 " " 37 deg. C. 3

Bacillus coli - Absent in 100 ml.

No. of coli-aerogenes organisms
per 100 ml. Nil

Report on analyses.

This is a clear and bright water, of normal colour and soft in character; it contains no excess of saline matter and is free from metals. The water is of satisfactory organic quality and reaches a high standard of bacterial purity.

(ii) *Drainage and Sewerage.*

The Borough Engineer, Mr. P. W. Ladmore, M.Inst.C.E., has kindly supplied the details in connection with drainage and the necessary information for Sections 3 (i), (ii).

“Sewer extensions to cope with additional estates amount to approximately 1200 lin. yds. of sewer.

As is known, the Corporation have adopted the Main Drainage Scheme and contracts were advertised during the past year; and work was commenced early in the current year.”

Almost the whole of the villa residences, and the majority of hotels and boarding-houses have the most modern sanitary arrangements. There have, however, been an increasing number of applications for houses to be built with septic tank drainage in outlying parts of the Borough where sewers are not available; and the multiplication of this form of drainage gives rise to considerable anxiety. Your Medical Officer has repeatedly and consistently opposed these schemes for septic tanks, which are virtually often nothing more than cesspools with overflows; and several Ministry of Health Inquiries have been held into appeals against the Local Authority's decisions.

At a time when an extensive scheme for the modernisation of the sewerage system is being undertaken, it is greatly to be regretted that there should be an increase in any form of drainage other than main drainage. And it is opportune to be reminded, as an Authority on epidemiology recently put it, that “Here, if anywhere, we should applaud the strictest observance of sanitary law, we should not be ashamed of belonging to the strictest sect of pharisees.”

2. *Rivers and Streams. Any action taken to check the pollution of rivers or streams in the area.*

There are only two small streams, one rising near the railway at Lawes Bridge and the other at Watcombe; these are not subject to pollution other than that arising from surface road washings.

3. (i) *Closet Accommodation.*

No conversions from conservancy to water-carriage took place during the year.

(ii) *Public Cleansing.*

There is no alteration in the procedure for the collection of refuse.

The arrangements at the dust destructor are unaltered, and remain entirely satisfactory.

(iii) *Sanitary Inspection of the Area.*

The systematic inspection of all areas in the Borough has been carried out during the year by the staff under the Senior Inspector. All this work is invaluable and extremely important, and reflects the greatest credit on the staff concerned; particularly is the inspection of meat and food of a very high order.

And when it is realised that every single duty properly performed is apt to arouse opposition, it speaks well for the department that the work is done efficiently with the minimum of friction or of legal proceedings.

REPORT OF THE SENIOR SANITARY INSPECTOR.

G. E. BODY, C.R.S.I.

The following details show the number of inspectors and their main duties.

Chief Inspector:—General supervision of the District Sanitary Inspectors and all the duties of the statutory officer.

Four District Inspectors:—The town is divided into four districts ; each Inspector is responsible for:—

1. The sanitary work in connexion with the following premises:—

		S.W.	S.E.	N.W.	N.E.
Dairies	...	31	25	12	22
Cowsheds	...	6	1	4	9
Schools	...	6	3	5	7
Public conveniences	...	3	17	4	6
Work-places	...	115	80	30	76
Factories	...	18	18	7	17
Butchers' shops	...	17	15	8	17
Cooked meat shops	...	5	14	1	3
Grocers	...	28	36	27	54
Greengrocers	...	19	47	11	29
Fish fryers	...	6	5	3	5
Fishmongers	...	7	5	1	3
Bakehouses	...	11	12	3	9
Common lodging house		—	1	—	—
Tripe dresser	...	—	—	1	—
Slaughterhouses	...	1	—	1	4
Places of entertainment		4	8	—	1
Rag and bone stores	...	2	—	2	—
Shops	...	345	411	67	213
Pigsties	...	3	—	6	7
Stables	...	6	4	7	4

2. House inspection for individual nuisances and detailed information of the condition of property for Clearance Areas, reconditioning, etc., and overcrowding under the Housing Act, 1935.

3. Enquiries into cases of infectious diseases and supervision of disinfection.

4. The inspection of carcasses in slaughterhouses and butchers' shops and all foodstuffs in other shops or premises. Each Inspector takes it in turn to supervise slaughtering at the Public Abattoir one week each. The private slaughterhouses in the North East District are inspected alternately by the North East and the North West District Inspectors.

5. Supervision of drainage work and other structural alterations or repairs carried out under the Public Health Act, except the erection of new buildings.

Houses :

				TOTAL
Houses inspected	...	...	...	1190
Houses visited	...	...	...	1371
Visits to Stentiford's Hill property	...	...	...	62
Visits to Westhill and Hele properties	...	...	...	162
Dirty rooms limewashed and cleansed	...	...	...	222
Rooms disinfected	..	...	...	483
Cases of overcrowding abated	...	...	...	45
Defective floors repaired	...	...	...	58
Water supply laid direct from main to tap over sink	...	...	...	35
Defective yards re-paved	...	...	...	35
External plastering repaired	...	...	...	49
Internal " " "	...	...	...	105
Stoves repaired or new provided	...	...	...	36
Coppers repaired	...	...	...	12
R.W.P.'s and gutters repaired	...	...	...	50
Nuisances from keeping fowls and animals	...	...	...	2
Ashbins provided for house refuse	...	...	...	38
Roofs repaired	...	...	...	54
Handrails fixed and stairs repaired	...	...	...	19
Doors and door frames repaired or renewed	...	...	...	45
Windows repaired or renewed	...	...	...	105
Yards and outbuildings cleansed	...	...	...	37
Houses closed as unfit for human habitation	...	...	...	5
Houses repaired	...	...	...	49
Overcrowding survey—houses visited	...	...	...	191

Drainage :

Smoke test applied	...	...	...	1320
Water test applied	...	...	..	311
New sets of house drains laid	...	...	...	94
Defective house drains repaired	...	...	...	102
Intercepting traps fixed	...	...	...	84
Fresh air inlets fixed	...	...	...	79
Old "Masons" traps and other old types abolished	...	...	...	41
Inspection chambers to drains built	..	...	...	264
Drains ventilated to head of system	...	...	...	93
Soil pipes fixed to outside buildings and ventilated	...	...	...	86
Iron and brick traps removed and earthenware gullies fixed	...	...	...	322
Waste pipes from baths, lavatories and sinks trapped	...	...	...	226
Choked drains cleared	...	...	...	150
Defective w.c. cisterns repaired or new provided	...	...	...	185
W.C.'s repaired or new provided	...	...	...	215
Glazed sinks fixed	...	...	...	86
Lavatory basins fixed	...	...	...	157
Housemaids sinks fixed	...	...	...	4
Sanitary certificates granted	...	...	...	8
Baths fixed	...	...	...	41

Shops :

Shops inspected under Shops Act	...	...	...	291
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Five fish fryers are subject to annual licensing. The objection to this type of business is the smell associated with frying and the discarding of paper bags and wrappings in the streets in the vicinity of these shops; this is especially noticeable during the summer months while many consider that the presence of a fish and chip shop lowers the amenities of the locality.

Other Offensive Trades. One tripe dresser and nine rag and bone and marine store dealers are on the register.

Rag Flock Act. All upholsterers utilise guaranteed rag flock only. The samples analysed in the Public Health Laboratory were found to conform to the required standard.

Contagious Diseases of Animals Act. Two cases of anthrax were notified, but only one was confirmed. Five cases of Swine Fever were reported to the police, all cases being discovered among pigs slaughtered at the Slaughterhouses; all five carcasses were destroyed.

Insect Pests (Destruction) Acts. No cases were detected or notified during the year.

Rats and Mice (Destruction) Act, 1919. Each District Inspector supervises the treatment of rat infested premises. There were no badly infested areas; premises or grounds complained of were fairly evenly distributed throughout the Borough and year. During the year under review 220 different premises were treated and 4,435 baits supplied.

Places of Entertainment. Visits were paid to 14 places of entertainment and special attention given to the sanitary arrangements and ventilation; all were found clean and in good order.

Common Lodging House. There is one registered common lodging house in the Borough, and inspection is made monthly; it was found satisfactory on each occasion.

Bakehouses. There are 29 bakehouses, two being of the underground type, certificates of which have been renewed. Except in one case, general cleanliness has been maintained and limewashing carried out.

FACTORIES ACT, 1937.

The following table is a record of work carried out relative to Part I. of this Act.

So far as Part VIII. is concerned, there are a few outworkers employed in the tailoring and needlework businesses; the work is carried out in a good type of artisan dwelling. There is no employment of persons in unwholesome premises.

1. INSPECTION FOR PURPOSES OF PROVISIONS AS TO HEALTH.

Including inspections made by the Sanitary Inspectors.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Occupiers Prosecuted (4)
Factories with mechanical power	76	1	—
Factories without mechanical power	118	3	—
†OTHER PREMISES under the Act (including works of building and engineering construction but not including outworkers' premises)	62	—	—
†Electrical Stations should be reckoned as factories	256	4	—
TOTAL			

2. DEFECTS FOUND.

Particulars. (1)	Number of Defects.			Number of defects in respect of which Prosecutions were instituted (5)
	Found. (2)	Remedied (3)	Referred to H.M. Inspector. (4)	
Want of Cleanliness (S. 1)	3	3	—	—
Overcrowding (S. 2)	—	—	—	—
Unreasonable temperature (S. 3)	—	—	—	—
Inadequate ventilation (S. 4)	—	—	—	—
Ineffective drainage of floors (S. 6)	—	—	—	—
Sanitary Conveniences (S. 7) { Insufficient	1	1	—	—
{ Unsuitable or Defective	—	—	—	—
{ Not Separate for Sexes	—	—	—	—
Other offences (Not including offences relating to Home Work or offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories & Workshops Transfer of Powers) Order, 1921, and re-enacted in the Third Schedule to the Factories Act, 1937)	—	—	—	—
Total	4	4	—	—

(iv) *Shops and Offices.*

The duties under the Shops Act, 1934, are confined, so far as the Public Health Department is concerned, to the question of :—

- (a) suitable and sufficient means of ventilation.
- (b) maintenance of reasonable temperature.
- (c) sanitary accommodation.
- (d) means of lighting.

and (e) the provision of washing facilities.

During the year the District Sanitary Inspectors have inspected 291 shops. There were no notices served, and no exemptions were granted.

Under the Public Health Act, 1936, the term work-place includes all places of clerical employment ; and with regard to offices the requirements include adequate and satisfactory sanitary accommodation, adequate ventilation, cleanliness, and the absence of overcrowding or of any condition prejudicial to the health of the employees.

The number of offices inspected was 78 ; no notices were served.

(v) *Camping Sites.*

(1) *The number of sites in the area which were used for camping purposes during 1938.*

There were nine sites used for camping during 1938.

(2) *The number of camping sites in respect of which licences have been issued by the Local Authority under Section 269 of the Public Health Act, 1936.*

No licences have been issued.

(3) *The estimated maximum number of campers resident in the area at one time during the summer season, 1938.*

The maximum number of campers at any one time is estimated to have been 360.

(vi) *Smoke Abatement.*

In a town like Torquay, the work under this section is not very considerable ; a few observations have been made in connexion with alleged nuisances, but nothing has occurred which has justified any formal notice or action.

The air is practically free from smoke or from anything which cuts off the ultra-violet radiation from the sky ; this is shown by readings of the ultra-violet rays which have been carried out at a number of places in the town, with the readings on the top of the pier shelter as the maximum standard.

(vii) *Swimming Baths and Pools.*

(a) *Public Swimming Baths.*

At the Medical Baths, the Corporation have a fine covered warm seawater swimming bath measuring 90ft. by 30ft., the depth being graduated from 4ft. to 7½ft. The average temperature of the water is a minimum of 76 deg. F. in the summer, increased to 80 deg. F. in the winter, when cubicles are also centrally heated. The bath is opened for mixed bathing on Sundays and weekdays ; and private sea and fresh water baths are provided in the gallery. The services of a professional certificated instructor are available.

The sea water is pumped direct from Beacon Cove, which adjoins the Medical Baths ; a modern filtration plant filters, aerates and chlorinates the whole of the water in the bath in the course of every three hours.

The chlorination is controlled by colorimetric tests, and the water is subjected to bacteriological examination at regular intervals. During the year 20 samples were taken (one near the inlet and one near the outlet) for examination ; of these 16 were satisfactory and 4 unsatisfactory. When bacteriological results have been unsatisfactory, it has been found on investigation that the chlorination plant has been temporarily not functioning properly or that the content of chlorine in the water has been allowed to become rather low.

(b) *Privately owned Swimming Baths open to the public.*

There are no such baths in the area.

(viii) *Eradication of Bed-Bugs.*

- (1)
- The number of houses infested during the year was :—*

(a) Council houses	-	-	26
(b) Other houses	-	-	45

The number of houses disinfested was :—

(a) Council houses	-	-	26
(b) Other houses	-	-	45

- (2)
- The methods employed for freeing infested houses from bed-bugs, and the name of the fumigant and/or insecticide used.*

Woodwork is removed from walls, after which an insecticide is sprayed all over the surfaces using "Solution D" and "Zaldecide."

- (3)
- The methods employed for ensuring that the belongings of tenants are free from vermin before removal to council houses.*

Notice is obtained before the transfer of tenants so that the Sanitary Inspectors can visit and inspect prior to removal; any belongings of the tenants found to be verminous are dealt with before the transfer is effected.

- (4)
- Whether the work of disinfestation is carried out by the Local Authority or by a Contractor.*

All the work is carried out by the Local Authority.

- (5)
- The measures taken by way of supervision or education of tenants to prevent infestation or re-infestation after cleansing.*

Houses that have been infested are, after cleansing, kept under observation and frequent re-inspections are made by the District Sanitary Inspector; each inspector has one of the electric torches with magnifying glass, designed by Dr. W. Gunn of the Glasgow Health Department, so as to be able to search as thoroughly as possible for any evidence of re-infestation.

4. *Schools.*

The sanitary conditions and the water supply of the schools in the Borough are satisfactory; in fact, during the past decade very considerable progress has been made in the hygiene of school buildings and of school premises. The new senior school at Audley Park was completed during the

year, and Upton School was closed. The new schools are built on the Derbyshire plan with very efficient ventilation and adequate air movement, as measured by the katablometer; and these are important factors in the maintenance of nutrition by stimulating metabolism. Full results have been given in the reports of the School Medical Officer.

These vast improvements must have extremely beneficial effects on the health of the children; and as a constant object lesson in general hygiene, cleanliness and tidiness, they are a powerful influence for good in health education and in creating a healthy way of life. All this will undoubtedly be reflected in the homes which these children are, after all, one day destined to control.

There have been no large outbreaks of infectious disease in the schools and there was no school closure in 1938.

SECTION D.

HOUSING.

The following is the table of information required :—

1. *Inspection of Dwelling-houses during the Year :—*

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ...	634
(b) Number of inspections made for the purpose ...	1187
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932 ...	28
(b) Number of inspections made for the purpose ...	76
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ...	11
(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 ...	123

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 ...	154
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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 ...	1
(2) Number of dwelling houses which were rendered fit after service of formal notice :	
(a) By owners ...	4
(b) By Local Authority in default of owners ...	—

(b) Proceedings under the Public Health Acts :

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied ...	2
(2) Number of dwelling houses in which defects were remedied after service of formal notices :	
(a) By owners ...	2
(b) By Local Authority in default of owners ...	—

(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	...
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	...
(d) Proceedings under Section 12 of the Housing Act, 1936 :	
(1) Number of separate tenements, or underground rooms in respect of which Closing Orders were made	1
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	...

4. *Housing Act, 1936, Part IV.—Overcrowding:—*

(a) (i) Number of dwellings overcrowded at the end of the year	...	17
(ii) Number of families dwelling therein	...	18
(iii) Number of persons dwelling therein	...	101
(b) Number of new cases of overcrowding reported during the year	...	4
(c) (i) Number of cases of overcrowding relieved during the year	...	45
(ii) Number of persons concerned in such cases	...	230
(d) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding		—
(e) Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report :		

Overcrowding is discussed in a subsequent section

Housing Inspection.

In section 1 of the preceding table there are details of the inspection of dwelling-houses during the year, together with the number of houses found defective ; in sections 2 and 3 information is given of the number of houses rendered fit after the defects had been remedied.

In addition, 3 Coombe Cottages, Teignmouth Road, 11 Park Road, 30a Cambridge Road, Thatched Cottage, Water Lane Shiphay, Farm Cottage, Shiphay Lane, 5, 6 and 7 George Street, and Basement rooms at 3, 4 and 7 Braddons Street, were brought forward for demolition or closure. Coombe Cottages, Thatched Cottage, Shiphay, and Farm Cottage, Shiphay Lane, are awaiting a final decision ; in the

cases of 11 Park Road and of 5, 6 and 7 George Street an undertaking was given not to use the premises for human habitation, and 30a Cambridge Road will be reconditioned.

One cottage, 2 Warren Hill, which was condemned in 1931, was reconstructed and a certificate for habitation issued.

Repairs to property have progressed satisfactorily, and a notable example consists of the so-called Model Dwellings in Church Lane; here this old building has been thoroughly reconstructed internally and made into six self-contained flats with separate bathrooms, water closets and kitchenettes, fitted with electric light and gas. The old property in Church Street, which is reported to have been the workhouse some hundred years ago, has been demolished and four small houses erected on the site.

A cottage at Hele which was partially demolished for road widening purposes was later reconstructed and rendered fit for habitation.

It is to be regretted that the owners of many of these old properties are not in a financial position to bring them up to modern standards; where money is available and judiciously used, it is surprising what an experienced architect and a skilled builder can accomplish.

With the completion of some of the new Corporation houses at Watcombe, it was possible to re-house the remaining tenants of the East Street Clearance Areas (several tenants had found accommodation elsewhere); these Clearance Orders were confirmed nearly three years ago, and it is satisfactory that a number of the old properties have now been demolished.

New Houses Erected.

During the year 132 new houses were inspected for Habitation Certificates, comprising 44 small houses of a type suitable for the working classes, 73 medium sized dwellings and 15 large houses; included in the total are 13 of the bungalow or semi-bungalow type.

House building has again decreased, and the fall has been progressive during the past three years, which is illustrated by the figures 1936, 291 houses; 1937, 162; 1938, 132.

During the year, building began on the Watcombe Estate where the Housing Committee decided to proceed with the erection of 188 dwellings. It is gratifying that 40 of these are to be four-bedroomed houses which will further eliminate overcrowding, 136 are to be three-bedroomed houses, and 12 are one-bedroomed houses suitable for older people.

The provision of houses for older people is an excellent innovation. "The best is yet to be, the last of life for which the first was made"—There is something encouraging in this robust optimism; and Torquay with its beauty, its character, and its climatic conditions, provides an enviable setting for those who are privileged to take up residence and enjoy a leisurely retirement from active work. And the provision of homes for aged persons without means is a social measure of the utmost importance and significance.

Situated in a pleasant setting round a quadrangle and admirably designed are these twelve homes; the external walls are coloured in a light cream colourmix and the gable roofs are covered with burnt tiles. Each house contains, all on one floor level throughout, a livingroom, bedroom, larder, bathroom, lavatory, coalstore, with such conveniences precious to the housewife as an eagle combination range, a good airing cupboard, a gas boiler and electric light. And to avoid regimentation there are slight variations in the actual planning of each individual home—the standard rent of which is 3/- to make it within the economic compass of the tenants for whom they are intended.

In the centre of the group is a community room where two or three may gather together to enjoy the comforts of a pleasant fire-side talk, or to read books, and benefit from other means of social well-being.

"We require from buildings, as from men, two kinds of goodness: first the doing their practical duty well, then that they be graceful and pleasing in doing it." These demands which Ruskin described are fulfilled by the new homes; for although there may be such homes in other areas there cannot be any to equal these beautifully designed in a beautiful town; and the Local Authority can feel gratified at yet another unique achievement.

House Property Manager.

No further progress has been made in this. But it may be reiterated that the management of housing schemes involves not merely the collection of rents and the maintenance of property, but also the consideration of human and social needs ; and there is a growing sense of public responsibility for social well-being with an appreciation of the fact that it is essential to watch and guide the progress of individual families.

Overcrowding.

The appointed day was fixed for 1st January, 1937, in the case of most areas, including Torquay ; and after that date the new code relating to overcrowding has been in operation. It should be emphasised that the main object is to prevent the occurrence of overcrowding ; and it is hoped that this will be reflected in a great improvement of the conditions under which many people have to live.

The total number of cases relieved of overcrowding during the year was 45 families comprising 230 persons.

As soon as the Watcombe houses are built, further progress will be made in abating overcrowding ; for there still remain 18 families (101 persons) living in overcrowdsd conditions.

Overcrowding has always been recognised as exerting an extremely deleterious effect on the health of the people, for it is the greatest evil of urbanisation. The Housing Act and the present scheme offer unique opportunities for the Local Authority of a town like Torquay where the problem is not so immense as to be impracticable, to deal boldly with it and make yet another great advance.

Licences for Temporary Overcrowding.

The Housing Act gives a Local Authority power, on the application of an occupier or intending occupier of a dwelling-house, to issue a licence allowing that dwelling-house to be occupied for a limited period by a number of persons in excess of the permitted number for the house. The Act contemplates that the circumstances of a holiday resort may be such as to require the issue of licences on rather a large scale.

In all cases where a licence is issued it is important to ensure that it is so framed as to permit only the minimum amount of overcrowding for the shortest possible time ; and in holiday resorts special care must be taken, so that primary regard is given to the occupier's own family and the accommodation available to them.

To enable the issue of licences to be granted uniformly and with the minimum delay, your Medical Officer recommended in 1937, the adoption of certain standards, which the Council confirmed.

During the year, three applications were received for temporary licences, which were granted. This is similar to 1937, when six applications for temporary licences were received ; and it would seem that the contemplated issue of licences on a large scale in a health resort is not realised, whether through lack of understanding on the part of the public (in spite of adequate publicity), or whether through lack of visitors (and this is indeed difficult to believe).

So far as the corporation houses are concerned, no tenant may take a permanent lodger without the written consent of the Housing Committee ; and no application is considered unless there is adequate accommodation, taking as the standard the number of bedrooms only, and counting persons as individuals. But in the summer for a few weeks corporation tenants are allowed to take in temporary visitors up to the permitted number in the rent book.

After all, the tenant has been given a corporation house for the benefit of himself and his family, so that they may keep healthy and strong ; if the house is allowed to become overcrowded all these benefits are thrown away and lost.

Community Centres.

During 1937 a site for a Community Centre at Hele was approved, and part of the Housing Site at Watcombe has been allotted for this purpose ; but during 1938 no further progress was made.

SECTION E.

INSPECTION AND SUPERVISION OF FOOD.

(a) *Milk Supply : Milk and Dairies Order, 1926.*

(i) *Source of Supply.*

The main source of supply is produced at farms within a radius of 15 miles of the Borough, but during the summer season a certain amount comes from the neighbouring counties of Cornwall, Somerset and Dorset.

(ii) *Producers in the Borough.*

At the end of the year there were, within the Borough, 20 cowsheds the sizes of which differ considerably. The total average number of cows on these farms is 369, and the health, cleanliness and condition of the animals can be considered satisfactory; for although the designated milk producer understands the need of the hygiene of both the cows and the cowshed, the regular inspection and the bacteriological examination of the milk tend to keep the unprogressive producer from too much backsliding.

The structural condition of the cowsheds varies considerably; one or two are excellent examples in modern developments, while others are reminiscent of the very distant dim past. Naturally these old buildings do not lend themselves to effective alterations, for being mainly constructed of cob, any attempt at the insertion of new windows and doorways or at the reconstruction of the roof only hastens disintegration; on the other hand the development of land for building houses is tending automatically to eliminate these unsatisfactory places.

It is gratifying to record that one cowshed is being reconstructed; and others in the Borough will be brought up-to-date unless the land is sold for building purposes.

The Veterinary Inspector, Mr. Charles Masson, M.R.C.V.S., who had been part-time inspector for the Corporation for many years terminated this position under the Corporation at the end of March. On and after the 1st April the inspection of dairy cattle became the responsibility of the Ministry of Agriculture and Fisheries. During this period of

control the Ministry's Officers have reported to the Corporation that a total of 31 visits have been paid to dairy farms and 9 bulls and 369 cows have been examined when 11 cases of some form of udder affection were discovered.

In addition the premises of 5 Designated Milk producers were visited when 3 bulls and 110 cows were examined ; 5 cases of mastitis and 3 other affections were found. One case of tuberculosis was notified.

One herd has been tuberculin-tested, and there are five accredited milk producers. Very little difficulty has been experienced in connexion with the cleanliness of the cowsheds and herds.

(iii) *Dairies.*

There are 90 registered dairymen or purveyors in the Borough, and this number includes seven who are also wholesale agents. Frequent inspections are made of the dairies and utensils, and apart from failure to cover cream or milk, the regulations are satisfactorily carried out.

(iv) *Bacteriological Examination of milk.*

As far as possible most samples taken for bacteriological examination are obtained from the churns of the producers at the time of delivery to the retailer; this assures that the milk has not been subject to any contamination subsequent to production.

The regular examination of milk has been carried out in the Town Hall laboratory for a number of years ; during 1938 examinations were made of 57 samples of Certified milk, 10 samples of Tuberculin-Tested milk, 120 samples of Pasteurised milk (including 82 samples supplied to the Elementary and Grammar Schools), 2 samples of Accredited milk, and 2 samples of undesignated milk.

The samples obtained show that 1 sample of certified milk contained *B. coli* in 1/10 ml. and the mean bacterial count was 52 per ml : in 1 sample of tuberculin-tested milk *B. Coli* was present in 1/10 ml. and the mean count was 2066 per ml. 7 certified and 2 tuberculin-tested milks failed on the methylene blue test.

In the case of pasteurised milk 120 samples were examined, including 82 samples as supplied to the elementary schools; the mean bacterial count of all samples was 304 per ml. *B. coli* was present in 1/10 ml. in 40 samples of school milk and 8 samples bought at the dairy; and 3 samples of school milk and 3 samples from the dairy failed to pass the phosphatase test.

The mean percentage of fat in pasteurised samples was 3.7 and other designated samples 4 per cent.

As arranged with the Devon County Council, four samples of milk each week were sent to the County Bacteriologist, Exeter, for examination; in all 212 samples were sent, of which 74 were taken at the local farms at the time of production.

The following is the table of results:—

Designation	No. of samples	Methylene Blue Test		B. Coli test		Plate count	
		Passed	Failed	Passed	Failed	Passed	Failed
T.T.	15	6	9	-	-	-	-
Accredited	20	14	6	1	-	1	-
Pasteurised	9	3	6	1	3	1	2
Non-designated milk	168	50	118	-	-	-	-

The percentage of failures (65 per cent compared with 72 per cent in 1937) shows how sensitive is the methylene blue test, for the failures in the preceding 5 years, under the former tests, ranged from 23 per cent to 41 per cent.

Comments on bacteriological examination of milk.

In the bacteriological grading of milk, what is required is a simple inexpensive test with a small experimental error, which can be used on a large scale by relatively unskilled workers. The modified Methylene Blue reduction test fulfils these requirements and moreover has two advantages over the plate count; the first is that the result of the reduction test does not appear to be seriously affected by the degree of aggregation of the bacteria in milk, while the plate count depends very largely on the amount of clumping. A milk in which the organisms are distributed mainly in small groups may have a plate count very much higher than that of another milk having the same number of organisms which are arranged in large clumps.

The second advantage is that the reduction test is considerably more sensitive to the growth of bacteria than is the plate count. After production of milk there is a lag phase during which, under favourable conditions, there is bacterial growth without actual multiplication; during this phase the organisms become larger, are actively respiring and are preparing for rapid division. Until division takes place the plate count undergoes no marked alteration and so the plate count cannot distinguish between the beginning and the end of the lag phase; but since the organisms are using up oxygen by actively respiring, there is during the lag phase a considerable fall in the reduction time as gauged by the methylene blue test. This differentiation is important because it is obvious that the keeping quality of the milk is much less at the end of the lag phase than at the beginning of that period of active growth.

The *B. coli* test has disadvantages when applied to routine milk examinations. In the first place a considerable proportion (from 50 to 70 per cent) of coliform organisms in raw milk are not of the true *coli* type, but of the *aerogenes-cloacae* type coming from soil and grain; their presence in milk cannot be regarded as an index of excretal pollution. Further the true *coli* organisms found in milk appear to come either directly from cow dung and manure, or indirectly from utensils which have not been sterilised or in which bacterial multiplication has occurred; and thirdly, milk is such a suitable medium that growth of the *coli* organisms may be considerable within a short time.

This test therefore has irregular results, not well correlated with the sanitary conditions of production or with the keeping quality of the milk.

So far as bacterial cleanliness of milk is concerned, it is probable that the methylene blue test will help to raise the standard of cleanliness, because it should be possible to examine more samples, and because it is peculiarly fitted for gauging the keeping quality of the milk. And when the cleanliness of the milk is more satisfactory, then pasteurisation (which is recognised by scientific authorities as being essential for ensuring a safe milk) will be correspondingly easier.

(v) *Special Bacteriological Examination for Tuberculosis.*

During the year 22 samples of milk were taken for examination for the presence of B. Tuberculosis; 19 were found to be negative, and 3 were inconclusive, owing to the death of the inoculated animals from causes other than tuberculosis.

(vi) *The Milk (Special Designations) Orders, 1936 and 1938.*

Under this Order the special designations of milk are : -

(a) *Tuberculin-Tested.*

This is milk from cows which have passed a veterinary examination and a tuberculin test, and it may be bottled on the farm or elsewhere.

If raw it must satisfy a prescribed Methylene Blue reduction test, *i.e.*, when tested in accordance with this method the sample must not decolourise Methylene Blue within $4\frac{1}{2}$ hours if the sample is taken at any time from 1st May to 31st October or within $5\frac{1}{2}$ hours if the sample is taken from 1st November to 30th April. The milk must contain no coliform bacillus in one-hundredth ml.

If pasteurised it must be described as "Tuberculin-Tested Milk (Pasteurised)," and must not contain more than 30,000 bacteria per ml.

If it is bottled on the farm the word "Certified" may be added.

(b) *Accredited.*

This is raw milk from cows which have passed a veterinary examination; it may be bottled on the farm or elsewhere, and it must satisfy the same bacteriological tests as are prescribed for raw T.T. milk.

(c) *Pasteurised.*

This is applicable both where accredited and where ungraded milk are pasteurised, *i.e.*, the milk has been retained at a temperature of 145 deg. F. to 150 deg. F. for at least 30 minutes, and immediately cooled to a temperature of not more than 55 deg. F. The milk must not be heated more than once, and such indicating

thermometers and recording thermometers as the licensing authority shall consider requisite must be installed; and temperature records must be kept for one month. The milk must not contain more than 100,000 bacteria per ml.

The licensing authority for producers of T.T. and Accredited milk is the County Council, and the licensing authority for producers of pasteurised milk is the Borough Council; the licensing of dealers in designated milk rests with the Borough Council.

In Torquay the following licences were granted:—

			Producers	Purveyors
T.T. Certified	..	..	-	15
T.T. ..	..	..	1	10
Accredited	..	..	5	-
Pasteurised	..	..	4	7

Frequent inspections of licensed pasteurising establishments are also made with a view to ascertaining that the acquirements of the Order, both as to apparatus and as to methods, are being complied with and are working in a uniformly satisfactory way.

In addition to the inspections and bacteriological examinations, the chemical phosphatase test was used in routine work.

(b) *Meat and Other Foods.*

(i) *Inspection of Meat.*

Nothing unusual has to be recorded during the year, and there has been little difficulty in the administration of the Public Health (Meat) Regulations, 1924. One or two cases of failure to notify alteration in time of slaughter and the exposure of meat and bacon in the open shop windows are the only matters of note.

Meat is retailed from carts in a few cases; and while the cleanliness of the vehicles and the class of food purveyed are satisfactory, it is not a method to which approval can be given from a public health point of view. Fortunately this practice is gradually dying out.

The covering of the stalls in the Market Hall has been completed, and except for one case each stall is now a self-contained shop with either fixed glass windows or sliding sashes; this is a very great improvement on the old order of things.

All the slaughterhouses are visited each day, including Sundays and Bank Holidays; in all 2,497 visits were made to these premises by the Inspectors examining carcasses. The Senior Inspector also supervises the slaughter of animals at two slaughterhouses in the rural area by arrangement with the Newton Abbot Rural District Council; 402 visits were paid to these premises and 602 carcasses were examined.

The subjoined tables give the number of carcasses examined in the different slaughterhouses:—

NUMBER OF CARCASSES EXAMINED IN THE DIFFERENT SLAUGHTERHOUSES
IN THE BOROUGH

No.	Bullocks	Cows	Heifers	Sheep and Lambs	Pigs	Calves	Total	Visits
1 ..	42	-	51	649	592	6	723	309
2 ..	13	5	12	331	86	22	469	285
3 ..	14	-	14	100	15	-	143	275
4 ..	146	3	107	730	1309	97	2392	420
Abattoir	280	61	378	5544	3243	906	10412	976
6 ..	16	-	68	611	228	156	1079	232
Totals ..	511	69	630	7965	5473	1187	15218	2497

NUMBER OF CARCASSES EXAMINED IN THE DIFFERENT SLAUGHTERHOUSES
OUTSIDE THE BOROUGH

	Bullocks	Cows	Heifers	Sheep and Lambs	Pigs	Calves	Total	Visits
A ..	-	-	24	183	-	1	201	208
B ..	7	-	40	219	128	-	201	394
Totals ..	7	-	64	402	128	1	402	602

The number of carcasses examined in shops was 21,722. These include chilled carcasses together with many home dressed carcasses which would previously have been examined in the slaughterhouse; and the total number of carcasses examined in both shops and slaughterhouses was 37,342.

The number of entire carcasses destroyed is given in the following table, showing the number condemned for tuberculosis and for diseases other than tuberculosis :

ENTIRE CARCASSES DESTROYED					
Tuberculosis	..	2	Heifers	..	1502 lbs.
"	..	2	Pigs	..	160 "
Anthrax	..	1	Cow	..	720 "
Septicaemia	..	1	Calf	..	200 "
Septic Pleurisy	..	1	"	..	65 "
Dropsy	..	1	"	..	65 "
Emaciation	..	2	Sheep	..	58 "
Fevered	..	1	"	..	50 "
Inflammation	..	1	"	..	60 "
Dropsy	..	1	Lamb	..	20 "
Swine Fever or suspected	..	4	Pigs	..	459 "
Diamonds	..	1	"	..	80 "
Bruised	..	1	"	..	65 "
Septic pneumonia	..	1	"	..	65 "
Septic peritonitis	..	2	"	..	160 "
Septicaemia	..	1	"	..	120 "
		<u>23</u>			<u>3849 lbs.</u>

The subjoined table gives the parts of carcasses or organs which were condemned, showing the number affected with tuberculosis and with diseases other than tuberculosis :—

DISEASED OR UNSOUND MEAT DESTROYED.

Organs, etc. Destroyed.		DISEASES.												
		Tuberculosis.	Flukes.	Cirrhosis.	Abscess.	Cysts	Strongyli.	Inflammation.	Pleurisy and Peritonitis.	Injury.	Actinomycosis	Unsound.	Others.	Totals.
Beasts :	Lungs ..	9	.	.	5	.	.	1	.	.	.	.	.	15
	Livers ..	5	64	50	1	.	.	.	.	.	.	.	2	122
	Tongues ..	3	.	.	.	.	.	.	.	.	.	.	.	3
	Heads ..	3	.	.	2	.	.	.	.	.	1	.	.	6
	Carcases ..	.	.	.	.	.	.	.	.	.	.	.	.	.
	Parts of ditto	2	.	.	.	.	.	.	.	.	.	.	.	2
Cows :	Lungs ..	1	.	.	2	.	.	1	1	.	.	.	1	6
	Livers ..	.	3	14	.	.	.	.	.	.	.	.	3	20
	Tongues ..	1	.	.	.	.	.	.	.	.	.	.	.	1
	Heads ..	1	.	.	.	.	.	.	.	.	.	.	.	1
	Carcases ..	.	.	.	.	.	.	.	.	.	1	.	.	1
Heifers :	Lungs ..	8	.	.	4	.	.	4	.	.	.	.	.	16
	Livers ..	6	82	54	1	.	.	.	.	1	.	.	3	147
	Tongues ..	4	.	.	.	.	.	.	.	.	.	.	.	4
	Heads ..	4	.	.	.	.	.	.	.	.	.	.	.	4
	Carcases ..	2	.	.	.	.	.	.	.	.	.	.	.	2
	Parts of ditto	.	.	.	.	.	.	2	.	.	.	.	.	2
Calves :	Carcases ..	.	.	.	.	.	.	1	.	.	.	2	3	
Sheep :	Lungs ..	.	.	.	12	.	161	43	40	9	.	.	5	270
	Livers.. ..	.	140	.	299	.	.	.	.	3	.	.	.	442
	Heads ..	.	.	.	.	.	.	.	.	.	2	.	.	2
	Carcases ..	.	.	.	.	.	.	1	.	.	.	4	.	5
	Parts of ditto	.	.	.	.	.	.	1	.	.	.	.	.	1
Pigs :	Lungs ..	40	.	.	12	6	12	189	96	15	.	3	45	418
	Livers ..	41	.	106	2	4	.	40	17	10	.	1	26	247
	Heads ..	524	.	.	3	.	.	.	.	.	.	.	2	529
	Carcases ..	2	.	.	.	.	.	4	.	1	.	.	5	12
	Parts of ditto	2	.	.	.	.	.	.	.	.	.	.	.	2
Other Organs :														
	Mesenteries ..	165	.	.	.	.	.	.	.	.	.	.	8	173
	Spleens ..	10	.	.	.	.	.	.	.	.	.	.	4	14
	Stomachs ..	10	.	.	.	.	.	3	.	.	.	.	4	17
	Kidneys ..	.	.	.	.	57	.	.	.	.	.	.	.	57
	Miscellaneous	25	.	.	1	4	.	141	7	6	.	58	204	446
Chilled Meat ..		.	.	.	.	.	.	.	.	10	.	47	1	58
Totals ..		868	289	224	344	71	173	430	161	55	1	116	313	3045

CARCASSES INSPECTED AND CONDEMNED.

	Cattle, exclud- ing Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed (if known)	It is not possible to give separate figures here, but not more than about 50 animals are slaughtered and sold without inspection during the year				
Number inspected ..	1218	69	1288	8367	5601
ALL DISEASES EXCEPT TUBERCULOSIS					
Whole carcasses condemned ..	—	1	3	5	10
Carcasses of which some part or organ was condemned ..	220	20	—	442	378
Percentage of the number inspected affected with disease other than tuberculosis ..	18	30.4	0.23	5.3	6.9
TUBERCULOSIS ONLY					
Whole carcasses condemned ..	2	—	—	—	2
Carcasses of which some part or organ was condemned ..	17	1	—	—	514
Percentage of the number inspected affected with tuberculosis ..	1.5	1.5	—	—	9.2

The weight of diseased or unsound meat destroyed is as follows:—

	Tons	cwts.	qrs.	lbs.
Voluntarily surrendered ..	2	11	0	25
Surrendered (after inspection)	8	3	—	14
Seized	—	—	—	—
	10	14	1	11

The premises, on which the diseased or unsound meat and other foods were found, are shown below:—

Place	Seized	Weight lbs.	Voluntarily Surrendered	Weight lbs.	Surrendered on Request	Weight lbs.	Total Weight lbs.
Shops ...	—	—	210	4135	42	190 $\frac{3}{4}$	4325 $\frac{3}{4}$
	—	—	—	—	T.B.10	127	127
Slaughter-houses	—	—	—	—	2002	8526 $\frac{1}{4}$	8526 $\frac{1}{4}$
	—	—	—	—	T.B.858	9426	9426
Siding ...	—	—	47	1602	—	—	—
Totals ...	—	—	257	5737	2912	18270	24007

(ii) *Inspection of Other Foods.*

Periodical regular inspections are made by the Sanitary Inspectors of all foodstuffs in shops, on hawkers' barrows and in stalls in the Market; routine visits are paid in the early morning to the Fish Quay, and the cargoes of vegetables landed at the harbour are also inspected.

Other food condemned included :—

	No. of articles	Weight in lbs.
Rabbits	23	19½
Case of Dripping	1	25
Basket of Cherries	1	12
Case of Sweets	1	1456
" " Biscuits	2	56
" " Saveloys	1	15
Ducks	19	89
Cooked Meats—various	6	261
Ham, Bacon, etc.	3	104½
Bags of flour, sugar	3	290
Bloaters	5	3
Eggs	51	6
Tinned goods:		
Fruit—various	46	154
Jam	22	33
Mincemeat	4	4
Fish	4	2½
Vegetables	13	26
Veal, Brawn, etc.	8	52
Miscellaneous	3	5
TOTALS	216	2613½

All unsound and diseased food is destroyed in the Corporation Refuse Destructor.

Ice Cream.

Particular attention is paid to ice cream and 39 samples were examined bacteriologically at the Town Hall Laboratory with these results :—

Number of samples	Mean Bacterial Count per ml.	B. Coli present or absent in	
		1 ml.	1/10 ml.
3	Too numerous to count	+	+
22	49517	+	+
14	5605	—	—

During the summer there were 94 retailers and five wholesale agents on the register.

Although there are 32 tradesmen who make their own ice cream, the tendency now is to purchase from the wholesale firms, which tends to ensure a higher standard of goods and, from the public health aspect, is more satisfactory.

2. *Inspection of Premises.*

(i) *Slaughterhouses.*

There are six private slaughterhouses, five being licensed annually and one registered—the so-called public abattoir.

(ii) *Necessity for improved Slaughterhouse Accommodation.*

The provision of an up-to-date Public Abattoir is urgently required; much of the present overhead gear and other fittings have been in constant use for the past seventy years, and little more need be said to emphasise that a complete modernisation of building and equipment should be undertaken at the earliest opportunity. A well equipped abattoir would be in the interests of all concerned—of the trade, of the administration of food inspection, of the Public Health and of the animals; and it is hoped that this matter will receive favourable consideration during the coming months.

(iii) *Slaughter of Animals Act, 1933.*

This Act came into operation at the beginning of 1934; it is now an offence to slaughter any animal in a slaughterhouse or knacker's yard unless it is first stunned by a mechanically operated instrument in proper repair. Forty-two applications were received from slaughtermen for a licence to slaughter animals, and all were granted after due enquiry had been made.

No legal proceedings were found necessary in connexion with the administration of the Act.

(iv) *Inspection of places where food is prepared.*

The inspection of dairies was dealt with in Section E (a) and the inspection of slaughterhouses in Section E (b) 2.

Regular inspections are made of all other premises where food is prepared or stored, and the following is a record of the visits:—

Butchers' Shops	..	..	3547
Butchers' Carts	..	..	76
Fish Quay	..	..	137
Railway Siding	..	..	64
Market Hall	..	..	120
Other Shops	..	..	922
Bakehouses	..	..	129
Fish and Chip Shops	..	..	78
Ice Cream Shops	..	..	91
Tripe Dressers	..	..	41
Cafés, etc.	..	..	79

These premises have been found, almost without exception, to be clean ; but concern must be felt, however, owing to the lack of precautions taken to protect foodstuffs from flies, from dust and from general contamination by droplet infection from human beings—such as occurs in coughing, sneezing, blowing, or even talking when food is uncovered.

Many high-class provision dealers provide a glass screen at the front of the counter or cover the food with transparent paper ; and with the various methods available, it is hoped that improvements will steadily evolve.

Too much cleanliness and care cannot be taken in all places where food is prepared or stored.

The mere provision of facilities for washing before handling food is not enough ; and as a further precaution in the protection of food from possible contamination, suitably worded notices have been exhibited in the toilet rooms attached to premises where food is prepared or handled. " How use doth breed a habit in a man," and constant reminders are necessary until the habit of scrupulous cleanliness becomes the inflexible chain which moralists declare a habit to be.

(v) *Kitchens of Hotels, etc.*

Under the Torquay Corporation Act, 1923, inspection of these premises is empowered, and regular visits are paid to examine the kitchens and larders of hotels, boarding houses, cafés and tea rooms ; on the whole these are found in a satisfactory condition, many of the larger hotels having up-to-date hygienic equipment.

(c) *Adulteration of Food.*

The Food and Drugs (Adulteration) Act, 1928, the Artificial Cream Act, 1929, the Public Health (Condensed Milk) Regulations, 1923 and 1927, the Public Health (Dried Milk) Regulations, 1923 and 1927, and the Public Health (Preservatives, etc. in Food) Regulations, 1925 to 1927, are administered by the County Council. Through the courtesy

of Superintendent Milford of the County Police, the following particulars are available showing the 50 samples of food submitted to the Public Analyst.

Nature of Sample	Number genuine	Adulterated
Baking Powder ..	1	—
Brandy ..	1	—
Butter ..	5	—
Cheese ..	1	—
Coffee ..	1	—
Cream ..	3	—
Desiccated Cokernut	1	—
Ground Almond ..	1	—
Ground Ginger ..	1	—
Icing Sugar ..	2	—
New Milk ..	25	3
Rice ..	3	—
Tapioca ..	2	—
Whiskey ..	1	—
White Pepper ..	2	—

In the cases of the three samples of new milk, two were cautioned and one prosecuted, a fine of £5 and costs being imposed.

(d) *Chemical and Bacteriological examination of Food.*

The analyses of milk have already been described in Section E (a) iv. A certain amount of bacteriological or chemical examination was carried out at the Town Hall Laboratory in connexion with meat and other foods as follows :—

For Tuberculosis (microscopically)	6
Actinomycosis	2
Fat for Jaundice	6
Unsound Tinned Food ..	4
Pork Pie	1
Other Meats	4
Milk	1
Swine Erysipelas	1

(e) *Nutrition :—Dissemination of knowledge and particulars of any special work on the subject of nutrition.*

Routine individual advice given by the Medical Officers and the Health Visitors on food values and diet is one of the most effective ways of helping to maintain and improve the nutrition of the people; and with the frailty of human memory repetition of facts is constantly needed for the less careful types of mothers. A number of talks and addresses have also been given.

No special work on nutrition has been carried out.

(f) *Shell-fish (molluscan).*

- (i) *Any information concerning the places to which shell-fish taken from layings in the district are sent to be marketed.*

There are no shell-fish beds or layings in the area.

- (ii) *The layings from which shell-fish (specifying the kinds of shell-fish) which may be marketed in the district, are derived.*

Lobsters and crabs are caught locally and are disposed of in the district; small shell-fish such as oysters, cockles, winkles, etc., come by train from London markets.

SECTION F.

PREVALENCE OF, AND CONTROL OVER,
INFECTIOUS AND OTHER DISEASES.*Notifiable Diseases.*

In 1938 the following were the notifiable infectious diseases in Torquay :—

Smallpox
Scarlet fever
Diphtheria and Membranous Croup
Erysipelas
Enteric fever (including paratyphoid fever)
Typhus fever
Relapsing and continued fever
Tuberculosis (all forms)
Ophthalmia neonatorum
Cerebro-spinal fever
Acute poliomyelitis
Acute polioencephalitis
Encephalitis lethargica
Acute primary pneumonia
Acute influenzal pneumonia
Puerperal pyrexia
Cholera
Plague
Dysentery
Malaria
Trench fever

No other diseases were added to this list by the action of the Local Authority.

1. *Notifiable Diseases (other than Tuberculosis).*

The incidence of notifiable disease *during the 52 weeks ended 31st December, 1938*, is shown in the three subjoined tables; the first table sets out the total notifications, with the number of cases admitted to Hospital and the total deaths, while the second table shows the distribution according to age, and the third gives the incidence in the various wards of the Borough.

Disease	Total cases notified	Cases admitted to Hospital	Total Deaths
Smallpox	—	—	—
Scarlet fever	85	66	—
Diphtheria	22	22	1
Enteric fever (including paratyphoid)	—	—	—
Puerperal pyrexia	18	11	—
Pneumonia	24	8	—
Cerebro-spinal fever	—	—	—
Erysipelas	16	1	—
Ophthalmia neonatorum	1	—	—
Acute poliomyelitis	1	1	—
Acute polioencephalitis	—	—	—
Encephalitis lethargica	1	1	—
Dysentery	3	1	—
Malaria (contracted abroad)	1	1	—

Disease	Age Groups												Total Cases Notified
	Under 1 year	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 and over	
Smallpox	.	.	.	.	.	.	.	.	.	.	.	.	—
Scarlet fever	1	.	2	2	6	25	30	6	10	3	.	.	85
Diphtheria	.	1	.	1	2	15	2	1	.	.	.	.	22
Enteric fever (including paratyphoid)	.	.	.	.	.	.	.	.	.	.	.	.	—
Puerperal pyrexia	.	.	.	.	.	.	.	.	18	.	.	.	18
Pneumonia	2	.	1	1	1	4	3	.	5	2	3	2	24
Cerebro-spinal fever	.	.	.	.	.	.	.	.	.	.	.	.	—
Erysipelas	.	.	.	.	.	.	.	1	4	2	3	6	16
Ophthalmia neonatorum	1	.	.	.	.	.	.	.	.	.	.	.	1
Acute poliomyelitis	.	.	1	.	.	.	.	.	.	.	.	.	1
Acute polioencephalitis	.	.	.	.	.	.	.	.	.	.	.	.	—
Encephalitis lethargica	.	.	.	.	.	1	.	.	.	.	.	.	1
Dysentery	.	.	.	.	.	1	1	1	.	.	.	.	3
Malaria	.	.	.	.	.	.	.	.	.	1	.	.	1
Totals	4	1	4	4	9	46	36	9	37	8	6	8	172

Disease	Wards									Total	Cases removed to Hospital
	Torre	Waldon	Upton	Ellacombe	Strand	Torwood	St. Mary-church	Babbacombe	Chelston		
Smallpox ..	.	.	.	.	.	.	.	.	.	—	—
Scarlet fever ..	10	3	9	18	5	2	19	10	9	85	66
Diphtheria ..	4	4	.	7	1	.	6	.	.	22	22
Enteric fever (including paratyphoid)	.	.	.	.	.	.	.	.	.	—	—
Puerperal pyrexia ..	4	.	.	.	1	.	1	.	12	18	11
Pneumonia ..	3	3	2	6	3	.	2	2	3	24	8
Cerebro-spinal fever ..	.	.	.	.	.	.	.	.	.	—	—
Erysipelas ..	.	3	4	3	.	1	1	2	2	16	1
Ophthalmia neonatorum	.	.	.	1	.	.	.	.	.	1	—
Acute poliomyelitis ..	.	.	.	.	.	.	.	.	1	1	1
Acute polioencephalitis	.	.	.	.	.	.	.	.	.	—	—
Encephalitis lethargica	.	.	.	.	.	.	.	.	1	1	1
Dysentery ..	1	1	.	.	1	.	.	.	.	3	1
Malaria ..	.	.	.	.	.	.	.	.	1	1	1
Totals	22	14	15	35	11	3	29	14	29	172	112

The following information was received from Head Teachers, showing the extent of school intimations of disease:—

Measles ..	246
Whooping cough ..	—
Mumps ..	4
Chickenpox ..	80
Scarlet fever ..	4
Diphtheria ..	3
German Measles ..	27
	364

A short epidemiological section is given below dealing with the more important diseases:—

(a) *Smallpox.*

There were no cases in 1938.

(b) *Scarlet Fever.*

During the year 85 notifications were received, showing a case-rate of 1.91 per 1,000 population compared with a case-rate of 2.41 for England and Wales. The notifications for each quarter were 9, 29, 22, 25; and the rise in the last quarter usually associated with the epidemiology of the disease was not shown.

In the first quarter the incidence of streptococcal infections (of which scarlet fever is only one manifestation), was exceptionally light; and during that time measles was the reigning epidemic, perhaps illustrative of Creighton's observations in his *History of Epidemics* to the effect that not only epidemiological science but common-sense tells us "*est modus in rebus.*" And the succession of reigning infections is a problem awaiting solution.

It is becoming obvious that traditional terminology has been rigorously maintained, while clinical pathology and science have progressed considerably; and it is now known that one species of streptococcus is responsible for a wide range of diseased conditions, the clinical forms and epidemiological features of which depend upon the virulence, toxicity, and invasive power of the organisms, and upon the susceptibility of the individuals exposed to infection. Thus scarlet fever is an infection of the naso-pharynx with haemolytic streptococci, in which, when the rash is seen, enough soluble toxin is circulated and diffused through the body to dilate the surface capillaries; when there is insufficient soluble toxin to produce a rash, the infection of the throat may still be present and the person may be just as infectious as when the rash is seen. To the epidemiologist, scarlet fever is a definite type of tonsillitis with or without a rash; to the public, scarlet fever is essentially and primarily what it was in the days of Sydenham (the father of English Medicine) a rash with or without a sore throat.

The present system of notifying and of isolating only those patients who show the characteristic rash is quite inadequate and fails to control the disease; some of these cases can quite safely be treated at home, but some need hospital treatment. And institutional accommodation should also be available for the larger group of streptococcal infections where although no rash occurs, the invasive powers or virulence of the organism renders the patient very seriously ill. It is exceedingly difficult to make this generally realised; but it is hoped that there will soon be a more enlightened state of public opinion, in keeping with modern epidemiology.

There was no death from scarlet fever.

(c) *Diphtheria.*

There were 22 notifications of this disease spread over the quarters of the year 11, 2, 4, 5 ; the case rate was 0.50 per 1,000 population compared with 1.58 for England and Wales. One death occurred due, as so frequently is the case, to delay in seeking treatment.

(d) *Enteric Fever.*

No case was notified ; and the case rate was 0.00 per 1,000 population compared with 0.03 for England and Wales.

(e) *Puerperal Pyrexia.*

There were 18 notifications of puerperal pyrexia ; and the case-rate was 34.81 per 1,000 total (live and still) births, compared with a rate of 14.42 for England and Wales. There was no death.

Although this points to the assumption that the incidence of puerperal pyrexia is higher in Torquay than in the country as a whole, there are several factors which need to be considered. As the Hospital here takes a number of confinements from areas outside the Borough, the registered births are transferred to the area in which the mother resides while the notification of pyrexia remains ; furthermore, a large proportion of the total births in Torquay occur in Hospital, and this tends to a greater completeness of notification than might otherwise obtain. And the fact that there were only just over 500 births makes the case-rate (calculated as it is on total births), liable to wide fluctuations—each notification increasing the rate by approximately 2.

During December the Maternity Ward at the Torbay Hospital was closed for a period of three weeks owing to the occurrence of three cases within a short time ; in each case trauma was probably the predisposing cause, and there was no evidence to show a high incidence of streptococcal infection or carriers.

(f) *Pneumonia.*

Pneumonia, like the streptococcal infections, seemed less prevalent, and there were only 24 notifications compared with 35 in 1937 and 62 in 1936. The incidence drifted as usual,

though perhaps less markedly, towards the extremes of age; 2 cases occurred in children under 2 years, and 7 were in persons over 35 years, 5 being in persons over 45 years of age. This is what might be expected, for as Osler put it "Pneumonia is the friend of the aged, causing them to escape the cold gradations of decay."

The case rate was 0.54 per 1,000 population compared with 1.10 for England and Wales.

(g) *Erysipelas.*

Sixteen notifications were received, and one case was removed to hospital: nine cases were over 45 years of age. There was no death.

The case rate was 0.36 per 1,000 population, compared with 0.40 for England and Wales.

(h) *Ophthalmia Neonatorum.*

One case was notified, but not removed to hospital; recovery was complete and there was no damage to sight.

(i) *Acute Poliomyelitis.*

One mild case was notified in a child of 2 years after admission from a neighbouring district to hospital. Fortunately the incidence of this cruel and distressing disease was not heavy in the South-West, which was perhaps in keeping with the immunity gained as a result of the outbreak of 1937.

(j) *Other notifiable diseases.*

One case of encephalitis lethargica was notified which unhappily proved fatal; one case of malaria (contracted abroad) was reported and there were three notifications of Sonne dysentery.

(k) *Other non-notifiable diseases.*

Influenza was not prevalent during 1938 until the middle of December, when a few cases were reported which heralded the outbreak in the early months of 1939.

The death-rate from influenza was 0.00 per 1,000 population compared with 0.11 for England and Wales.

Whooping Cough was not prevalent and no school notifications were received.

Measles was epidemic in the early months of 1938 and there were 246 school notifications: the entire borough was affected, and on the whole there were not many serious complications except a few cases of pneumonia in children from unhygienic surroundings.

Rubella was mildly prevalent during the summer and 27 notifications were received from schools: there were also 4 cases of *mumps* reported, and 80 cases of *chicken pox*.

No cases of *brucella* came to the notice of the Health Department.

Epidemic jaundice. There was a small outbreak of this disease at the Torbay Hospital in the early months of the year, affecting five members of the nursing staff. On the 9th March, the first case began with pronounced vomiting and a temperature, becoming jaundiced on the 13th; the vomiting was very severe and the jaundice marked. On the 12th March another nurse became ill with similar symptoms (vomiting and a temperature), and on the 15th was jaundiced; a third nurse complained of a slight sore throat on the 12th, had a slight temperature, vomited once, and slight jaundice followed on the 15th. The fourth case had a temperature with some vomiting on the 18th, followed by slight jaundice on the 21st. The fifth nurse had tonsillitis on the 4th March, with no other symptoms; on the 10th she was clear and went home, but on the 13th March she had another attack of tonsillitis and felt ill, with vomiting on the 14th and 15th and jaundice supervened on the 16th. Three of the nurses were working in the medical ward, one in the massage department visiting the medical ward, and the fifth was in the ear, nose and throat ward. Another sporadic case occurred in a nurse in September.

Except for the pronounced vomiting in one case, which was difficult to control, the illness was mild and there were no complications or sequelae. The sera of the first two cases were kindly tested by Major H. C. Brown of the Wellcome Bureau of Scientific Research, London, and were negative for agglutination in all dilutions to *Leptospira ictero-*

hæmorrhagiae; Major Brown pointed out that case to case infection does not occur in leptospirosis, that the blood count is different, and that the last 86 cases of Weil's disease in his series had all been male patients with evidence in nearly every case of contamination from rats.

The long incubation period of 28—30 days in epidemic catarrhal jaundice makes it difficult to trace the cause; and in these cases, allowing for the usual variations in incubation periods, it appeared that they all could have been infected about the same time. And this may be supported by the short period of infectivity of cases emphasised by Dr. W. N. Pickles. On the other hand Dr. J. Alison Glover suggests that there are two forms of the disease, one with a short incubation of 3—4 days associated with sore throat and this too would explain the case sequence.

No other cases had been reported in hospital, and only one case had been seen in the Borough on 7th February. Probably missed cases are responsible for the spread, and several cases in children were later seen at the school clinics in April and May; in none of the children had the mother noticed the slight jaundice, the complaint being only of the vomiting during the two or three previous days.

It is interesting to notice that during February and March a number of sore throats had been reported among the nursing staff at the hospital; and probably they were not all streptococcal, as the incidence of hæmolytic streptococcal infection in the Town as a whole was particularly light at that time. And it may be a matter of speculation whether or not any of the throats were a typical reactions to the virus of epidemic catarrhal jaundice spread as this is by droplet infection. Major Brown kindly pointed out references E. M. R. Frazer, British Medical Journal, 1935, 1,701, and Beauchamp, British Medical Journal, 1934, 1,850, where cases of epidemic catarrhal jaundice had been associated with sore throats and tonsillitis; and as he says it is interesting also to note that Weil's disease often starts with a sore throat.

2. Isolation Hospital Treatment.

The number of cases admitted to the Isolation Hospital during the year, together with the number for the previous year for comparison, is given in the subjoined table:—

	1937	1938
Scarlet Fever ..	88	75
Diphtheria ..	35	30
Cases for observation ..	17	12
Measles ..	4	29
Mumps ..	1	—
Erysipelas ..	1	1
Chickenpox ..	1	1
Puerperal Pyrexia ..	—	1
Diphtheria carrier ..	2	—
	149	149

There were 10 cases in Hospital at the end of the year.

Scarlet Fever.

Out of the 85 notifications, 66 were removed to Hospital; the difficulties of replacing Hospital treatment by adequate nursing and supervision at home are increased in a health resort where many visitors are staying, and where many of the residents among the working classes are in trades which involve the handling and preparation of food. Moreover, many of the cases for their own sakes need the necessary careful treatment of Hospital; although the provision of smaller wards or cubicles would be a great help in preventing the crossing of infection with different strains of haemolytic streptococci.

Treatment by serum has been used in toxic cases, but the experience in preventing the complications has been disappointing, and a careful use is now being made of sulphanilamide in dealing with some of the complications. Dr. T. Anderson, of Ruckill Fever Hospital, Glasgow, kindly sent a number of details concerning sulphanilamide treatment. Uncomplicated cases are returned home at the end of four weeks or soon afterwards; but it would be unwise to maintain this policy too rigidly, and indeed the physician must always have an equal place with the epidemiologist in the administration of hospital treatment.

Diphtheria.

All cases were admitted to Hospital; and while the clinical type remains unaltered, several cases, including the fatal one, had delayed seeking treatment until late.

Both diphtheria anti-toxin and scarlet fever anti-toxin are provided free of charge to medical practitioners whose patients may be unable to pay for them; and repetition is needed to emphasise the paramount importance of early treatment.

Observation Cases.

A number of suspicious throats and rashes, and a number of other suspected infectious diseases are admitted; this is especially necessary in a health resort with numerous visitors, and the provision of cubicle wards will facilitate this work. It will then also be possible to admit cases of measles and whooping cough which are often far more in need of hospital skilled treatment than certain notifiable diseases.

Fortunately owing to the temporary absence of scarlet fever while measles was epidemic, it was possible to admit a number of cases of measles; several were dangerously ill with pneumonia on admission, but with good nursing, open air, and hospital treatment, all recovered without any permanent disability.

Vaccination.

Through the courtesy of the Vaccination Officer the following is the record of vaccination during the five years, 1933-37 (the averages for the decade 1901-1909 are also shown for comparison):—

Years.	Total births registered	Successfully vaccinated	Insusceptible of Vaccination	Had Small-pox	Number of Declarations from Conscientious Objectors	Died Unvaccinated	Postponed by Medical Certificate	Removed to other districts the Vaccination Officer of which has been apprised	Removed Address unknown	Percentage successfully Vaccinated	Excluding those who died Unvaccinated. Percentage
1900-1909	578	468	—	—	39	4	6	3	10	82.0	87.0
1933	565	169	3	—	335	24	8	3	13	29.91	31.0
1934	552	136	3	—	353	21	4	3	32	24.6	25.6
1935	583	138	3	—	397	13	4	1	25	23.7	24.2
1936	587	133	1	—	397	19	4	4	29	22.6	23.0
1937	554	114	2	—	371	22	7	5	35	20.6	21.2

The percentage vaccinated has fallen from 87 per cent. (the average for 1900 to 1909), to 21 per cent. in 1937.

Immunisation.

At the Isolation Hospital the nursing and domestic staff are tested for susceptibility to diphtheria and scarlet fever and immunised when necessary.

Three orphanages in the Borough have been immunised against diphtheria, and all new entrants to these homes are tested and similarly protected where necessary.

The method of immunisation is that so ably worked out by Dr. G. Chesney of Poole; for children A.P.T. is used in two doses with a month's interval, the first being the "detector" dose for reactors; and no preliminary Schick test is carried out in children under 10 as it is considered advisable (as Dr. Chesney points out), to stimulate further any possible natural immunity in children of this age—for Schick immunity may be only a border-line immunity in some cases

and needs strengthening. For reactors and for older persons T.A.F. is used in three doses, with a fortnight's interval between the first and second, and a month between the second and third. The number of school children immunised was 43 and of pre-school children 11.

An endeavour has been made to test and immunise all the other children in a house in which a case of diphtheria arises; parents are usually only too willing for this, and by peaceful penetration it is hoped to pave the way for a campaign to obtain more widespread immunisation. Without some preliminary work, any attempt at insisting on mass inoculation seems to arouse opposition, for negativism is as prevalent in parents as in children; and compulsory vaccination against smallpox seems to have bequeathed an enduring but unwarranted prejudice.

During the measles epidemic, a limited number of cases were attenuated by placental globulins; the results were satisfactory and no reactions occurred although it could not be considered in any way a large scale trial.

Science has given these invaluable preventive measures, and they are but scantily used. People often say, in epidemic times especially, how much appreciated would be some preventive measures against such as influenza, or it is said how great would be the discovery of the cause of cancer; but in view of the way in which existing discoveries are used, the cynic is tempted to ask if any more are deserved.

4. (a) *Prevention of blindness. Particulars should be given of any action taken under Section 66 of the Public Health Act, 1925, or under Section 176 of the Public Health Act, 1936, for the prevention of blindness or for the treatment of persons suffering from disease or injury to the eyes.*

Arrangements are in force for the prompt treatment of cases of ophthalmia neonatorum, hospital accommodation under specialist treatment being available for all cases; and the pre-school and school medical services deal with cases of eye defects in children. No special measures have been taken for injuries to adults, because there are no local industries in which these would be specially required.

It cannot however be over-emphasised that "After the early years blindness, apart from accidents, is often due to general disease, and the prevention of blindness to this extent becomes part of preventive medicine. For this reason alone it is highly desirable that persons with defects of sight should seek expert medical advice with a view to finding out whether the cause of such defects is some disorder of general health." This is the considered opinion expressed in their reports by the Prevention of Blindness Committee and the words merit the most careful attention by each individual person.

(b) *Tuberculosis.* Particulars should be given of any action taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925 (relating to persons suffering from pulmonary tuberculosis employed in the milk trade), or under Section 62 of the Public Health Act, 1925, or Section 172 of the Public Health Act, 1936 (relating to the compulsory removal to a hospital of persons suffering from tuberculosis).

No action was required under this section.

5. *Tuberculosis.*

New cases and mortality during 1938.

Particulars of new cases of tuberculosis and of deaths from the disease in the area during 1938 are given in the following table:—

Age Periods	NEW CASES.				DEATHS			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	Male	Female	Male	Female	Male	Female	Male	Female
Under 1 year	-	-	-	-	-	-	-	-
1 to 5 years	-	-	1	-	-	-	1	-
5 to 15 "	2	2	2	-	1	-	-	-
15 to 25 "	6	5	-	-	2	3	-	-
25 to 35 "	10	10	1	1	4	4	-	1
35 to 45 "	3	6	-	1	3	2	-	-
45 to 55 "	4	4	-	-	3	3	-	-
55 to 65 "	5	2	-	-	2	1	-	-
65 & over "	1	2	-	-	2	1	-	-
TOTALS	31	31	4	2	17	14	1	1

The death-rate for respiratory tuberculosis in Torquay was 698 per million population, compared with a rate of 532 for England and Wales ; and the death-rate for other forms of tuberculosis was 45 per million, compared with a rate of 103 for England and Wales.

The number of cases on the Tuberculosis Register at the end of the year was :—

	Male	Female	Total
Respiratory	205	178	383
Non-Respiratory	39	27	66
	244	205	449

The ratio of non-notified tuberculosis deaths to total tuberculosis deaths is 2 to 33 or 6.1 per cent. In each case of a non-notified tuberculosis death, enquiries are made and the particulars forwarded to the County Medical Officer of Health.

The efficiency of notifications of tuberculosis in the area seems satisfactory, and there is no evidence to suggest any cases of wilful neglect or refusal to notify.

6. *Disinfection.*

Disinfection is carried out, without charge, in all cases of notifiable infectious disease and also after the removal or death of tuberculosis patients: moreover, after cases of cancer and after a number of other non-notifiable diseases disinfection is employed.

The methods used are unaltered, formalin disinfection for rooms, and steam disinfection for the bedding ; the number of rooms disinfected was 483, and the number of lots of bedding disinfected was 149.

Probably disinfection has a certain value, especially psychologically ; but much of the value depends on the subsequent household cleaning, with plenty of soap and water, distempering or re-papering where necessary, which are as effective. It is indeed taking a long time for a realisation that the words of Burton in his "Anatomy of Melancholy" are profoundly true—of infectious disease as of other things—
"The greatest enemy to man is man."



BOROUGH OF TORQUAY.

Torquay Riparian Authority
REPORT, 1938

STAFF.

Medical Officer of Health.

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Deputy Medical Officer of Health.

W. J. HOGG, M.D.ABERD., L.M.DUB., D.P.H.ABERD.

Chief Sanitary Inspector and Port Sanitary Inspector.

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District Sanitary Inspector and Assistant Port Sanitary Inspector.

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(The work in connection with Port Health Administration is carried out by the above members of the Public Health Staff, in the course of the general Public Health Administration of the Borough).

BOROUGH OF TORQUAY.

PORT HEALTH ADMINISTRATION, 1938

The following report is the record of Port Health Administration for the year 1938, detailed in form and sequence in accordance with the instructions of the Minister of Health contained in Memorandum 204/S.A.

**I. AMOUNT OF SHIPPING ENTERING THE PORT
DURING THE YEAR.**

TABLE A.

		Number	Tonnage	Number Inspected		Number reported to be defective	Number of vessels on which defects were remedied	Number of vessels reported as having, or having had, during the voyage infectious disease on board.
				By the Medical Officer of Health	By the Sanitary Inspector			
Foreign—								
Steamers	..	13	9907	3	3	—	—	—
Motors	..	29	9818	1	35	—	—	—
Sailing	..	—	—	—	—	—	—	—
Fishing	..	34	864	—	3	—	—	—
Total	..	76	20589	4	41	—	—	—
Coastwise—								
Steamers	..	16	6602	4	21	—	—	—
Motor	..	758	34183	6	73	—	—	—
Sailing	..	1	10	—	—	—	—	—
Fishing	..	1298	10861	—	3	—	—	—
Total	..	2073	51656	10	97	—	—	—
Total—Foreign and Coastwise	..	2149	72245	14	138	—	—	—

II. CHARACTER OF TRADE OF PORT.

TABLE B.

(a) *Passenger Traffic during the year.*

This is not a port approved under the Aliens Order, 1920.

No. of Passengers	1st Class	2nd Class	3rd Class	Transmigrants
Inwards ..	—	—	—	—
Outwards ..	—	—	—	—

Tourist Traffic. During the year there were 13,471 passengers on tourist trips, to Cherbourg, to the Dart or along the coast to Exmouth, Weymouth, etc. It also includes some passengers who landed for a few hours from two or three liners on tour calling in Torbay.

(b) *Cargo Traffic.*

Principal Imports. Coal, cement, timber, sugar, fish, onions and general.

Foreign Ports from which vessels arrive. Baltic Ports, Archangel, Ghent, Roscoff, Delfzyl and St. Malo.

III. WATER SUPPLY.

(1) *Source of Supply for (a) the Port (b) Shipping.*

The town supply drawn direct from the main is the source of supply used.

(2) *Hydrants and Hosepipes. What precautions are taken against Contamination?*

These are flushed prior to use and inspected regularly by the Sanitary Inspector.

(3) *Number of water boats and their sanitary condition.*

There are no water boats.

IV. PORT SANITARY REGULATIONS, 1933.

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

Declarations of Health in the approved form are completed by the Master of the Vessel and handed to the Customs Official who, should occasion require it, communicates immediately with the Medical Officer of Health.

(2) *Boarding of vessels on arrival.*

All foreign and coastwise vessels are boarded and inspected by the Sanitary Inspector, and by the Medical Officer of Health if required; and a few vessels are inspected by the Medical Officer of Health or his Deputy as a routine.

(3) *Notification to the Authority of inward vessels requiring special attention (wireless messages, land signal stations, information from Pilots, Customs Officers, etc.)*

Arrangements are made with the Post Office for the transmission of wireless messages if required. None were received in 1938.

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

- (a) Within the docks.
- (b) Outside the docks.

In March, 1934, the Commissioners of Customs and Excise formally agreed to the establishment under Article 10 of a mooring station for ships arriving at Torquay between Buoys No. 11 and No. 19 in the Outer Harbour. The agreement is subject to the understanding that the mooring place referred to is for all ships unhealthy under the Regulations, that a standing exemption under Article 14 has been granted and that the Local Health Authority will meet the cost of conveying Customs Officers when boarding ships detained at the Mooring Station.

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

A standing exemption under Article 14 has been granted by the Medical Officer of Health in respect of ships with infectious diseases other than cholera, plague, yellow fever, typhus fever, smallpox and chicken-pox on board, and ships otherwise clean arriving from ports in areas listed under Article 11.

(6) *Experience of working Article 16.*

There has been no experience of this during 1938.

(7) *What, if any, arrangements have been made for :—*

(a) *Premises and waiting rooms for medical examinations.*

There are no premises specially designated for medical examinations, but there is an office at the harbour where such examinations may be made.

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

The Authority is not competent to undertake the disinfection of ships which, when occasion arises, are referred to Plymouth for this purpose.

The cleansing of persons and the disinfection of clothing and other articles can be undertaken at the Isolation Hospital.

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

No special premises have been designated for the temporary accommodation of persons, but should this become necessary, it might be provided at one of the Hospitals in the area.

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

For smallpox cases the County Council have a central institution at Upton Pine, near Exeter. No special hospital accommodation is available for plague, cholera or yellow fever, except such as the Torquay Isolation Hospital could provide. There is a small special hospital at Dartmouth where cases might be sent by arrangement with the County Medical Officer of Health. Other infectious diseases would be dealt with at the Isolation Hospital.

(e) *Ambulance Transport.*

An adequate and efficient ambulance service is available with four motor ambulances for infectious and non-infectious diseases.

(f) *Supervision of Contacts.*

This would be undertaken by the Medical Officer of Health, his Deputy, or by the Sanitary Inspector, according to the requirements of the particular case.

(8) *Arrangements for the bacteriological or pathological examination of rats for plague.*

No formal arrangements have been made, but the required examination would be carried out at the County Laboratories, Exeter (administered by the County Council).

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

Examinations under this heading would be made either at the Town Hall Laboratory, Torquay, or at the County Laboratory, Exeter. Special examinations (such as for leptospirosis, etc.) would be made at the Wellcome Research Bureau, London.

(10) *Arrangements for the diagnosis and treatment of venereal disease among sailors under international arrangements.*

A venereal disease clinic is held at the Torbay Hospital, Torquay, where provision is made for diagnosis and treatment; in addition to the special clinics, daily treatment is arranged for those cases needing it. The personnel of all ships are circulated with leaflets informing them of these facilities: and the booklet "A Doctor Speaks to Seamen" has also been distributed.

(11) *Arrangements for the interment of dead.*

There is a recently built and adequately equipped mortuary for infectious and non-infectious cases; and when built accommodation was provided in excess of that ordinarily anticipated, so that it would possibly meet the needs of any mishap at sea or on shore. The nearest crematorium is at Plymouth; but there was no death at the port in 1938.

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 five years
	Passengers	Crew		
Measles ..	—	—	—	0.2

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 five years
	Passengers	Crew		
—	—	—	—	—

No cases of plague, cholera, yellow fever, smallpox or typhus fever occurred on any vessel using the port, and no plague-infested rats were discovered.

Notice was given in the case of one ship not to land three budgerigars.

V. MEASURES AGAINST RODENTS.

(1) Steps taken for detection of rodent plague.

(a) In ships in the port.

Enquiries are made from all Masters of Vessels using the port concerning the presence of rats, and, if present, of signs of unusual mortality among the rats. Owing to the small size of the vessels and of the nature of the cargo carried, it is extremely uncommon to find any evidence of rat infestation.

(b) On quays, wharves, warehouses, etc., in the vicinity of the port.

Regular inspection is made by the Sanitary Inspector and any unusual signs are notified to the Medical Officer.

- (2) *Measures taken to prevent the passage of rats between ships and the shore.*

Notice is given to each Master who must adopt these precautions in order to prevent the passage of rats between the ships and the shore, and in addition two notice boards have been placed on the quay; protectors must be fitted on hawsers (or hawsers to be frapped with canvas and freshly tarred each night to the satisfaction of the Sanitary Inspector), and gangways must be removed at night.

- (3) *Method of deratisation of*

(a) *Ships.*

Any ship requiring deratisation is referred to Plymouth for the necessary measures, and the next port of call of the vessel would be notified.

(b) *Premises in the vicinity of docks or quays.*

These premises are inspected regularly by the Sanitary Inspector and baits laid down, if required.

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

Systematic inspections are made, with special reference to the presence of rat excreta, rat runs, damage to food-stuffs, etc.

- (5) *Rat-proofing.*

(a) *To what extent are docks, wharves, warehouses, etc., rat proof.*

The quays are of cement and there are concrete walls, with sheet zinc extensions below ground.

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

(i) *In ships.*

Masters are advised and regularly reminded of the necessity for storing food in containers which are rat-proof, and of the necessity for avoiding any collection of food refuse, etc., which might attract rats.

(ii) *On shore.*

The quays are of good construction, but emphasis is laid on adequate cleanliness and the avoidance of any accumulation of foodstuffs for rats. Where foodstuff is temporarily stored on the quays, it is placed in buildings which are rat-proof.

RATS DESTROYED DURING THE YEAR.

TABLE E.

(1) On Vessels

Number of Rats	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total in year
Black ..	.	.	.	.	.	.	.	.	.	.	.	.	.
Brown ..	.	.	.	.	.	.	.	.	.	.	.	.	.
Species not recorded	.	.	.	.	.	.	.	.	.	.	.	.	.
Examined ..	.	.	.	.	.	.	.	.	.	.	.	.	.
Infected with plague	.	.	.	.	.	.	.	.	.	.	.	.	.

TABLE F.

(2) In Docks, Quays, Wharves and Warehouses

Number of Rats	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total in year
Black ..	.	.	.	.	.	.	.	.	.	.	.	.	.
Brown ..	.	.	.	.	.	.	.	.	.	.	.	.	.
Species not recorded	.	.	.	.	.	.	.	.	.	.	.	.	.
Examined ..	.	.	.	.	.	.	.	.	.	.	.	.	.
Infected with plague	.	.	.	.	.	.	.	.	.	.	.	.	.

TABLE G.

Measures of Rat Destruction on Plague "infected" or "suspected" Vessel or Vessels from plague infected ports arriving in the Port during the year.

(1) Total number of such Vessels arriving	(2) Number of such Vessels fumigated by SO ₂	(3) Number of Rats killed	(4) Number of such Vessels fumigated by HCN	(5) Number of Rats killed	(6) Number of such Vessels on which trapping, poisoning, etc., were employed	(7) Number of Rats killed	(8) Number of such Vessels on which measures of Rat destruction were not carried out.
—	—	—	—	—	—	—	—

TABLE H.

Deratisation Certificates and Deratisation Exemption Certificates issued during the year.

This table does not apply, as Torquay is not an approved port under Article 28 of the International Sanitary Convention, 1926.

VI. HYGIENE OF CREWS' SPACES.

TABLE J.

Classification of Nuisances

Nationality of Vessels	Number Inspected during the year	Defects of original construction	Structural defects through wear and tear	Dirt, vermin and other conditions prejudicial to health
British ..	97	—	—	—
Other Nations ..	41	—	—	—

VII. FOOD INSPECTION.

- (1) *Action taken under the Public Health (Imported Food) Regulations, 1925, the Public Health (Imported Food) Amendment Regulations, 1933, the Public Health (Imported Milk) Regulations, 1926, and the Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1927.*

No samples were taken ; there is no importation of food, except a few cargoes of potatoes and onions from France.

During the year no food (including fish) was condemned or surrendered.

- (2) *Shell Fish.*

Information respecting any shell-fish beds or layings within the jurisdiction of the P.H.A. stating whether they are in the opinion of the Medical Officer liable to pollution. Report of any action taken under the Public Health (Shell-fish) Regulations, 1934, or the Public Health Cleansing of Shell-fish) Act, 1932.

There are no oyster or mussel beds within the jurisdiction of the Authority, and no action was taken under the above-mentioned Regulations or Act.

Some lobsters and crabs are caught locally by Torquay and Brixham boats ; but there is no evidence to suggest that they are liable to pollution.

Any available information on the following points :—

- (i) *The places to which shell-fish taken from layings in the district are sent to be marketed.*

There are no shell-fish layings in the area.

- (ii) *The layings from which shell-fish (specifying the kinds of shell-fish) which may be marketed in the district, are derived.*

Lobsters and crabs are caught locally, and are disposed of in the district; small shell-fish such as oysters, cockles, winkles, etc., come by train from the London markets.

(3) *Number of Samples of Food examined by :—*

(a) *Bacteriologist.*

(b) *Analyst.*

No samples were taken for examination under either heading.

SECTION H.

MISCELLANEOUS.

- (1) *A statement of any special action taken during the year to arouse public interest in the prevention of ill-health or the importance of early treatment. A brief description of the special efforts made locally in connexion with the national campaign to secure a wider use of the health services should be included under this heading.*

The campaign to secure a wider use of the health services started towards the end of 1937 and followed the campaign made to improve national fitness. At the beginning of each campaign, special films were shown at one of the local cinemas; and the Mayor, the members of the Public Health Committee and others attended the inaugural display. The Press co-operated and a number of articles and annotations appeared; and delegates were present at a mass meeting at Plymouth to further the campaign. Subsequently different posters were displayed each month at all schools, municipal buildings, and other prominent positions, and talks given to various voluntary organisations and guilds, and at certain schools.

It was a fortunate coincidence that at the conclusion of these campaigns one section of the Annual Meeting of the British Medical Association at Plymouth was held in Torquay; and this section of which your Medical Officer was Hon. Scientific Secretary, devoted the whole day to National Fitness. The scientific meeting obtained prominent speakers to open a discussion on the Physiological Approach to Fitness, together with the relation of Fitness and Industry, Fitness and the Services, Fitness and the Average man, Fitness and the Health Resort; this brought out many scientific aspects of such an important subject.

In the afternoon, by permission of the Army Council, there was a display of physical fitness by recruits from the Physical Development Dépôt; and a large number of medical practitioners and of the public witnessed this most interesting event. A routine sample of recruits (not a picked group) who had passed through the Dépôt were paired with entrants who had just arrived, and later the senior recruits gave a continu-

ous display. A running commentary through a microphone gave an interesting account of the contrasts between the two types, of some of the points in training and other general details; and everyone present was thoroughly impressed by such a vivid practical example of what can be achieved in a comparatively short time.

It is said that seeing is believing, and this display would do more than many lectures to bring home to doctors and public alike the importance of fitness; and those present would return as missionaries to their own localities with renewed enthusiasm for futhering the gospel of a hygienic way of life.

(1) *Local Government Superannuation Act.*

The duties of your Medical Officer under this section include the medical examination of all newly appointed officers and servants entering the Corporation's service or coming into the scheme; he is also required to examine and report on any officer and servant after prolonged illness or after accident as to fitness or unfitness to return to service, and to examine and report on any cases who may be permanently unfit and who may have to be invalided on account of ill-health.

During the year your Medical Officer carried out the necessary clinical examinations in 172 individual cases.

(3) *Air Raids Precautions.*

During the year there was a great increase in activity in this section of the work; and from 1st October Torquay, Paignton and Brixham became a joint authority for administering A.R.P. and for making the detailed schemes. The general arrangements for first-aid posts were revised, in the light of previous experience, and stocks were obtained in September to be held for any emergency.

The training of personnel for the First-aid sections was continued through the British Red Cross Society and the St. John Ambulance Brigade; while the area organiser, Mr. H. E. Marshall, organised the training of women ambulance drivers.

In connexion with the organisation of the medical profession in time of national emergency, a Local Emergency Committee was formed of which your Medical Officer is a joint Hon. Secretary. The Local Emergency Committee (working under the Central Emergency Committee) covers the area of the Torquay Division of the British Medical Association, and its many duties include the responsibility of advising the Local Authorities as to medical personnel available for work in A.R.P. schemes, the allocation of medical personnel available for the maintenance of the health of the civil population, and the provision of arrangements for the protection of the practices of doctors called away on active service.

On the outbreak of war, the Local Emergency Committee becomes the Local Medical War Committee.



Borough of Torquay.

Chart shewing the Principal Meteorological Conditions during each day of the year 1938



RAINFALL
Each Square = 0.01 inch
• denotes rain 0.01 inch or more
• denotes fall of 0.01 inch
• denotes fall of 0.01 inch

BAROMETRIC PRESSURE indicated in p.s.f. and inches: 29.92
(1 in. = 2.54 cm.)

ULTRA-VIOLET RAYS

TEMPERATURE
Each Square = 1° F.

SEA TEMPERATURE

SUNSHINE
Each Square = 1 hour
• denotes rain with duration of 0.1 to 0.2 hour

Drawn by H. T. BEECHY, Torquay.

Dr. J. V. A. SIMPSON,
Medical Officer of Health,
Torquay.

C. BELLINGER,
Borough Meteorologist,
Torquay.

