

## **Annual report on the health of Gibraltar.**

### **Contributors**

Gibraltar. Public Health Department.

### **Publication/Creation**

Gibraltar : Govt. Printer, [1937]

### **Persistent URL**

<https://wellcomecollection.org/works/dgdzke72>

### **License and attribution**

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

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

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



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



City Council of Gibraltar.

---

ANNUAL REPORT

ON THE

HEALTH OF GIBRALTAR

FOR THE YEAR

**1937.**

BY

Major R. A. MANSELL, M.B.E., M.B., D.P.H., D.T.M. & H.,  
Royal Army Medical Corps.  
Medical Officer of Health.

with which is included  
the Report of the City Analyst and Bacteriologist,  
and the Report of the Veterinary Adviser.

---

Gibraltar Garrison Library Printing Establishment,  
Government Printers for Gibraltar.  
1938.



22501399037



City Council of Gibraltar.

---

ANNUAL REPORT

ON THE

HEALTH OF GIBRALTAR

FOR THE YEAR

**1937.**

BY

Major R. A. MANSELL, M.B.E., M.B., D.P.H., D.T.M. & H.,  
Royal Army Medical Corps.  
Medical Officer of Health.

with which is included  
the Report of the City Analyst and Bacteriologist,  
and the Report of the Veterinary Adviser.

---

Gibraltar Garrison Library Printing Establishment,  
Government Printers for Gibraltar.

1938.

City Council of Gibraltar

ANNUAL REPORT

OF THE

HEALTH OFFICER OF GIBRALTAR

FOR THE YEAR

1937

BY

DAVID A. MANSELL, M.B.E., M.R.C.P., D.M.S., D.M. (Lond.)  
Royal Army Medical Corps

WELLCOME INSTITUTE LIBRARY	
Coll.	welM0mec
Call	Ann Rep
No.	WA28
	. EG5
	G44
	1937

## LIST OF CONTENTS

	PAGE
SUMMARY OF VITAL STATISTICS ... ..	1
METEOROLOGICAL OBSERVATIONS ... ..	2
VITAL STATISTICS	
Population ... ..	5
Vital Statistics during 1937 and previous	10
Years ... ..	6
Deaths ... ..	7
BIRTHS AND INFANTILE MORTALITY ... ..	10
PREVALENCE AND CONTROL OF INFECTIVE	
DISEASES ... ..	12
RELIEF OF THE DESTITUTE AND AGED SICK	20
INVESTIGATION AND PREVENTION OF OTHER	
DISEASES ... ..	23
MEDICAL WORK FOR THE COUNCIL ... ..	26
SERA, VACCINES, ETC., KEPT IN STOCK...	26
DISINFECTION ... ..	27
AMBULANCE SERVICE ... ..	28

LIST OF CONTENTS—*Continued.*

SANITARY CIRCUMSTANCES OF THE DISTRICT	
Water Supply ... ..	29
Sewerage and Drainage ... ..	30
Refuse Collection and Disposal ... ..	31
Public Highways ... ..	31
Public Baths ... ..	32
HOUSING ... ..	32
SUMMARY OF WORK DONE BY SANITARY INSPECTORS ... ..	33
COMMON LODGING HOUSES ... ..	34
REFUGEES ... ..	35
FOOD ... ..	37
AMOUNT OF SHIPPING ENTERING THE PORT ...	41
REPORT OF THE CITY ANALYST AND BACTERIOLOGIST ... ..	42
REPORT OF THE VETERINARY ADVISER ...	53
CHARTS ... ..	End of Report

# CITY COUNCIL OF GIBRALTAR

---

## *Chairman.*

Councillor PETER G. RUSSO, J.P.

Councillor Comdr. G. A. GARNONS-WILLIAMS, D.S.C., R.N.,  
(Vice-Chairman).

Councillor Lt.-Col. J. S. BAINES, R.E.

Councillor A. J. BALDORINO.

Councillor E. B. COTTRELL.

Councillor J. DISCOMBE, O.B.E., J.P.

Councillor H. St. C. GARROOD, M.C., L.R.I.B.A.

Councillor A. E. HUART, J.P.

Councillor C. T. POU.

---

## *Medical Officer of Health.*

Major R. A. MANSELL, M.B.E., M.B., D.P.H.  
D.T.M. & H., R.A.M.C.

## *City Analyst and Bacteriologist.*

A. G. HOLBOROW, F.I.C.

## *\*Veterinary Adviser.*

Lieut.-Colonel F. C. O'RORKE, C.M.G., F.R.C.V.S.

## *Senior Sanitary Inspector and Public Health Chief Clerk.*

|| † C. E. NORTON, M.R. San. I.

## *Sanitary Inspectors.*

† A. E. VICTORY, A.R. San. I.

† H. W. MCINTOSH, M.R. San. I.

|| † P. VELLA, A.R. San. I.

|| † J. SUAREZ, M.R. San. I.

|| † A. TRAVERSO, A.R. San. I.

## *Laboratory Assistants.*

M. J. GOMEZ.

H. J. BRUZON.

## *xDestitute Sick and Tuberculosis Scheme.*

Medical Officer i/c of the Home...The Medical Officer of Health  
Lady Superintendent ..... Mrs. R. MONTEGRIFFO.

## *xMaternity and Child Welfare.*

Medical Officer i/c .....The Medical Officer of Health  
Midwife and Health Visitor.....Mrs. A. GONZALEZ.

\* Occasional.

† Cert. Royal Sanitary Institute.

|| Cert. Inspector of Meat and Other Foods.

x Mainly maintained by Government Grants.



# COLONIAL DEPARTMENT

---

## *Colonial Hospital.*

### *Senior Medical Officer*

J. LOCHHEAD, Esq., O.B.E., J.P., M.A., M.D., B.Sc.,  
F.R.C.S. (Edin.)

### *Medical Officers.*

J. E. DEALE, Esq., M.B., Ch.B., B.A.O., F.R.C.S.I.

A. McK. FLEMING, Esq., M.B., B.S.

K. GILCHRIST, Esq., F.R.C.S.

\*L. H. GILL, Esq., L.R.C.P., L.R.C.S. (Edin.)

---

### *Public Vaccinator.*

\*L. H. GILL, Esq., L.R.C.P., L.R.C.S. (Edin.)

### *Port Surgeon.*

\*A. A. Russo, Esq., L.R.C.S.I., L.R.C.P.I.

### *Deputy Port Surgeon.*

J. J. GIRALDI, Esq., M.D.

### *Surgeon Isolation Hospital.*

\*J. A. DURANTE, Esq., M.R.C.S., L.R.C.P.

### *Inspector of Food.*

The Medical Officer of Health.

### *Medical Inspector of Schools.*

The Senior Medical Officer, Colonial Hospital.

### *District Medical Officers.*

\*H. G. TRIAY, Esq., M.B., Ch.B.

\*J. DOTTO, Esq., M.R.C.S., L.R.C.P.

### *School Dentist.*

J. GARESSE, Esq.

---

\* Allowance paid to private medical practitioners as a retaining fee for their services.

PREFACE.

BOARD OF HEALTH.

---

H.E. the Governor (Chairman).

---

The Hon. Colonial Secretary.

The Deputy Director of Medical Services.

The Senior Naval Medical Officer, Gibraltar Command.

The Captain of the Port.

The Port Surgeon.

The Senior Medical Officer, Colonial Hospital.

The Medical Officer of Health.

The Chairman, City Council.

The President, Exchange Committee.

The President, Chamber of Commerce.

Secretary—H. J. S. NORTON, Esq., M.B.E.



Digitized by the Internet Archive  
in 2019 with funding from  
Wellcome Library

## PREFACE.

---

*Reports, such as this, on the state of the public health may be read in at least two days.*

*To some minds figures mean results—whether good or bad, and can be compared with similar figures of the same nature recorded in the same way over a number of years. The health of the people can be gauged, up to a point, statistically.*

*For 1937 we have a death rate lower than that of the three preceding years; a birth rate correspondingly higher, and a zymotic mortality rate at the average of those three years. We have, at the same time, an infantile mortality rate which is the highest recorded in recent years. It needs no knowledge of medicine or skill in statistics to appreciate that the strain of adverse conditions must first manifest itself at the weakest link of the chain of life; or to realise that this particular evidence of an increase of that strain, instead of a decrease for which it is our business to strive, is of much more serious import than mere figures can shew.*

*On the other hand a very great part of the public health lies in the happiness and general well-being of the people—their welfare. This it is not possible to measure statistically, at any rate in such a form as to be easily understandable by those not specially trained to combine and assess all the scattered, but relevant, figures. It can, however, readily be inferred from a knowledge of the conditions under which the people live and with which they have, often unwillingly, to contend. Such information is, I hope, available in this Report in forms not too difficult to gather into a composite picture.*

*The mere fact that the epidemic of measles which is recorded in the following pages had a practically negligible mortality does not prevent one from appreciating the worries, the difficulties, and the unhappiness of trying to nurse two or three sick children in a family of ten, or even more, living in one room; nor can one fail to realise also the later difficulties of bringing them and the other members of the family, especially the mother, back to a state above the border-line of susceptibility to further breakdown, either physical or mental. At the*

same time there are paragraphs in this Report, easy to find, which contain the record of so much promise for the betterment of the people's being that the whole picture is, in the end, illuminated.

If something of this latter aspect of public health work can be read into the pages which follow, I, and my successors, will have to acknowledge more and more widely their gratitude to public bodies, private individuals and the Press whom I now thank for their assistance in 1937.

The Reports of the City Analyst and Bacteriologist and of the Veterinary Adviser are appended.

R. A. MANSELL,

Major, R.A.M.C.,

Medical Officer of Health.

Public Health Department,

City Council of Gibraltar,

14th May, 1938.

# CITY COUNCIL OF GIBRALTAR

## PUBLIC HEALTH DEPARTMENT

### SUMMARY OF VITAL STATISTICS FOR 1937.

Total area of Gibraltar Territory	... ..	{ 1,387 acres, 2 roods, 3 poles
Area of the City	... ..	{ 104 acres, 3 roods, 33 poles.
Estimated Total Civil Population of Gibraltar		19,541 persons.
Estimated Fixed Civil Population of Gibraltar		16,792 persons.
Births in Fixed Civil Population	... ..	{ 208 Males. 173 Females.
Total Births	... ..	434.
Birth rate per 1,000 of Fixed Civil Population		22.69.
Deaths in Fixed Civil Population	... ..	{ 139 Males. 153 Females.
Total Deaths	... ..	344.
Crude death rate per 1,000 of Total Civil Population	... ..	{ 14.93.
Average crude death rate for previous ten years	... ..	{ 15.5.
Death rate from Pulmonary Tuberculosis	... ..	1.08 per 1,000.
Infantile Mortality rate	... ..	68.24 per 1,000 births.

# METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1937.

Recordings for the year are shewn in the tables which follow. These actual figures are not properly comparable with those of reports prior to 1936 as the main recording station was moved during the latter half of 1935 from the Alameda Gardens to Windmill Hill where the station is now in charge of meteorologists from the Air Ministry, London. The comparatively reasonable temperatures shewn in the tables do not, therefore, record the fact that the summer was a particularly trying one from the point of view of temperature and humidity.

The rainfall for the year was below the expected average by 8.12 inches. But for the continued yield of the North Front wells this must have resulted in a serious situation for the fully crowded City.

ABSTRACT OF MEANS YEAR 1937. HOURS 7-1-9

	TEMPERATURE						RAINFALL				NUMBER OF DAYS OF							RADIATION					Highest corrected Barometer and Date MBs Inches	Lowest corrected Barometer and Date MBs Inches	Number of Obs.: per Month						
	Mean Max: °F	Mean Min: °F	Mean of Max. & Min: °F	Abs. Max: °F	Date	Abs. Min. °F	Date	Total Fall Inches.	Total Fall Millimetres	Deviation from Normal MM	Moist in a day Millimetres	Date	Precipitation O.T.M.M. or more	Precipitation 1. M. M. or more	Clear Sky less than 2/10	Overcast More than 8/10	Hail	Thunderstorm	Frost	Gale Gusts	Fog	Grass Min. Mean:				Abs. Min:	Date	Solar Max. Mean:	Abs. Max:	Date	
JAN....	57.3	52.3	54.8	62	30th 31st	45	28th	5.43	138.0	+ 9	25.6	23rd 27th	12	10	0	8	1	4	0	4	1	48.8	41	1st	88	118	13th	1023.4 30.516	991.3 29.272	27th	93
FEB....	58.1	53.4	55.8	67	19th	46	1st-9th 10th	0.18	4.9	-102	2.3	8th	3	2	7	4	0	0	0	8	2	48.8	39	10th	109.4	129	21st	1025.9 30.296	1014.0 29.943	27th	84
MAR...	57.7	51.8	54.7	63	17th 24th 31st	45	1st 20th	5.35	135.9	+ 14	32.8	3rd	17	15	3	7	0	1	0	23	1	48.6	40	1st	101.5	124	30th 31st	1023.6 30.229	998.8 29.406	4th	93
APR....	62.7	55.4	60.0	71	9th 17th	62	17th	2.47	62.7	- 5	17	27th	9	7	6	4	0	1	0	14	6	50.5	45	4th 19th	111.1	132	16th	1025.4 30.280	1008.3 29.776	12th	90
MAY...	65.7	58.3	62.0	75	31st	52	21st	0.44	11.3	- 33	3.6	18th	5	4	11	1	0	0	5	4	53.4	48	6th 7th	120.7	133	26th 31st	1024.8 30.263	1009.6 29.813	19th	93	
JUN....	71.8	62.5	67.2	80	15th	58	11th	0.11	2.7	- 9	2.5	8th	3	1	15	0	0	0	5	2	58.3	53	30th	127	137	29th 30th	1022.0 30.180	1013.0 29.916	10th	90	
JUL....	75.8	67.6	71.7	88	24th	63	9th	0	0	- 1	-	-	-	-	17	0	0	0	10	9	61.0	59	27th	Solar M Ther m. Br	ax. oken	1018.7 30.083	1007.6 29.757	30th	93		
AUG....	78.0	69.0	73.5	89	19th	64	24th	0.02	0.5	-2.5	0.5	26th	1	0	15	0	0	1	0	3	9	65.4	58	25th	-	-	-	1019.1 30.096	1012.2 29.890	11th	93
SEP...	73.8	66.3	70.1	92	10th	60	20th-24th 25th-26th	.08	2.1	- 33	1.8	16th	3	1	6	1	0	1	0	28	0	62.9	53	27th	-	-	-	1020.7 30.143	1006.8 29.730	11th	90
OCT....	65.9	60.7	63.3	76	1st	53	28th	10.8	274.3	+190	55.8	21st	20	14	1	13	0	2	0	11	3	58.6	51	28th	-	-	-	1026.0 30.299	995.1 29.386	26th	93
NOV....	64.4	58.9	61.7	72	25th	53	28th	1.82	46.2	-116	12.0	13th	11	11	3	9	0	0	6	1	55.7	43	28th	-	-	-	1026.7 30.320	1006.9 29.753	2nd	90	
DEC....	57.7	50.8	54.2	68	8th	42	31st	7.83	198.9	+55.9	42	9th	13	9	4	4	0	1	0	13	0	47.3	39	16th	-	-	-	1027.7 30.348	1005.4 29.690	8th	93
YEAR.	65.7	58.9	62.3	92	10th Sept.	42	31st Dec.	34.55	877.5	- 33 1.26 ins.	55.8	21st Oct.	97	74	88	52	1	11	0	130	38	55.2	39	10th Feb. 16th Dec.	-	-	-	1033.4 30.516	991.3 29.272	27th Jan.	1095



ABSTRACT OF MEANS YEAR 1937. HOURS 7-1-9.

	Mean Bar: corrected Inches	Mean Bar: corrected M'Bars	HYGROMETER ETC.												Cloud 0-10			WIND											Gales Number of Obs: per Month	
			Dry Bulb °F			Dep. of Wet °F			Vapour Pressure M' Bars			Humidity %			Mean Amount			Forces			1095. Observations									
			Hours			Hours			Hours			Hours			Hours			0-12 Beaufort			DIRECTION									
			7	1	9	7	1	9	7	1	9	7	1	9	7	1	9	4-7	1-3	Calm	N	NE	E	SE	S	SW	W	NW		
JAN ...	30.163	1021.1	53.9	56.8	55.1	2.6	3.4	3.0	11.8	12.5	12.0	82	79	81	6.6	7.0	4.3	52	36	3	3	1	16	18	2	1	25	24	3	93
FEB ...	30.140	1020.6	54.7	59.5	57.3	2.6	3.8	3.2	12.1	13.4	12.8	84	78	80	4.8	5.6	3.0	33	44	7	4	4	3	5	0	2	24	35	0	84
MAR ...	30.006	1016.1	53.0	57.2	55.2	3.4	4.3	3.2	11.4	11.8	11.8	82	74	79	6.1	5.9	5.2	61	29	3	3	0	5	5	0	3	29	45	2	93
APR ...	30.026	1016.8	56.6	61.8	58.7	2.8	5.2	3.5	12.9	13.3	13.3	83	72	79	4.7	5.0	3.9	43	43	4	2	10	16	4	1	4	33	16	1	90
MAY ...	30.068	1018.2	59.5	64.3	61.0	3.6	5.6	3.5	13.8	14.4	13.7	79	71	75	3.7	3.6	2.6	33	56	4	4	10	26	9	1	1	18	20	0	93
JUN ...	30.046	1017.5	64.1	70.0	65.4	4.4	7.4	4.9	15.6	16.2	15.9	77	65	75	3.7	1.9	1.6	28	57	5	1	5	11	5	1	3	37	22	0	90
JUL ...	29.996	1015.8	69.2	73.9	70.9	3.3	6.0	4.2	20.5	20.7	20.6	84	73	80	3.3	1.4	1.4	32	56	5	1	13	32	2	0	3	22	15	0	93
AUG ...	29.970	1014.9	70.5	76.6	71.7	2.9	5.9	3.0	21.9	23.1	22.6	86	74	85	4.6	2.0	0.7	17	67	9	1	12	22	7	1	5	14	23	0	93
SEP ...	29.990	1015.6	67.4	72.9	69.3	3.0	5.6	3.7	19.6	20.7	20.2	84	74	82	4.2	4.8	3.2	37	48	5	1	4	29	6	0	4	14	27	0	90
OCT ...	29.940	1013.9	62.1	65.5	62.9	1.8	3.8	2.1	17.2	17.3	17.4	90	80	88	7.8	7.2	6.6	36	49	8	1	20	17	4	0	4	18	21	1	93
NOV ...	30.036	1017.1	59.9	64.2	61.9	2.0	4.0	2.6	15.8	16.1	16.2	88	79	85	6.5	6.9	6.6	18	54	17	1	8	21	4	2	0	11	26	1	90
DEC ...	30.081	1018.7	52.2	57.0	54.3	3.4	5.0	3.2	10.4	11.1	11.5	77	69	79	5.5	5.4	4.9	37	54	2	2	10	14	0	0	3	18	44	1	93
YEAR..	30.038	1017.2	60.3	65.0	62.0	3.0	5.0	3.3	15.3	15.9	15.7	83	74	81	5.1	4.7	3.7	427	593	71	24	97	212	69	8	33	263	318	9	1095

## VITAL STATISTICS.

Whereas last year, in the calculation of these statistics, known refugees from Spain, both British and alien, were excluded, they are this year included. The position appears, statistically at least, to have stabilised itself and the Colony, which had been capable for ten years previous to 1936 of containing, on an average, no more than some 16,700 inhabitants, still at the end of 1937 is admitted to contain an excess of more than three thousand persons over that figure—or some eighteen per cent above normal. This, perhaps, may not sound impressive unless it is fully realised that what I have called the average normal was definitely a saturation figure, providing very marked overcrowding, especially amongst the working class population; and that it is particularly amongst this latter class that the majority of our present excess population is now housed.

At the end of 1936 the Police Estimate of the population shewed an excess of 1,152 British and 1,184 alien persons over the previous year's figures. Evidence came to light during the course of 1937 to shew that those figures were most definitely underestimated as I recorded in my last Report. The Police count at the end of 1937 shews still 1,057 British and 1,619 alien persons in excess of the figures for 1935.

The actual resident population at the end of 1937, as estimated, was:—

British Subjects .....	16,699		
Maltese .....	66		
Bay .....	27	16,792	
Aliens—			
City .....	2,485		
Bay .....	264	2,749	
Total Population		19,541	

The fluctuations of the population during recent years are shewn below:—

How estimated.	British Subjects Fixed Population.	Alien Subjects Floating Population.	Total Population.
Census June, 1921 .....	16,753	1,787	18,540
Police Estimate at end of 1922 .....	16,182	1,145	17,327
Police Estimate at end of 1923 .....	16,165	1,181	17,346
Police Estimate at end of 1924 .....	16,177	1,147	17,324
Police Estimate at end of 1925 .....	16,127	1,161	17,288
Police Estimate at end of 1926 .....	16,150	1,013	17,163
Police Estimate at end of 1927 .....	16,120	1,076	17,196
Police Estimate at end of 1928 .....	15,719	1,112	16,831
Police Estimate at end of 1929 .....	15,647	1,052	16,699
Police Estimate at end of 1930 .....	15,526	922	16,448
Census April 1931 .....	16,188	1,425	17,613
Police Estimate at end of 1932 .....	15,143	1,466	16,609
Police Estimate at end of 1933 .....	15,071	1,326	16,397
Police Estimate at end of 1934 .....	14,790	1,057	15,847
Police Estimate at end of 1935 .....	15,735	1,130	16,865
Police Estimate at end of 1936 .....	16,875	2,319	19,194
Police Estimate at end of 1937 .....	16,792	2,749	19,541

VITAL STATISTICS DURING 1937 AND PREVIOUS TEN YEARS.

Year	Population.		How Estimated.	Deaths.			Infantile Mortality.		Births.		Zymotic Mortality.		
	Fixed.	Total.		Fixed population. No.	Total population. No.	Rate per 1,000 of population. Fixed population. Total population.	No.	Rate per 1,000 births.	No.	Birth rate per 1,000 living of Fixed population	No.	Rate per 1,000 living of Fixed population	
1926	16150	17163	Police Estimate	271	276	16.78	16.08	46	107.0	427	25.0	20	1.2
1927	16120	17196		291	297	18.05	17.27	36	99.1	363	22.0	13	.8
1928	15719	16831		286	293	18.19	17.40	45	122.9	366	23.2	30	1.7
1929	15647	16699	Police Estimate	254	262	16.36	15.68	18	46.6	388	24.7	10	.63
1930	15526	16448		240	240	15.6	14.5	25	71.3	349	22.4	8	.51
1931	16188	17613	Census	250	254	15.4	14.4	23	61.0	377	23.28	4	.24
1932	15143	16609	Police Estimate	245	259	16.17	15.59	21	60.69	346	22.84	16	.96
1933	15071	16397		241	245	15.99	14.94	14	39.2	357	23.68	3	.18
1934	14790	15847	Police Estimate	225	230	15.21	14.51	21	54.8	383	25.8	6	.37
1935	15735	16865		255	265	16.20	15.71	18	67.4	267	16.9	6	.35
1936	15735	16865	**	249	261	15.82	15.47	19	62.09	304	19.30	13	.77
1937	16792	19541	Police Estimate	256	292	15.24	14.93	26	68.24	381	22.69	10	.51

\*\*Normally resident population.

## DEATHS.

The resident British population provided 256 deaths—a rate of 15.24 per 1,000—and resident aliens provided 36 deaths—13.09 per 1,000; the total death rate per 1,000 amongst the civil population was 14.93.

The principal causes of death, in order, were :—

(1) Heart diseases .....	53 cases
(2) Other (unclassified) diseases .....	44 „
(3) Haemorrhage, apoplexy and softening of the brain .....	31 „
(4) Cancer and malignant tumours ...	25 „
(5) Old age .....	23 „
(6) Tuberculosis of the respiratory system .....	21 „

The crude death rate for the last ten years has been :—

Year .....	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Fixed Population .....	18.19	16.36	15.60	15.40	16.17	15.99	15.21	16.20	15.82	15.24
Total Population .....	17.40	15.68	14.50	14.40	15.59	14.94	14.51	15.71	15.47	14.93

#### MONTHLY AND QUARTERLY MORTALITY.

The highest number of deaths was recorded in January, and the lowest in July. The death rate during the first quarter of the year was the highest and that during the third quarter the lowest.

The mortality by months and quarters of the year is shewn below.

January 41	April 26	July 15	October 19
February 28	May 25	August 21	Nov. 22
March 26	June 21	Sept. 21	Dec. 27
—	—	—	—
95	72	57	68
—	—	—	—

Causes of deaths in 1937 in Civil population, according to the International Abbreviated List with Age and Sex incidence.

Cause of Death.	All Ages	Under 1 year.		1 year and under 2.		2 years and under 5.		5 years and under 15		15 years and under 25.		25 years and under 45		45 years and under 55		55 years and under 65		65 years and over	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
		1	1									1							
8	3		1	1			1												
9	3											1	1						1
12	5				1					2		1		1					
13	21									1		7	2	4		3	3		1
14	1					1													
15	1														1				
16	25											1	2	1	3	7	4	7	
17	2		2																
18	31											1	5	1	1	6	4	13	
19	53						2	2		1	4	3	6	4	6	3	7	15	
20	2		1															1	
21	10														4	1	3	2	
22	17	3	2	1		2	1				1	1	1		2		2	1	
23	6														4			2	
24	1														1				
25	10	3	2		1									1	1			2	
26	1										1								
27	2											1							1
28	1												1						
29	8										1		1		1	2	1	2	
32	1											1							
33	11		2																
34	23																		4
35	4			1	1						1							1	
37	44	1					1		1	1	2	1	4		3	5	9	16	
38	5									1			1		1	1		1	
Totals...	292	16	10	3	3	3	3	2	2	4	4	19	12	25	8	31	28	36	83

## BIRTHS AND INFANTILE MORTALITY.

Three hundred and eighty-one births were recorded during the year amongst the resident population—208 males and 173 females; providing a birth rate of 22.69 per 1,000 of that population.

Twenty-six infants died during the first 12 months of their lives from causes which are tabulated below. The infantile mortality rate per 1,000 live births was, therefore, 68.24. This is the highest recorded in recent years.

Twenty-four still-births were recorded.

## CAUSES OF INFANT DEATHS.

Cause of Death.	Under 1 week.	1 week and under 2.	2 weeks and under 3.	3 weeks and under 4.	Total under 4 weeks.	1 month and under 3.	3 months and under 6.	6 months and under 9.	9 months and under 12.	Total under 1 year.
Congenital Debility and Malformations	9	—	—	—	9	—	1	—	1	11
Pneumonia	—	—	—	—	—	—	2	1	2	5
Bronchitis	—	—	—	—	—	—	1	—	—	1
Diarrhoea and Enteritis	—	—	—	—	—	1	1	3	—	5
Meningitis	—	—	—	—	—	—	1	—	1	2
Diphtheria	—	—	—	—	—	—	1	—	—	1
Convulsions	—	—	—	—	—	—	—	1	—	1
Totals ... ..	9	—	—	—	9	1	7	5	4	26

### MATERNITY SERVICES.

Two hundred and sixty-three women were treated at the Maternity Ward of the Colonial Hospital where 219 civil live births were recorded.

Of the admissions 203 were from the resident population and 60 were non-resident—the corresponding numbers of births were 166 and 53 respectively. These former births—i.e., proper to the resident population, accounted for 43.5 per cent of the total births.

One hundred and sixty-nine live births were attended by midwives giving a rate of 44.3 per cent of the total births. Amongst these no cases of puerperal pyrexia or sepsis occurred. The absence of this dreaded complication of child-birth amongst cases dealt with by midwives for the past six years is a fine testimony to the care and attention to detail exercised by them.

Eighteen cases were provided with free attention by the midwife engaged by the Council from funds provided by the Government.

### CHILD WELFARE.

The average attendance at the Centre was 103, an increase of 25 over last year's figure and a record since the beginning of this work; as equally was the quantity of milk (8,500 tins) distributed free and at reduced prices. The working and finance of the Centre has been so arranged that a parent of the working classes can obtain at the Centre, in addition to advice and supervision with home visiting where necessary, at least half the total milk requirements of an infant up to 12 months of age at considerably less than wholesale prices (in the known indigent cases free), provided that the child is brought regularly to the Centre. Feeding bottles, Virol and some proprietary foods have also been issued during the year. At Christmas it was possible to make a small additional free issue of milk to regular attendants. A grant made by the Government is the basis of the finance of this Centre in conjunction with the midwifery service. This, on the present system of working, lasts for about three quarters of the year; the remainder of the year's expenses and a small necessary balance against emergencies are made by an infinitesimal profit on a proportion of the milk and other items issued above the wholesale prices at which importing firms very generously supply them. It requires no words of mine to emphasize the great value of this service to those who benefit by it.

The nurse who attends the Centre made 431 visits to homes during the year.



School medical inspection is in the hands of the staff of the Colonial Hospital: Mr. Garesse continues as the schools' dentist.

The number of children treated in the children's ward at the Colonial Hospital during the year was 239.

## PREVALENCE AND CONTROL OF INFECTIVE DISEASE.

Four hundred and nineteen cases of infective disease were recorded, in comparison with 177 in 1936, and 241 in 1935.

Towards the end of the year measles appeared in epidemic form though of mild type. The following figures shew the principal diseases in comparison with 1936:—

	1936	1937
Diphtheria .....	44	34
Scarlet Fever .....	31	10
Enteric Fever .....	17	12
Pulmonary Tuberculosis.....	30	34
Measles .....	24	164
Rubella .....	1	113

Ten deaths occurred from the eight principal zymotic diseases, providing a zymotic death rate of 0.51 per 1,000 of population. (0.77 per 1936).

QUARTERLY INCIDENCE OF NOTIFIABLE INFECTIOUS DISEASES  
CIVIL POPULATION.

Disease	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total	Deaths.
Scarlet Fever .....	4	2	3	1	10	—
Diphtheria .....	8	18	1	7	34	3
Enteric Fever .....	4	—	3	5	12	1
Pulmonary Tuberculosis ...	3	11	13	7	34	—
Cerebro-Spinal Fever .....	1	—	2	—	3	3
Chicken Pox .....	1	3	—	29	33	—
Measles .....	—	26	45	93	164	—
Rubella .....	—	77	30	6	113	—
Polio-myelitis .....	—	—	1	—	1	—
Dysentery .....	—	—	—	3	3	—
5th Disease .....	—	—	—	12	12	—
Leprosy .....	—	—	—	—	—	2
Totals .....	21	137	98	163	419	9

CASES LANDED FROM THE BAY OR BROUGHT INTO  
THE TOWN FOR TREATMENT.

Disease	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total	Deaths
Pulmonary Tuberculosis	1	—	2	10	13	6
Diphtheria .....	—	1	—	1	2	—
Measles .....	—	1	1	1	3	—
Dysentery .....	—	1	—	—	1	—
Enteric Fever .....	—	—	1	—	1	—
Rubella .....	—	—	1	—	1	—
Polio myelitis .....	—	—	—	1	1	—
Undulant Fever .....	—	—	—	1	1	—
Cerebro-Spinal Meningitis	—	—	—	—	—	1
Totals .....	1	3	5	14	23	7

I wrote last year of the "luck" which had followed the footsteps of the several services which care for the health and cleanliness of the City. Again as I write in March 1938 with the City still overcrowded (with all respect) to a degree known only to oriental insanitation, I can invite attention to 847 cases of notifiable infective disease during the five winter months, November to March. This is a sorry bill of ill-health, inconvenience and expense on the inhabitants and to the administration of a City normally and rightly known for its comparative freedom from disease. All that can be said is that the death rate directly attributable to these infections has remained low. Of the conditions from which these figures, in my opinion, largely result, I shall have more to say later.

Age and Sex incidence of Notifiable Infectious Diseases amongst Civil Population during 1937.

Notifiable Disease.	NUMBER OF CASES NOTIFIED.												Districts.		Total cases re- moved to Hospital.				
	Under 1.		1 and under 5.		5 and under 15.		15 and under 25.		25 and under 45.		45 and under 65.		65 and Over.		North.	Central.	South.	Residents.	Non-Residents.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.					
	At all Ages																		
Scarlet Fever	10	—	1	6	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	34	—	7	9	1	3	1	1	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	12	—	—	1	1	3	1	6	—	—	—	—	—	—	—	—	—	—	—
Pulmonary Tuberculosis	34	—	—	2	2	5	2	8	5	3	—	—	—	—	—	—	—	—	—
Cerebro-Spinal Fever	3	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—
Chicken Pox	33	—	2	6	21	1	1	1	—	—	—	—	—	—	—	—	—	—	—
Rubella	113	2	16	8	35	30	3	11	2	1	—	—	—	—	—	—	—	—	—
Dysentery	3	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5th Disease	12	—	1	3	6	2	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	164	2	35	44	36	41	1	2	—	—	—	—	—	—	—	—	—	—	—
Totals	419	4	61	68	92	112	13	18	19	20	7	3	—	11	342	66	38	23	—

Monthly Notifications of Notifiable Infectious Diseases during 1937.—Civil Population.

Months.	DISEASES.																							
	Scarlet Fever		Diphtheria		Enteric Fever		Pulmonary Tuberculosis		Cerebro-Spinal Fever		Chicken Pox		Rubella		Dysentery		Poliomyelitis		5th Disease		Measles		Leprosy	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
January	1	—	1	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
February	3	—	2	—	1	—	3	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
March	—	—	1	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
April	—	—	5	—	—	—	4	—	—	—	3	—	10	—	—	—	—	—	—	—	13	—	—	—
May	—	—	5	—	—	—	2	—	—	—	—	—	27	—	—	—	—	—	—	—	1	—	—	—
June	2	—	8	—	—	—	2	—	—	—	—	—	40	—	—	—	—	—	—	—	12	—	—	—
July	3	—	1	—	—	—	—	—	—	—	—	—	23	—	—	—	—	—	—	—	18	—	—	—
August	—	—	—	—	1	—	1	—	2	—	—	—	6	—	—	—	—	—	—	—	—	—	—	—
September	—	—	—	—	2	—	2	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
October	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
November	—	—	2	—	—	—	1	—	—	—	22	—	1	—	—	—	—	—	—	—	—	—	—	—
December	1	—	5	—	4	—	1	—	—	—	7	—	4	—	—	—	—	—	—	—	—	—	—	—
Totals..	10	—	34	3	12	1	34	21	3	3	33	—	113	—	3	—	1	—	12	—	164	—	—	2

### FIFTH DISEASE (Erythema infectiosum).

A new heading appears in the list. This disease has not been previously recorded in Gibraltar, though it seems possible that occasional cases of it may, in the past, have escaped recognition or been recorded with one of the vaguely similar infective skin rashes. As a clinical entity the disease is well established: if it had not so been the characteristics evident in the series recorded here (which to the date of writing in March 1938 amounts to 123 cases) have been so consistent as essentially to establish the validity of its claim to recognition. The cases here have had no mortality, which is usual, for the disease is normally without either complication or symptom except for the striking appearance of the rash and its typical distribution on the cheeks and on the extensor surfaces of the limbs, especially of their proximal portions. The infectivity of the disease is stated, by those previously acquainted with it, to be low: the number now recorded is but further evidence of the intimate contact resulting from overcrowding by our excess population. The disease was brought to my notice by a practitioner in the City and I have myself seen many of the cases, as have other practitioners: the diagnosis is not in doubt. A peculiar feature has been observed which I have not traced in other descriptions of the disease: this is that after the brightness of the typical butterfly-shaped rash on the face has faded, leaving only its palpably raised, and somewhat blue, margins, exposure to sunlight has brought about the re-appearance of the bright red rash.

Owing, amongst other reasons, to its possible confusion with the rashes of other, more dangerous, diseases it has been considered desirable to make this disease officially notifiable.

### MEASLES.

I suggested in my Report for 1936 an outbreak of measles might be expected in 1937/38: it commenced during December 1937 and to the date of writing this present Report bids fair to be the record epidemic recorded for the City. Up to the end of 1937, 164 cases were reported with no death; i.e.: the disease, as usual here, was of a mild type. Arrangements were ready for the provision of prophylactic serum at short notice by which the disease can be prevented or modified for the protection of very young or weakly infants, but no demand was made for this. The last definite epidemic occurred in 1935 but was a comparatively small one. The size of the present outbreak is but one reflexion of the grossly overcrowded state of the City, and residents can only feel thankful that the type of the disease has been on the whole, particularly mild, and that

it has been this, and not a more serious disease which has appeared in epidemic form. I have no confidence, in the present condition of living which is forced especially on the working class population of the City by the presence of "refugees," that any epidemic could be prevented from assuming relatively vast proportions.

#### PULMONARY TUBERCULOSIS.

Thirty four cases and twenty-one deaths provide a notification and death rate, respectively, of 1.74 and 1.08 per 1,000 of the population. Ten of the deaths occurred during the same year as that in which they were notified, and eight other cases were notified in the death certificate only. Eighteen of the cases notified were below the age of 35 years.

Very much more than I, and I think many other persons, expected has resulted, even in the first year of its opening, from the out-patient clinic under the specially appointed medical officer of the Colonial Hospital.

Weekly sessions of this clinic have been held. Not only have the attendances been most encouraging, but the results attained even in so short a time have confirmed the belief that sufferers are becoming increasingly willing and anxious to obtain treatment and advice; and that treatment can and will be effective in restoring many of them to health and efficiency, especially in proportion to the earliness at which it is sought.

An examination of the records of notified cases over the past five years and their present condition, in which medical practitioners have very kindly assisted me, suggests more strongly than anything else that the relatively high death rate from this disease, which has remained practically unchanged for many years, is due to the fact that cases are not discovered, or do not place themselves under treatment, at a sufficiently early stage of the disease. The other possibility, that pulmonary tuberculosis is a relatively more deadly disease here than other countries of Europe, does not appear to be the case in the light of the facts which I have ascertained and of the opinions expressed by the tuberculosis medical officer in discussion with me. This, in conjunction with the activities of that officer, and with the now rapid rising from the ground of the King George V Memorial Hospital for diseases of the lungs, is a note of the highest hope for those hitherto in fear of their lives, and livelihoods, from this scourge. In conjunction with this the promise held out, as recorded later in this Report, that the acceptance of the Report of the Commission on Housing may soon start to bear fruit is of the greatest importance to the well-being of the Colony as a whole.

## DIPHTHERIA.

The majority of the 34 cases reported were of the mild type which is usual here. Three of the more virulent infections resulted in early death. I have previously remarked on the possibility of a more virulent type of the disease being introduced here, and on the existence of a means of preventing it by simple inoculations of well-proven value; but any general demand for the latter will, I fear, not arise, despite advice, till the former state has made itself evident by a rapidly rising mortality rate from this disease amongst the young.

## ENTERIC FEVER.

Of the 12 cases one occurred in a child under treatment in hospital for diphtheria during its convalescence, one other was the wife of a fatal case under treatment in hospital: she visited and for some time remained with, her husband in the hospital and must, I think, have contracted the infection from him. Her attack, too, was severe, and after a very considerable time she remained a "carrier." She was allowed out of hospital under supervision and still remains a "carrier" but without any relation to any subsequent case. Another case occurred in an alien refugee occupying a stable loft at North Front, whilst yet another was an alien female temporarily residing in Gibraltar who made frequent visits to La Linea and was also in residence there.

Apart from 4 cases which occurred in December and which investigations failed to connect with one another, the disease was evenly spread throughout the year and was on no occasion traced to either the milk or water supplies.

The ages of the patients ranged from 13 years to 37 years; 10 cases occurred in females and 2 in males.

## VENEREAL DISEASE.

Thirty cases were treated at the Colonial Hospital, of whom 13 were merchant seamen. Laboratory work in connexion with these is recorded in the Report of the City Analyst and Bacteriologist.

## VACCINATION.

Four hundred and six primary and 302 re-vaccinations were performed during the year: of the latter 269 were on children attaining the age of twelve years. The Public Vaccinator carried out 371 and 290 of these cases respectively.



The following figures shew the vaccinations performed in relation to births during the year:—

Number of children born .....	434
Died before vaccination .....	14
Left Gibraltar .....	49
Certified as insusceptible to vaccination .....	1
Vaccination postponed on medical grounds .....	47
Number successfully vaccinated .....	232
Objectors to vaccination .....	1
Outstanding (under 3 months of age) .....	90

A high proportion of failed primary vaccinations occurred over a period of three weeks during September-October. As soon as it had become certain that these were not merely accidental or due to any factor within the control of the Public Vaccinator, the facts were represented by cable to the authorities in England from whom the supply is derived. In a commendably short time these authorities discovered, and remedied, a small chemical error (an increase of alkalinity) in the quality of the capillary glass tubes in which the vaccine lymph is supplied and at the same time made good the loss which had resulted. The supply has been consistently satisfactory since.

#### RABIES.

One case of rabies in a cat was discovered. A man who had been scratched by the animal received a full course of treatment at the Colonial Hospital here. For the actual diagnosis and for most helpful guidance as to treatment we are indebted to the Director of the Pasteur Institute of Morocco.

### RELIEF OF THE DESTITUTE AND AGED SICK.

#### OUTDOOR RELIEF—

The number of persons in receipt of outdoor relief during the past five years, on an average, has been:—

1933 .....	86
1934 .....	106
1935 .....	131
1936 .....	131
1937 .....	118

The drop in these figures during the past year is undoubtedly closely associated with the heavy demand for labour of all kinds by all employers, both official and private. This relief is in no way intended to assist unemployed persons merely because they are not earning wages. Full employment however, is associated

not only with a greater ability, and usually desire, of the family to care for itself; but also, and especially in proportion as wages are adequate, with an increase in the general well-being of the community. This is an elementary fact of social economy. On the other hand, I have pointed out before that an estimate of the sums expended annually in the City by public and organised charities of the same nature as this leads to the conclusion that the total amounts to a tax of practically £1 sterling per head of the total population—and this apart from the very considerable amount of charity which I know is distributed privately.

Skilled local labour in trades and of the artisan type is difficult to obtain. A very large proportion of such as is employed is obtained from nearby Spain, where standards generally and cost of living are lower than in Gibraltar.

Both for the Colony as a self supporting unit (so far as labour is concerned), and for the better welfare of a considerable proportion of the poorer inhabitants, I feel that I am entitled to record my opinion that—given due time—skilled labour could be made available in Gibraltar to a much greater extent than exists at present if this competition could be overcome and the rising generation be offered inducements to qualify in such work at rates comparable with the standards and costs of living required of them here. I feel so entitled because, as I have already written, the public health is intimately connected with the maintenance, so far as possible, of the whole public themselves above the poverty line as regards income and essential expenditure.

#### INDOOR RELIEF—

The average number of inmates of the "Home" was 38 males and 18 females; 2 of the former and 1 of the latter originally entered as notified cases of pulmonary tuberculosis.

A series of expensive repairs was embarked on towards the end of the year and will have to be continued through 1938, probably culminating in the renewal of the roofs. Though absolutely essential for the maintenance of the Home in a sanitary and habitable condition I regard the monies so spent as providing poor return for their quantity. The present Home is an adaptation of houses originally built as tenement dwellings. For many years it has fulfilled its purpose: the fact that it has done so reflects nothing but credit on the Lady Superintendent and her very small staff with the few inmates who are capable, either physically or mentally, of giving assistance. The best place, and the best plans, for reconstruction are by no means easy to arrive at: I know that many factors require fuller consideration, and many obstacles must be surmounted before finality can be reached. A new "Home," with a small

infirmary included or attached, such as I described in my Report last year, is an advance which I would be very glad to be able to record before I quit the Colony.

The average cost of feeding per head per day for the year has been  $1/0\frac{3}{4}$  in comparison with  $1/0\frac{1}{2}$  in 1936 and  $-/11\frac{3}{4}$  in 1935: the "all-in" daily cost per head has been  $2/2\frac{1}{4}$  in comparison with  $2/0\frac{3}{4}$  in 1936. During the year a final conversion of all payments from a mixed peseta—sterling to a single sterling basis has been completed.

It will be seen in the accounts which follow that the balance in hand of the Government grant of £3,246, which provides both indoor and outdoor relief, was only £42 14 7 as against £239 16 0 in 1936 and £163 31 in 1935. Increased cost of living and the abolition of peseta payments which were previously converted by the Council to the credit of this account at a very advantageous rate, account for the larger part of this decreased credit balance. With a considerable bill to face for essential repairs in 1938 I fear that it will be hard to make both ends meet at all.

## SUMMARY OF INDOOR AND OUTDOOR EXPENDITURE FOR THE YEAR 1937.

### INDOOR RELIEF—

Provisions .....	£1,095	9	4
*Miscellaneous .....	387	13	6
Maintenance of Buildings .....	109	9	3
Repairs to Buildings .....	62	4	3
Rent .....	312	0	0
Clothing and Equipment .....	150	8	3
Light .....	47	17	5
Water .....	73	4	10
Funeral Expenses .....	1	3	3
Hire of Telephone .....	12	0	0
Insurance .....	1	10	0
	£2,253	0	1
Days of subsistence.....	20,440		
Average No. of inmates .....	56		
Cost of feeding per head per day ...	$1/0\frac{3}{4}$ d.		
Cost of feeding per head per year	£19 11 $2\frac{3}{4}$		
Total all-in cost per head per day ...	$2/2\frac{1}{4}$ d.		
Total all-in cost per head per year	£40 4 $7\frac{1}{2}$		

\* Includes washing, cleaning, cooking, coal, charcoal, boot repairs, utensils, ice, medicines, tobacco for inmates, &c.

## OUTDOOR RELIEF—

Meat (14,318 lbs.) .....	£357	19	0
Milk, fresh (8,949 pts.) .....	108	9	10
Milk, condensed (8,640 tins) ...	148	10	0
Money Grants .....	119	2	11
Printing .....	16	2	8
		£750	4 5
Salaries .....		385	0 0
Total expenditure on Indoor and Outdoor Relief .....		£3,388	4 6

### INVESTIGATION AND PREVENTION OF OTHER DISEASES.

I remarked last year on the difficulty of disposing of animal manure resulting from the closure of the Spanish frontier. During the early warm months the Council accepted the recommendation that this disposal should be undertaken by them as an urgent measure for the safeguarding of the health of the community. In collaboration with the City Engineer a system of daily collection from all stables, at no charge to the horse owner, was instituted and the manure so collected was tipped directly into the sea at "Dead-man's Hole" at Europa point. The fall here is directly into deep water where natural currents and tides normally carry all matter clear of the Rock in a comparatively short time. This tip has been in use for certain classes of refuse by both civil and military authorities for many years. The extra strain placed on its organisation by this large increase of offensive matter naturally revealed some deficiencies which were remedied. The military authorities collaborated and have done all in their power to assist both in reducing the fly menace and in improving arrangements at the rubbish tip. The result of this measure was highly satisfactory and the City experienced a comparative freedom from flies which, I was told, was unequalled in modern memory.

Records of anti-mosquito work and of rat destruction are contained in the tables which follow.

MOSQUITO CAMPAIGN RETURN FOR 1937

Week ending	Visits paid to Premises	TOWNS—LOWER			TOWNS—MIDDLE			TOWNS—UPPER			SOUTH			NORTH			TOTALS			
		Tubs	Barrels	Earthenware Vessels	Others	Tubs	Barrels	Earthenware Vessels	Others	Tubs	Barrels	Earthenware Vessels	Others	Tubs	Barrels	Earthenware Vessels		Others		
Jan. 1 & 2	351																	4		
9	349																	1		
16	349																	2		
23	349																	2		
30	368																	2		
Feb. 6	334																	2		
13	346																	2		
20	352																	2		
27	350																	2		
Mar. 6	809																	2		
13	356																	2		
20	363																	2		
27	333																	2		
Apr. 3	353																	4		
10	364																	1		
17	372																	1		
24	377																	1		
May 1	359																	1		
8	373																	1		
15	387																	1		
22	391																	1		
29	363																	1		
June 5	470																	7		
12	686																	8		
19	734																	6		
26	749																	7		
July 3	813																	7		
10	824																	1		
17	842																	4		
24	753																	13		
31	850																	14		
Aug. 7	801																	9		
14	845																	6		
21	839																	10		
28	789																	8		
Sept. 4	727																	15		
11	737																	9		
18	729																	2		
25	730																	1		
Oct. 2	689																	5		
9	713																	1		
16	673																	1		
23	643																	3		
30	659																	2		
Nov. 6	687																	1		
13	648																	1		
20	351																	1		
27	368																	2		
Dec. 4	363																	1		
11	361																	1		
18	344																	1		
25	357																	1		
27/31	268																	1		
Totals	27,484	4	16	23	33	1	6	3	20	1	13	3	9	9	46	14	8	1	49	268

Others include—Buckets, pits, gullies, under-ground tanks, flower-pots, catchpits, storm-water drains, pumps, animals-drinking troughs, jugs, old tins, grinding stones, concrete tanks and open channels.

SUMMARY.

Tubs	84
Barrels	19
Earthenware Vessels	32
Others	134
<b>Total</b>	<b>269</b>

1st Offences	214
2nd "	1
3rd "	1 (Cemetery)

Rats destroyed during 1937, by Districts  
(not including H.M. Dockyard).

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total
Town District .....	259	234	234	226	222	247	262	252	243	240	287	281	2,987
South „ .....	265	256	267	298	280	272	291	286	263	261	281	295	3,315
North „ .....	84	90	97	108	113	100	131	125	95	87	83	68	1,181
Sheds and Warehouses Waterport Wharf and Commercial Mole .....	11	20	26	7	0	71	104	53	115	73	30	43	553
Total.....	619	600	624	639	615	690	788	716	716	661	681	687	8,036

Rats examined at City Laboratories during 1937.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total
Non-Infected .....	12	2	7	11	8	13	7	10	11	6	12	9	108
Infected .....	—	—	—	—	—	—	—	—	—	—	—	—	Nil

Number of poisoned baits laid by Rat Catchers during 1937.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total
3,425	2,578	3,626	3,188	3,154	3,226	3,290	3,405	2,934	3,646	3,782	3,832	40,086

Total number of Rats destroyed during 1937.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total
Civil and Colonial Property } Trapped ...	618	600	624	639	615	688	787	716	713	661	681	687	8,029
} Poisoned ...	1	0	0	0	0	2	1	0	3	0	0	0	7
H.M. Dockyard } Trapped ...	83	97	112	152	134	164	169	143	151	152	127	135	1,619
} Poisoned ...	4	8	4	12	14	6	10	11	9	5	15	10	108
Total.....	706	705	740	803	763	860	967	870	876	818	823	832	9,763

**MEDICAL WORK FOR THE COUNCIL.**

The following numbers of men have been examined prior to their employment by the Council :—

January .....	7
February .....	—
March .....	2
April .....	34
May .....	13
June .....	21
July .....	5
August .....	—
September .....	3
October .....	3
November .....	10
December .....	7
	—
Total .....	105
	—

**SERA AND VACCINES.**

Stocks of the following sera and vaccines are maintained :—

- Anti-Streptococcus Serum
- Anti-Anthrax Serum
- Anti-Meningococcus Serum
- Anti-Dysentery Serum
- Diphtheria Antitoxin
- Tetanus Antitoxin
- Scarlet Fever Streptococcus Antitoxin
- Staphylococcus Vaccine
- Anti-Rabic Vaccine
- Calf Lymph
- Tuberculin (veterinary uses).

**DISINFECTION.**

The following numbers of articles were dealt with at the Council's Disinfecting Station during the year :—

Month	Beds and Mattresses	Bolsters and Pillows	Blankets and Quilts.	Sheets	Sundries.	Totals.
January .....	44	73	72	78	88	355
February .....	57	55	40	54	93	299
March .....	44	62	46	45	100	297
April ..	48	49	31	29	55	212
May .....	49	74	43	49	65	280
June .....	97	124	115	113	107	556
July .....	105	156	93	138	80	572
August .....	86	92	51	73	31	333
September .....	67	67	30	35	21	220
October ..	41	18	14	14	18	105
November .....	58	27	14	17	39	155
December ..	104	213	645	102	65	1,129
<b>Totals.....</b>	<b>800</b>	<b>1,010</b>	<b>1,194</b>	<b>747</b>	<b>762</b>	<b>4,513</b>

One hundred and ninety-six premises were disinfected on account of the occurrence therein of cases of infective disease or for the destruction of vermin.

The number of disinfections carried out in stables, amounted to 639.



## AMBULANCE SERVICE.

This service has been greatly improved during the year by the acquisition of two new ambulances embracing the latest devices to ensure the utmost comfort and expeditious removal of patients in place of the previous old pattern vehicles.

The Council now provide a continuous day and night service which includes the removal of street accident cases, cases for operation, etc., in addition to the conveyance of cases of an infective nature.

The number of cases conveyed during the year was as follows:—

	Local cases.	Bay cases
Pneumonia .....	5	4
Diphtheria .....	4	—
Enteric Fever .....	5	1
Appendicitis .....	4	2
Malaria .....	2	4
Tuberculosis .....	2	—
Erysipelas .....	2	—
Injuries .....	44	11
Pleurisy .....	2	—
Influenza .....	3	—
Chicken Pox .....	1	—
Scabies .....	4	—
Encephalitis .....	1	—
Measles .....	2	—
Cerebro-Spinal Meningitis .....	2	—
Dead Bodies .....	8	—
Miscellaneous .....	124	17
	175	39
Totals .....	175	39

## SANITARY CIRCUMSTANCES OF THE DISTRICT.

I am indebted to the City and Water Engineer, Mr. W. H. Pearce, O.B.E., M.C., M.Inst.C.E., F.S.I., etc., for assistance in the preparation of this section of the report.

### WATER SUPPLY.

#### (a) Potable—

Rainfall=30.54 inches, being the average of a number of the Council's rain gauges situated at different levels. Highest intensities of rainfall registered during the year were on 29th October, .28" in 10 minutes=rate of 1.68" per hour, and on the 26th October .29" in 19 minutes=rate of 1.74" per hour (these have been exceeded in other years).

The total quantity of water collected from catchments and stored in the rain water reservoirs during 1937 was 17,634,247 gallons (16,718,310 in 1936), and the consumption of water for the year was as follows, in comparison with a total of 22,475,113 gallons in 1936 :—

To Shipping (including the Admiralty)...	8,269,734 gallons
To the City .....	16,569,827 gallons
	<hr/>
	Total ...24,839,561 gallons
	<hr/>

Over 2 million gallons of the excess issue went to the city.

A new reservoir (No. 9) of one million gallons storage capacity is in course of construction and will be completed in the early months of 1938. The existing total storage accommodation in use at the end of 1937 was 11½ million gallons. The consumption of potable water has more than doubled in the last few years.

During the dry season further substantial renewals were carried out to the catchment areas on the eastern side of the Rock. Almost complete renewal has been necessitated owing to attacks of the white ant on the timber-work and fittings of the corrugated iron sheets.

Water from the new potable water wells Nos. 8 and 9 was pumped into the Moorish Castle and High Level Reservoirs for supply to the public who were largely dependent upon this source, as were the ships of H.M. Fleet based at Gibraltar, for lengthy periods.

The total quantity pumped from the wells into the Moorish Castle and High Level Reservoirs was 12,973,710 gallons; direct supply from the same source was also given to the Ice Factory &c., to the extent of 278,197 gallons. Thus the total supply, during the year under review, from potable water wells Nos. 8

and 9 was 13,251,907 gallons, in comparison with 4,799,507 gallons in 1936. The wells were perforce heavily drawn upon and there is a tendency in such circumstances for the quantity of chlorides to increase, especially in Well No. 9.

A new reserve Diesel engine driven pump has been installed at North Front for pumping water from the above-mentioned wells to Giralda Tower Tank to operate in case of failure of the electricity power supply.

The pumping main from Waterport to Moorish Castle reservoir was extended during the year and connected to the overflow from the high level reservoirs to Moorish Castle reservoir; by this means it was possible to pump water to high level reservoirs also.

The old 4" Fresh water main from Castle Road to the Colonial was substituted by a 6" main thus improving the distribution to the town from the Low Level Reservoirs.

#### (b) Brackish—

During the year 1937 the total quantity of brackish water pumped was 292,135,900 gallons (271,651,400 in 1936).

At North Front Pumping Station the very old reserve electrically driven pump has been removed. The second reserve pumping plant, which could be alternatively driven by electricity or suction gas, has been re-conditioned and re-erected on the site of the former and provided with a new Diesel oil engine.

The gradual renewal of old mains and incidental improvements to the supply system continues; the old 4" mains in Morello's Ramp and Charles V Steps were renewed.

The existing water circumstances are only sufficient to contend with one large sustained fire at a time; the Water Engineer has drawn attention to the fact that existing arrangements could certainly not cope simultaneously with a number of large sustained fires which might arise under certain circumstances.

#### SEWERAGE & DRAINAGE.

The whole of the sewage of Gibraltar discharges at Europa Point into the sea. The main gravitating sewer is flat in gradient and collects silt in small quantities especially at high tides: its length is about  $2\frac{1}{2}$  miles and its size at the outfall is six by four and a half feet: it carries both storm water and sewage. An area to the north of the Colony which lies low is drained to various ejectors operated by compressed air which lift the sewage to the head of the main outfall sewer. Works on the Upper Rock have resulted in more flood water reaching the Town sewers than hitherto.

At Orange Bastion Sewage Pumping Station an old oil engine has been removed and a quicker starting Diesel engine erected in its place as a flood reserve in case of emergency.

A new 9" storm water drain has been laid in Devil's Tower Road from Bland's Ice Factory discharging into the sea at Eastern Beach to obviate the flooding of the public highway which now has been made up and bitumen-surfaced.

#### REFUSE COLLECTION & DISPOSAL.

House refuse is collected once a day in winter and twice daily in summer and is incinerated in a duplicate twin cell Destructor at North Front as far as its capacity permits.

The average daily disposal of domestic refuse at Destructor was about 16 tons; a further quantity is tipped into the sea.

The manure from stables, Cattle Sheds, Slaughter House etc., was collected and removed by Council's lorries and tipped into the sea at Dead Man's Hole, the fly nuisance being thus considerably abated as noted previously in this Report.

#### PUBLIC HIGHWAYS.

All the public highways in Gibraltar are provided with impermeable surfaces which are well maintained.

The total length of public highways maintained by the Council is approximately 21 miles.

Gibraltar is a difficult "road place" on account of both humidity and the steep narrow roads which animal traffic still has to use. Gradients of one in four are quite common over considerable blind lengths; the increase of motor traffic and parking of cars, night and day, in the streets make circumstances exceedingly onerous at times. Congestion of houses and lack of yard or air space forces the children to use the roads as playing grounds. Such conditions not only make traffic control and road maintenance difficult, but also tend to multiply and magnify noises to an extent which cannot but be detrimental to the welfare and well-being of those who live amongst them.

Various improvements were effected during the year and include the following:—

Widening of and resurfacing of Devil's Tower Road between Bland's Ice Factory and Slaughter Houses.

Alterations and improvements to the southern end of Eastern Beach Road.

Carpeting of Market Place to the entrance of Corral Road with Cold Chon Bitumen.

Carpeting of Sir Herbert Miles Road with Cold Chon Bitumen.

Resurfacing of Line Wall Road and road leading to Casemates with Goudalite, the nearest approach to a non slip road material yet found.

Reconstruction of footpath in Main Street between Convent Ramp and Garrison Recreation Rooms.

Reconstruction of Catalan Bay Road from junction with Sir Herbert Miles Road to the Village including sea walls.

#### PUBLIC BATHS.

The public bathing establishment in Irish Town containing hot and cold slipper baths, douches, etc., is well maintained.

Ample sea bathing facilities are provided for the public consisting of a first class Bathing Pavilion and in addition two small second class sea bathing establishments.

The two second class bathing places, the reconstruction of which was commenced during 1936, were completed and brought into use during 1937.

Facilities have been given by the Council to children under 12 years of age to use the second class establishments free of charge.

#### FIRE STATION.

The new Fire Station on the site of the Old Victoria Battery facing the Alameda Parade was commenced and will be completed in the early months of 1938.

#### SANITARY CONVENIENCES.

The Council maintains many small public sanitary conveniences in various parts of the City all of which are fitted on modern lines.

A new sanitary convenience for both men and women was erected at the top of Ragged Staff Road to substitute the small existing one for men only in that vicinity which has now been removed.

### HOUSING.

Last year I recorded the publication of the Report of the Commission of Inquiry on Housing and Rent Restriction. That Report has been accepted, with its recommendations, by the Secretary of State for the Colonies in England, and is now the basis on which the re-housing of the working classes and the abolition of the slums of Gibraltar should be carried out progressively in years to come. The responsibility for construction and administration will fall on the City Council, whilst, as the scheme is to be in part subsidised by them, the Government have final control (as the Ministry of Health in England) over

all schemes and legislation. It is only fair to say that plans have already been drawn for buildings, schemes have been drawn up for several years' work of clearance and re-housing, laws and bye-laws have been considered, and drafted, and at the time of writing a complete overcrowding survey of the City is well on its way to completion.

It is true that few things done in a hurry are done well. It is only to be hoped that such delays as have occurred in the final sanctioning of the schemes which have been put forward by the Council may only mean that proportionate benefits will result. If this is so the working classes of the City can look forward with high hope to the eventual production of dwellings which should be a model to the world.

### SUMMARY OF WORK DONE BY SANITARY INSPECTOR DURING 1937.

Complaints received .....	219
Premises inspected :	
General inspection .....	3
Number of Statutory Notices served .....	18
Number of Informal Notices served .....	229
Nuisances found :	
Minor defects in drains .....	127
Obstructed drains .....	333
Minor defects in water closets .....	261
Defective water closet fittings .....	337
Defective water fittings .....	283
Defective rainwater pipes .....	72
Defective eavesgutters .....	111
Defective roofs .....	59
Defective yard paving .....	39
Dampness .....	35
Premises dirty .....	156
Defective or no dustbin .....	219
Other minor defects .....	1513
Suspected pollution of water in underground tanks...	11
Underground tank not insect proof .....	14
Brackish water tank not insect proof or no cover .....	15
Brackish water running to waste .....	227
Miscellaneous services :	
Samples of Food and Drugs taken for analysis .....	58
Premises disinfected for infectious disease .....	191
Premises disinfected for vermin, etc. ....	5

Stables disinfected .....	639
Articles disinfected at North Front Disinfecting Station	4513
Visits of enquiry re Infectious Disease .....	355
Visits paid to milk shops .....	294
Visits paid to eating houses .....	287
Visits paid to mineral water factories .....	234
Visits paid to common lodging houses .....	56
Visits paid to premises on which notice for abatement of nuisance has been served and are revisited for the purpose of ascertaining if requirements have been complied with .....	1968
Cases removed in ambulance :	
Local .....	175
Bay, etc. ....	39
Vaccination notices served .....	439
Legal proceedings instituted .....	11
Street water fitting found defective .....	60

### COMMON LODGING HOUSES.

The only Common Lodging House at present existing in Gibraltar was visited at intervals and in no instance was an infringement of the Bye-Laws noted. No case of disease of an infective nature occurred in it during the year.

## REFUGEES.

In my Report for 1936 I endeavoured to convey briefly an idea of the difficulties and dangers which had resulted from the outbreak of the Spanish civil war and caused a gross overcrowding of the already full City. In a postscript to that description I made an estimate of this excess population as some 5,000. During the year considerable numbers of aliens have been removed, or persuaded to remove themselves, from the City; especially during May and June when, with the assistance of H.M. Navy, over 1,200 persons were shipped to ports on the east coast of Spain. At the end of 1937 the official police estimate of the population shewed that there were still over 3,000 persons resident in the Colony in excess of the average normal civilian population for the preceding ten years—about 1,700 were (or claimed to be), British subjects, and 1,400 aliens. The average normal population over the ten years referred to has been some 16,700; this may be taken to be the absolute capacity of the Colony under present (normal) conditions. The love of the Gibraltarian for his home, and for dwelling in the City to which he belongs, is well known: if he can find place and opportunity to satisfy this desire he will strain every nerve to do so. The birth rate here, consistently and markedly, exceeds the death rate; i.e., the population proper to the Colony increases; but the population living therein has, for many years, practically been unable to do so—used even as have the poorer working classes become to living under conditions of overcrowding which are considered intolerable elsewhere in civilised Europe. This is but emphasising the fact that this Colony was not—and is not now, and never can be—capable of providing permanent sanctuary to more than a very few extra persons. The present estimate given by the police—and I can only say that, in my opinion, their figures at least do not over-estimate the position—means that the Colony is still, after eighteen months, housing an excess of not far short of twenty per cent: over its normal full condition.

Since the last month of 1936 (when I returned from leave) I have not ceased to impress on the Government, by both spoken and written word, the gravity of this situation, and the potential danger which it represents to all who dwell in the Colony, whether civilians or the armed forces of the Crown forming the garrison of the Fortress.

It is useless to point to a death rate not markedly above normal, or to an incidence of infective disease not excessively beyond expectations, and to say that we have come to no trouble so far, why worry about the future? Providence, it is well known, has a care, up to a point, for such folly as that;—and



equally, in its own good time, a drastic schooling by death and disablement. The Colony cannot afford to continue to gamble with health by permitting any excess above that population which is vital to its prosperity.

On my advice the Council have, during the year, taken action for the abatement of "nuisances" resulting from persons living in structures wholly unsuitable for dwelling places in two series of cases. These cases were picked by me as including some of the worst instances in the more crowded parts of the City; they included, for instance, a family of eight living on the stairway of a tenement building, two families living in stable-stalls in company with horses, families living in stores with no natural light or ventilation and with no regular drainage or access to sanitary conveniences save by means of the public highway. In the first series a fortnight's warning notice was given followed by a statutory notice allowing seven days. By various processes of delay and legal tactics the last cases of this series were completed by the end of five months. The second series, as a result of the initial service of statutory notices of fourteen days, was completed in four months. The nett result of these two efforts of the Council both to uphold the Public Health Ordinance for the benefit of the community, (the right and justice of which none of the defendant landlords attempted to deny), and to urge some of these refugees back to their own lands, was that whereas aliens so evicted appeared to find no difficulty in obtaining other lodging, Gibraltarian refugees filtered, after a few days living in the streets, to the occupation of the open yard of a tenement house which the owner is proposing to reconstruct, other lodging of any kind being impossible for them to find. This being so I have been bound to consider whether by proceeding further—even with the freely offered, and given, support of the Council—I would not simply be making matters worse, and spending considerable time, energy and money in so doing, if I were to proceed in any further cases until a considerable proportion of the unwanted, and certainly not essential, excess population of alien refugees can be removed from the Colony.

The matter has been regarded as surrounded by many and great difficulties. I am in the privileged position of being the hygiene adviser to the Government, the Council and the garrison; as such I am able to appreciate most of the obstacles which face those in whose hands action lies, and I do not for one moment belittle these obstacles. But I will record my view that, if it is impossible now to reduce our excess alien population, I cannot see how it is likely to become any more easy to do so, whatever may happen in Spain, for a long time to come. And further I feel bound again to record my opinion, bearing

in mind my responsibilities and all the implications of my words, that, if the present state is allowed to continue, sooner or later (and we have had eighteen months grace to the end of 1937) a very grave responsibility in the matter of life, health and welfare, will be laid to the count of those, whoever they may be here or elsewhere, who have permitted the community, and especially the poorer working classes, amongst whom bad conditions have been rendered immeasurably worse, to remain in the condition of risk in which it now is.

POSTSCRIPT :—It is satisfactory to be able to record that whilst this Report has been going through the press legal and other action has been revised and initiated with the definite object of accelerating the departure of refugees, especially aliens. No official (at any rate in my position) should, however, rest until the proper population of the City enjoys at least that elbow room and breathing space which it had two years ago.

### FOOD.

Except as recorded below in regard to the sale of milk it has not been necessary to take legal action in any case in respect of unsound food. The following articles were destroyed as unsound at the request of their owners:—

Sausage .....	23,293 lbs.
Ham (tinned) .....	150 lbs.
Ribs (salted) .....	1,111 lbs.
Kippered Herrings .....	7,000 tins
Roast chicken .....	148 tins
Cheese .....	640 lbs.
Preserved Fruit .....	37 barrels

Reports on the samples taken for analysis are included in the Report of the City Analyst which is published with this.

The free supply of fresh fruit and vegetables from Spain has continued with only occasional minor and temporary interruptions in respect of certain items of which, usually, there was, at the time, a shortage either generally or in the immediate neighbourhood. The Spanish civil war has now grown to be such an accustomed fact here that I think too few citizens really appreciate this freedom of supplies; too many think only of the inconveniences which, necessarily, have resulted. One of these inconveniences has been the complete disappearance of trading by means of Spanish coinage and the substitution of sterling. This, it has to be remembered, cuts both ways: not only has the purchaser had to pay a little more for many of the staple articles of diet derived from Spain, but the trader also has had to pay new and additional taxation on his exports to the Colony and has received in exchange for

his sterling receipts Spanish coinage at an arbitrary rate of exchange which, whilst it is well above the normal pre-war level, is still markedly below the rates offered both here and in neighbouring countries. Careful examinations have been conducted at intervals into the costs of foodstuffs sold in the Public Markets. It is popular knowledge, as I said above, that the prices of certain commodities are higher than they were two years ago, and that, therefore, the general cost of living has risen; but no instance of profiteering has been disclosed and the fact that the trade in the Markets has undoubtedly increased is witness to the fact that stall-holders there have at least done their best to attract custom.

#### MILK, DAIRY PRODUCE, ETC.

During the first half of the year an unnecessarily high proportion of samples of milk were referred for legal action as not complying with legal standards. Details are recorded in the Report of the City Analyst and form a sorry commentary on the milk trade of the City which, owing to the enormous amount of work thrown on Sanitary Inspectors by the refugee problem, had not received its usual share of sampling in the latter half of the preceeding year. Stimulation by legal penalties brought the situation back to normal.

Amendments and alterations of the Bye-Laws governing the sale and the standards of milk have been made to conform with the latest practice in England and to close several loopholes which previous legal proceedings had shewn to exist.

The peculiar conditions of Gibraltar have been considered to make it desirable to permit the manufacture and sale of "reconstituted" milk. Bye-Laws have, consequently, been made for the control of this trade.

The possibility of the transport of milk overseas in the refrigerator chambers of ships has also necessitated the introduction of Bye-Laws which have been modelled on the English standards for imported milk and which leave the Council a very wide discretion as to the origin of such milk which they may accept.

Improvements in the manufacture and transport of ice-creams have led to similar Bye-Laws and to the regulation of conditions which the Council may impose in permitting the sale of these in the streets.

It is noteworthy that certain ice creams imported from England for sale here have proved on analysis to be of a purity and quality hitherto unapproached in Gibraltar.

#### MARKETS AND SLAUGHTERHOUSES.

Alterations and improvements continue to be made, in particular additional storage has been provided in the Markets

and the Fish Markets has been almost entirely renewed. An extensive scheme of further improvements has been worked out for completion during the next few years, especially directed to the modernisation of the Slaughterhouse.

Generally speaking the condition of the cattle imported for local slaughter has remained unchanged. During the winter months Moorish cattle both appear, and are, of poor quality in the live state: when slaughtered they yield, on the whole, meat free from disease but extremely lean. It is claimed that at that time of year better grade cattle are not obtainable, so that all that can be said is that the customer gets less fat and butcher more bone in proportion to meat than either reasonably should.

The importation of a consignment of cattle from Yugo-Slavia—very well-nourished and healthy beasts—unfortunately coincided with the presence of foot and mouth disease in other cattle in the Slaughterhouse stables, then the only stabling available for the former animals. The usually mild type of disease normally seen in Moorish cattle on transfer, as was inevitable, to these European animals assumed a much more virulent form. About the same time the disease spread to the milch cattle of a dairy farm at North Front. This outbreak and the measures taken in connexion with it are described in the Report of the Government Veterinary Surgeon. During the year the heads, feet and paunches of 178 animals were condemned and destroyed on account of this disease.

Other condemnation of locally slaughtered animals were:—

CATTLE—

	In whole.	In part.
Cysticercus Bovis .....	12	28
Tuberculosis .....	5	7
Fever (acute) .....	7	—
Septicemia .....	1	—
Abscess (localized) .....	—	1
Peritonitis (localized) .....	—	1
Bruising .....	—	1
Emaciation .....	1	—
Pericarditis & pleurisy .....	—	1
Jaundice (mild) .....	—	1
Enlarged glands .....	—	2

SHEEP—

Fever (acute) .....	2	—
Abscess (localized) .....	—	1
Pleurisy (localized) .....	—	1
Fatty atrophy (generalized) .....	1	—
Emaciation .....	4	—
Sarcocysts .....	—	1

## PIGS—

Tuberculosis .....	4	23
Jaundice .....	1	—
Bruising .....	—	2
Peritonitis (septic) .....	6	—
Peritonitis (localized) .....	—	2
Abscesses (multiple) .....	1	—
Abscess (localized) .....	—	3

## Number of Animals Slaughtered :—

	1933	1934	1935	1936	1937
Cattle .....	1,892	1,512	1,446	1,926	2,106
Sheep .....	1,491	1,287	1,154	1,121	813
Pigs .....	786	759	676	746	557

The marked decrease in the numbers of sheep and pigs, especially the former, is due to difficulties of obtaining and importing these animals from Spain. It will be seen that the deficiency of local slaughtering of both these animals, and in particular of pork, is balanced by considerably increased importations of corresponding frozen meat.

## Imports of Frozen Meat (in pounds):—

	<i>Beef.</i>	<i>Mutton.</i>	<i>Pork.</i>
1933 .....	377,235	156,030	61,482
1934 .....	436,666	181,839	92,261
1935 .....	678,264	178,761	128,564
1936 .....	996,799	207,791	138,923
1937 .....	1,101,228	231,866	261,823

The total quantity of Frozen Meat including edible offal imported during 1937 was 1,711,671 lbs.

**AMOUNT OF SHIPPING ENTERING THE PORT OF  
GIBRALTAR DURING THE YEAR 1937.**

		Vessels entered in 1937*	Net Tonnage.	Number inspected.	Left in quarantine	Admitted to Pratique.
British	Steam .....	2,693	6,256,717	3	—	3
	Sailing .....	35	1,677	—	—	—
Total British .....		2,728	6,258,394	3	—	3
Foreign	Steam .....	2,219	7,471,992	6	—	6
	Sailing .....	202	8,844	—	—	—
Total Foreign .....		2,421	7,480,836	6	—	6
Total British and Foreign...		5,149	13,739,230	9	—	9

\* Exclusive of men-of-war, yachts and seaplanes.

## REPORT OF THE CITY ANALYST AND BACTERIOLOGIST FOR THE YEAR 1937.

I have pleasure in submitting my eighteenth annual report. It represents the work carried out in the Public Health Laboratories for the year 1937. The total number of pathological specimens and samples of all classes examined and reported on was 5,344. The activities of the laboratories have been maintained and comprise pathological specimens from (1) Colonial Hospital; (2) Military Hospital and Veterinary department; (3) Royal Navy; (4) medical practitioners of Gibraltar; (5) Public Health specimens (including samples taken under the "Food and Drugs (adulteration) Ordinance"), miscellaneous samples from City Council and general public; toxicological and forensic examinations for H.M. Coroner and Police also the testing of oil carrying tankers for inflammable gas.

Most of the work was directly connected with the health of the people.

Pathological specimens received from the Colonial Hospital again increased in number and were 302 more than the previous year.

A marked increase was also noticed in the number of blood sugar estimations and in renal efficiency tests.

Under the Food and Drugs (adulteration) Ordinance, and the Public Health Ordinance, new Bye-Laws dealing chiefly with the boiling and pasteurisation of introduced milks, the conditions of sale of milk introduced in airtight containers and a schedule definition controlling the terms "pasteurised" and "boiled" were added to the Milk and Dairies Bye-Laws.

A memorandum detailing the tests for boiled and pasteurised milk and the procedure to be followed in bacteriological examinations was approved by the City Council under 1 (9) and 2 (c) of the schedule to the Milk and Dairies Bye-Laws.

Additional conditions attached to the sale of ice-creams when sold in the streets were also approved by the City Council.

The report is divided into four parts :—

- Part I.—Food and drugs, Public Health Ordinance.
- Part II.—Miscellaneous.
- Part III.—Bacteriology, chemical pathology and public health work.
- Part IV.—Testing of ships for inflammable gas.

## PART I.—FOOD AND DRUGS.

## “The Public Health Ordinance”

The number of samples taken officially by the sampling officers was 97. The rate of sampling per 1,000 inhabitants was increased from 3.2 to 5.8. Samples included goats' milk, cows' milk, ice cream, mineral waters, olive oil, various tinned products, general groceries, drugs, and wines and spirits.

Of the thirty-one samples of milk received fourteen were below the statutory limit in either fat, or non-fatty solids, or both. One sample of cows' milk contained 0.19 per cent of sodium bicarbonate presumably added to counteract acidity produced in a souring article. A sample of goats' milk declared “boiled” was found to contain 2 per cent of “raw” milk. The pasteurisation test and the “Ortol” test were in agreement on this sample. One sample of margarine was without the regulation label declaring the nature of the article as required by law. Two vendors were each fined £5 and £1 3 0 costs for selling condensed milk contained in a tin not labelled according to requirements of the Condensed Milk Bye-Law 1933. Fines and costs for adulterated samples amounted to £43. The magistrates are taking a serious view of the adulteration of milk as in most instances fines were heavy. In all cases of food adulteration where the City Council deemed it advisable legal action was instituted.

Details of adulterated samples :—

<i>Lab. No.</i>	<i>Sample</i>	<i>Adulteration</i>	<i>Remarks.</i>
110	Goats' milk	added water 12.4%) fat deficiency 22%)	Fined £5 and costs £2 3 0
111	Goats' milk	fat deficiency 14%	Declared skimmed
112	Goats' milk	fat deficiency 4%	Declared skimmed
114	Goats' milk	added water 24%) fat deficiency 27%)	Fined £5 and costs £2 3 0
116	Goats' milk	added water 9.5%) fat deficiency 13%)	Fined £5 and costs £2 3 0
553	Goats' milk	added water 24.9%) fat deficiency 23%)	Fined £10 and costs £1 3 0
1148	Goats' milk	added water 15.8%) fat deficiency 17%)	Fined £5 and costs £2 4 0
1143	Goats' milk	added water 22.9%) fat deficiency 20%)	Fined £1 and costs £2 4 0
554	Goats' milk	fat deficiency 11%	Declared skimmed
555	Goats' milk	fat deficiency 7%	Declared skimmed
590	Goats' milk	fat deficiency 5%	Declared skimmed
591	Goats' milk	fat deficiency 17%	No action
1144	Goats' milk	raw milk 2%	No action



1146	Goats' milk fat deficiency 10%	Declared skimmed
1147	Goats' milk fat deficiency 9%	No action
2029	Cows' milk 0.19% sod. bicarb.	No action
2556	Margarine sold without label	No action

The rate of adulteration for all classes of samples was 16 per cent and the rate of adulteration of milk samples was 51 per cent. A serious view is taken of this high figure when it is realised how necessary a good quality milk is to children and invalids. No sample of goats' imported milk was found to be wholly unboiled, but the presence of as little as 2 per cent (No. 1144) of raw milk is fraught with danger of contamination with disease producing organisms.

#### *Average Composition of Milks.*

For goats :—

Milk-fat .....	3.33 per cent
Non-fatty solids .....	8.30 per cent

The statutory limits for goats' milk are, fat 3.5% ; non-fatty solids 8.00%.

For cows :—

Milk-fat .....	3.63 per cent
Non-fatty solids .....	9.00 per cent

The statutory limits for cows' milk are, fat 3.0% and non-fatty solids 8.5%.

It is recorded here that the average fat content of all the samples of goats' milk officially taken for analysis is actually below the statutory requirements. This is accounted for by the fat having been partially extracted before sale to the public.

#### OLIVE OIL.

The average percentage of acidity of the samples of olive oil received was 2.39 per cent. The highest acidity noted was 3.2 per cent and the lowest 0.56 per cent. An olive oil used for dietetic purposes should not have more than 2.0 per cent of oleic acid and if this reaches 5 per cent should be condemned as deleterious to health. No admixture with cheaper foreign oils was found and all were genuine.

#### GROCERIES.

The adulteration of margarine by the addition of water over and above the 16 per cent allowed by law to which attention was drawn last year was not repeated. No sample contained more than 15.5 per cent of water. All samples of butter, lard and margarine were also genuine in other respects and con-

tained no admixture with other fats. Other samples included tea, coffee, jams, currie powder, tinned peas, sugar, ground nut oil, ground cassia and pepper were all genuine.

#### WINDS AND SPIRITS.

The samples examined included gin, whisky, brandy and rum. The law requires that either of these spirits shall not be over 35 per cent U.P.

All samples were genuine and the percentages of alcohol content were well above the statutory figure of 30.6 per cent.

#### DRUGS.

All drug samples were genuine. These comprised mercury ointment, tinct. of iodine, sedlitz powders, camphorated oil, boric ointment, aspirin, zinc ointment and citric acid.

#### MINERAL WATERS.

Samples of lemonade were taken unofficially. Three samples contained 0.6 parts per million of lead. This is not an objectionable amount but it is desirable that mineral waters should be free from lead. Lead was not detected in the other samples submitted.

#### CANNED MILK AND RECONSTITUTED MILK.

These two varieties of milk are not subjected to sterilisation in Gibraltar. The appearance of such milks in the market necessitated new legislation controlling their sale. Bye-Laws have been added to the "Milk and Dairies Bye-Laws 1937" permitting the City Council the right to grant or refuse permission for the sale of milk of this class which has not been pasteurised or boiled in Gibraltar. Introduced canned milk shall have been boiled or pasteurised prior to or at the time of canning, that the milk is introduced into Gibraltar in tins, cartons, or other air-tight container and sold in the same container, also that the number of bacteria at the time of sale shall not exceed 100,000 per cubic centimeter and shall be free from tubercle bacilli.

In the case of reconstituted milk or other liquids made from dried, condensed, skimmed or separated milk the above conditions do not apply but the bye-laws state that the receptacles shall be clearly labelled indicating the nature of the content with the name and address of the manufacturer or of the dealer for whom it is made.

## ICE CREAM.

When the sale in the streets is not prohibited by the City Council additional conditions make it compulsory that any or all, but no others, of the following substances shall be used in its manufacture—milk (or condensed or reconstituted) cream, sugar, fresh eggs, custard powder, harmless vegetable colouring and flavouring substance, not less than five per cent of milk-fat; not more than 66 per cent of water, and not more than one per cent of thickening material. Preservatives also are not allowed.

Four samples were analysed with the following results:—

<i>Sample</i>	<i>Fat</i>	<i>Water</i>	<i>B. Coli</i>	<i>Total organisms at 37° C</i>
1	9·43	64·37	in '00001 c.c.	3680000 per c.c.
2	2·81	74·75	in '0001 c.c.	3520000 per c.c.
3	8·40	66·74	in '01 c.c.	8512000 per c.c.
4	11·94	59·50	in 5 c.c.	490 per c.c.

## PART II.—MISCELLANEOUS.

Samples received for analysis and report under this heading numbered 103 and were as follows:—

One sterilised milk—for chemical, and bacteriological examination and pasteurisation test.

One cows' milk—for evidence of adulteration.

One white lead paint—examined for adulterants.

One tin of sweetened condensed milk—for analysis.

One ice cream sample—chemical and bacteriological examination.

One soldier's tunic—for identification of blue stains.

Two bottles of concentrated fruit compounds—for estimation of alcohol.

One sample of urine—for analysis.

One sample of sugar—for purity.

One sample of reconstituted milk—for chemical and bacteriological examination, and pasteurisation test.

Two samples of fuel oil—for flash point determinations.

Two samples of lubricating oil—for flash point and viscosity determinations.

One sample of Spanish bread—for analysis.

One sample of coal—for analysis and calorific power.

Two calculis—nature of.

Two powdered dried milks—for analysis.

One sample of butter—for pasteurisation test.

One sample of glycerine—for purity.

Two samples of soil—for percentage of salt.

Eighteen toxicological and forensic examinations.

Three preparations of sterile glucose saline.

One sample of cat-gut—bacteriological examination for sterility.

Two field dressings—for sterility.

One drug (salicylate of soda) for purity.

Twenty-four samples of arsenical dipping fluid—estimation of arsenious oxide.

Five tankers—for detection of inflammable gas.

Seventeen samples of milk—for detection of tubercle bacillus.

Four blood smears for piroplasmosis.

Two spleens, one bone marrow and liver — examination for Leishmania.

One sample of Ice cream for chemical examination.

*Toxicological and Forensic Examinations.*

Bottle A. labelled cocaine hydrochloride contained salicylic acid with a trace of cocaine.

Bottle B. labelled cocaine hydrochloride contained salicylic acid with a trace of cocaine.

Bottle C. labelled cocaine hydrochloride (unopened) contained salicylic acid (99.77 per cent) and cocaine (0.23 per cent).

Suspected narcotic in box was talcum.

Distilled water in bottle contained no dissolved narcotic.

Liquid in another bottle was pot. alum dissolved in water.

Loose powder in drawer was Veronal.

Traces of white powder in pill box gave group reactions for alkaloid—cocaine, morphine, novocaine, strychnine or caffeine could not be detected.

Arsenic and food poisoning bacilli were not found in tin of tunny fish, or in stools of patient.

Yellow liquid in bottle partaken of by a child was commercial hydrochloric acid.

Arsenic and other poisons were not detected in human stomach and its contents.

Of four bottles purported to contain cocaine hydrochloride two were a mixture of cocaine with boric acid, one was cocaine and aspirin and one contained cocaine and salicylic acid.

Powder in two bottles was morphine tartrate.

PART III.—BACTERIOLOGICAL, PATHOLOGICAL AND PUBLIC HEALTH WORK.

	No. of specimens.
Drinking waters and others .....	287
Swabs: C. diphtheria, Vincent's organisms, &c....	642
Sputa: tubercle bacilli and causative organism...	178
Blood: Widal—T.A.B. and Br. Melitensis .....	216

Blood : goats—Widal for undulant fever .....	122
Blood : Total count .....	93
Blood : smears for malaria, anthrax, &c. ....	23
Blood : cultures for enteric, streptococci, &c. ...	40
Blood : sugar estimations, sugar tolerance tests...	424
Blood : urea estimations, urea concentration factor .....	108
Blood : Wassermann reaction .....	565
Blood : sedimentation rate .....	27
Blood : calcium; van den Bergh; icterus index, etc. ....	14
Naso-pharyngeal swabs; meningococcus .....	32
Cerebro-spinal fluid; cytology, protein, sugar Wassermann and bacteriological examina- tion .....	91
Pleural fluid; cytology, culture, &c. ....	17
Urine : analysis and bacteriological examination	1565
Urine : urea estimations, urea concentration test	75
Pus : gonococcus and causative organisms .....	131
Sera : from V. S. for <i>Tr. pallidum</i> (dark ground)	10
Fæces : bacteriological for enteric, dysentery, &c.	247
Breast Milk : chemical analysis .....	32
Rats : examined for plague .....	108
Histological sections .....	5
Gastric contents .....	7
Guineapig inoculations : virulence K.L.B. and T.B. ....	21
Autogenous and stock vaccines .....	49
Miscellaneous .....	10
	<hr/>
Total .....	5139
	<hr/>

#### DIPHTHERIA.

In the bacteriological examination of swabs for *C. diphtheriæ* only the presence of Klebs-Loeffler bacillus is reported, Hoffmann bacillus being disregarded. Of the large number of swabs examined thirty-five new cases were reported. There were four positive contact swabs. Virulence tests by guineapig inoculation were resorted to when patients persist in carrying the germ in spite of treatment. In three of such cultures one was virulent. Throat swabs of convalescents are repeatedly examined until absence of the organism is reported in three consecutive swabs.

#### TUBERCULOSIS.

Various specimens were received for detection of the bacillus causing this disease and include sputa, cerebro-spinal fluid, pleural fluid, urine, fæces, pus and cows' milk. Of the 178

sputa examined 25 per cent contained the tubercle bacillus. It was also found in one case of mouth ulcers, and in one pleural fluid and in five cerebro-spinal fluid. In suspicious cases when the bacillus cannot be found microscopically guineapig inoculation is resorted to.

#### VINCENT'S ANGINA.

The specific organisms causing "Vincent's throat" were found in 2 cases. All throat swabs where *C. diphtheriæ* is absent are examined for Vincent's organisms.

#### VENEREAL DISEASES.

The usual examinations of blood and cerebro-spinal fluid by Wassermann or Kahn reactions, sera from primary sores, for the presence of *Tr. pallidum* by dark ground method, and pus smears for gonococci were undertaken. Of 565 Wassermann results 75 were positive. Gonococci were found in 25 of the 131 smears examined. Blood from one patient was repeatedly strongly positive by Wassermann while the Kahn test was always negative. In other cases there was agreement with the two tests.

#### MALARIA.

The malaria parasite was found in 7 of the 23 blood smears for this infection. These were imported cases.

#### DYSENTERY.

Many stools were examined for bacteriological evidence and identification of the type of organism causing this disease. The cases of bacillary dysentery encountered were chiefly due to *B. dysenteriæ* Flexner (polyvalent) and "Sonne." Morgan's bacillus was isolated from three specimens; *B. ambiguus* from two; *Endolimax nana* from one; Flexner (polyvalent) from three; "Sonne" from seven and para colon group from two. Dysentery due to Shiga and *Amœba histolytica* was not met with during the year. All specimens of dysentery stools are examined microscopically for presence of red blood cells and pus cells. A large proportion of suspected dysentery stools were diarrhœic in character without red blood cells and pus cells. The differentiating agglutination serum for corroboration of the variety of organisms isolated is obtained from Oxford University and has always been found reliable.

#### ENTERIC AND UNDULANT FEVERS.

All human blood specimens which require agglutination tests were examined for typhoid (O and H) fever; paratyphoid (A and B) fever, and undulant fever. The formolised standard suspensions and agglutinating sera obtained from Oxford University continue to give satisfaction and can be relied upon, and are especially useful when examining bloods of inoculated

patients, such as soldiers. Of the numerous bloods serologically examined 17 agglutinated for *B. typhosus*; 16 for paratyphosus; 5 for *Br melitensis* and 1 for *B. dysenteriae flexner*. In connection with these diseases stools, bloods, and urines were examined culturally for the presence of the causative organism. *B. typhosus* was isolated from 11 stools. Convalescent patients' stools are again cultured to ensure he is not a carrier of these germs. Serological tests are carried out of blood of those who are about to be employed in trades dealing with food and drink, i.e., vendors of milk, ice cream, waiters, etc. By this means a possible carrier of enteric bacilli would be detected. To detect possible carriers of the enteric germ widal tests are relied upon in the first instance.

#### MENINGITIS.

The results of the examination of 91 cerebro-spinal fluids were reported on during the year. These examinations comprise cytology, protein content, sugar and salt content and bacteriological evidence of the causative organism. In some instances a Wassermann or Kahn test was necessary. Meningococcus was found in 15 specimens—these include repetitions. The tubercle bacillus was found in 5 specimens while others, though T.B. was not found showed cytological evidence of tubercular infection. The meningococcus was not found in the 32 naso-pharyngeal contact swabs examined.

#### BLOOD EXAMINATIONS, &c.

A variety of examinations comes under this heading and includes renal efficiency tests, blood count, and cultures, examination of fractional test meals; cytology, chemical and bacteriological examination of pleural and cerebro-spinal fluids; estimations of urea, calcium and sugar in blood and urine; van den berg's test and icterus index in jaundice; rate of sedimentation of red blood cells, and urine analyses, etc., etc.

As a guide and control in insulin treatment diabetic patients usually visit the laboratory for blood sugar estimations. The total number of these was 424 and 9 patients attended for complete sugar tolerance test. In connection with renal disease 49 patients were examined by renal efficiency tests (urea concentration factor) and 10 for the urea concentration test. Blood urea estimations amounted in all to 108.

#### DRINKING WATER.

Constant supervision of Gibraltar dietetic waters necessitated the bacteriological examination of numerous samples. The City's public supply is tested monthly, each reservoir separately. It remained unpolluted during the year. Many houses collect their private supply of water from the roof. This is stored

in underground tanks, and these tanks are at times liable to pollution. When contamination is suspected a sample is referred to the laboratories. All military tanks are also systematically examined. The number of such tank waters examined was 151.

*Notifiable diseases: venereal diseases, &c.*

The table given below shows the nature and number of specimens examined and the results obtained in connection with the above diseases.

	Total	Positive
Blood—Wassermann .....	565	75
Blood—Widal		
B. typhosus ("H" and "O")	} 216	17
B. para typhosus (A and B)		16
Br. melitensis		5
B. Flexner		1
Pus—gonococcus .....	131	25
Sputum—tubercle bacillus .....	178	45
Swabs—C. diphtheriæ .....	642	80
Serum—Tr. pallidum .....	10	3
Cerebro-spinal fluid .....		13
Meningococcus	} 91	15
Tubercle B.		5
Blood smears—malaria .....	23	7
Fæces		
B. dysenteriæ Flexner	} 247	3
B. dysenteriæ Sonne		7
Bacillus ambiguus		2
B. Morgan's No. 1		3
Endolimax nana		1
Para-colon group		2
B. typhosus		9
Tubercle bacillus		1
Pleural fluid for T.B. ....	17	1
Mouth ulcers for T.B. ....	1	1

*Veterinary work.*

Four blood smears were examined for Piroplasmosis. These were negative.

Two spleens of dogs, one bone marrow, and liver were examined for Leishmania—all were negative.

*Distribution of specimens.*

Specimens submitted were derived as follows:—

From Colonial Hospital 1,367, Military Hospital 875, Naval authorities 116, and from medical practitioners, public health specimens and samples from the general public 2,986—Total 5,344.



*Autogenous vaccines.*

These are prepared chiefly in cases of eczema, and nasal and bronchial catarrh at the request of medical practitioners for their private patients. Certain stock vaccines are also kept.

*Animal inoculations.*

This practice is chiefly confined to the inoculation of *C. diphtheriæ* to determine its virulence, and to determine whether sputum, pleural fluid, C.S.F. and urine contain the tubercle bacillus when, in suspected cases bacteriological methods have failed to demonstrate the presence of the bacillus.

## PART IV.—TESTING OF SHIPS.

The City Analyst is responsible for the testing of compartments of oil carrying tankers for inflammable vapours. Gas free certificates are necessary before ships of this class enter dry dock for repairs. Five tankers were examined.

(Sd.) A. GEO. HOLBOROW, F.I.C.,

City Analyst and Bacteriologist.

## REPORT OF THE GOVERNMENT VETERINARY SURGEON, 1937.

### CONTAGIOUS DISEASE.

On 6th April my predecessor Major Glyn Lloyd, R.A.V.C., reported an outbreak of foot and mouth disease in a consignment of slaughter cattle from Tangier. These animals were housed in the cattle sheds at the Slaughter House.

Telegraphic instructions were sent through the Colonial Secretariat to the authorities at Tangier and Casablanca requesting them to stop the shipment of infected animals to Gibraltar. In spite of this however cattle showing typical lesions of the disease continued to arrive.

Although very thorough preventive measures were adopted locally the disease spread to the cattle of the Shorthorn Dairy Farm on 15th May, and a few days later all the milch cattle and calves were infected with a fairly severe type of the disease.

On 16th May, the Shorthorn Dairy was closed and the importation of cattle from Morocco prohibited.

The dairy cattle were placed under treatment and by the 3rd June, all were cured. The ban on the importation of cattle from Morocco was lifted, and from 17th June, the restrictions on the sale of milk were also removed.

### HORSES, MULES, AND DONKEYS.

	Spain.	Casablanca.	Tangier.	England.
Imports :—Horses	15	4	1	Nil
Donkeys	1	Nil	Nil	Nil
Exports :—Horses	1	1	2	6
Donkeys	Nil	Nil	Nil	Nil

All imported horses, mules, and donkeys were examined by the Veterinary Surgeon as to their freedom from contagious and infectious disease before being allowed to occupy stables in Gibraltar.

Similarly all horses, mules, and donkeys before shipment for exportation had to pass a Veterinary examination.

No infectious or contagious diseases occurred amongst horses, mules, and donkeys in Gibraltar during the year.

Gharry horses plying for hire between Gibraltar and La Linea were inspected for the presence of infectious diseases.

## SLAUGHTER CATTLE, SHEEP, AND PIGS.

	Spain.	Morocco.	Ireland.	Yugoslavia.
1. Imports :—				
Cattle (a)	36	1984	28	100
Sheep	605	219	Nil	Nil
Pigs	165	406	Nil	Nil

(a) includes local cows and calves. ...

2. Number of cattle destroyed on the quay side owing to injury in transit or to disease :—Nil.

3. As reported elsewhere in this report foot and mouth disease was prevalent in imported Moorish cattle during April, May, and June and seven Yugoslavian cattle housed in the same premises contracted the disease. As a result of this disease the heads, paunches, and feet of 178 slaughter cattle were condemned and burnt.

All slaughter cattle were inspected by the Veterinary Surgeon before slaughter. Moroccan cattle were generally poor and unthrifty and some imported during December were very emaciated. The cattle sheds and piggery are maintained in a satisfactory condition.

Twenty cows were tested with tuberculin, five of which gave a positive re-action.

## EXPORT.

Slaughter cattle :—Nil.

Sheep :—7. To shipping.

Pigs :—Nil.

Milch cows :—15. To Casablanca.

Goats :—11. 9 to Tangier and 2 to Morocco.

## HORSES, DONKEYS, DOGS, AND CATS.

Imported :—

(a) Horses :—From Spain 15.  
From Casablanca 4.  
From Tangier 1.

(b) Donkeys :—From Spain 1.

(c) Dogs :—From England 11.  
From Spain 2.  
From Portugal 2.  
From Malta 1.

(d) Cats :—From Italy 2.

Exported :—

(a) Horses :—To England 6.  
To Tangier 2.  
To Casablanca 1.  
To Spain 1.

- (b) Donkeys :—Nil.  
 (c) Dogs :—To England 1.  
                   To Malta 1.  
                   To Palestine 4.  
 (d) Cats :—Nil.

#### RABIES.

One case of rabies occurred in a cat during the year.

Details of this case and subsequent action are given in the appropriate section of the Report.

The muzzling order no doubt acts as a deterrent against the spreading of this disease, but I regret to say that quite a number of the local dog owners try to evade it.

All dogs and cats imported from countries other than the U.K. were quarantined at the Isolation Kennels at Rosia, for a minimum period of three months. The number of animals detained in quarantine on importation was:—5 dogs and 2 cats.

The number of dogs and cats that were detained under observation in the Market Kennels on account of having bitten or scratched people is as follows:—Dogs 28. Cats 9.

The number of dogs and cats destroyed, either lost, strayed and unclaimed or destroyed at the owners request is:—

Dogs :—Destroyed at the Dog's Rest Lethal Chamber ...	88
Destroyed by the G.S.P.C.A. ....	32
Cats :—Destroyed by the G.S.P.C.A. ....	116
Destroyed at the Lethal Chamber ....	208

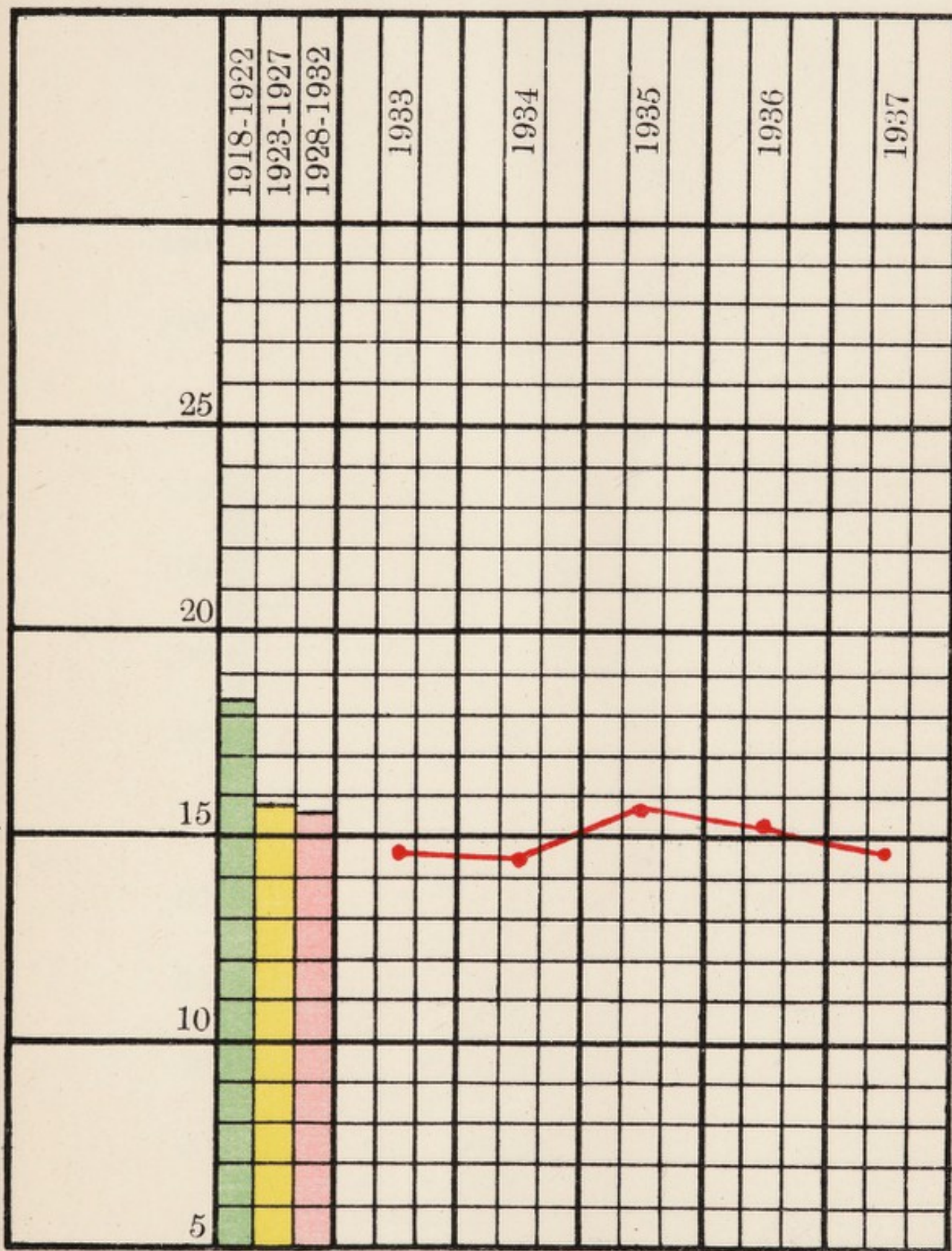
New kennels and lethal chamber are under construction at Rosia to replace the Market Kennels (Dog's Rest) and will shortly be fit for occupation.

At the Veterinary Hospital at Rosia, sick horses, dogs, and cats are able to obtain veterinary treatment and the animals of the really poor people are dealt with free of charge under the auspices of the Gibraltar Society for the Prevention of Cruelty to Animals.

F. C. O'RORKE,  
 Lieut.-Colonel,  
 Government Veterinary Surgeon.



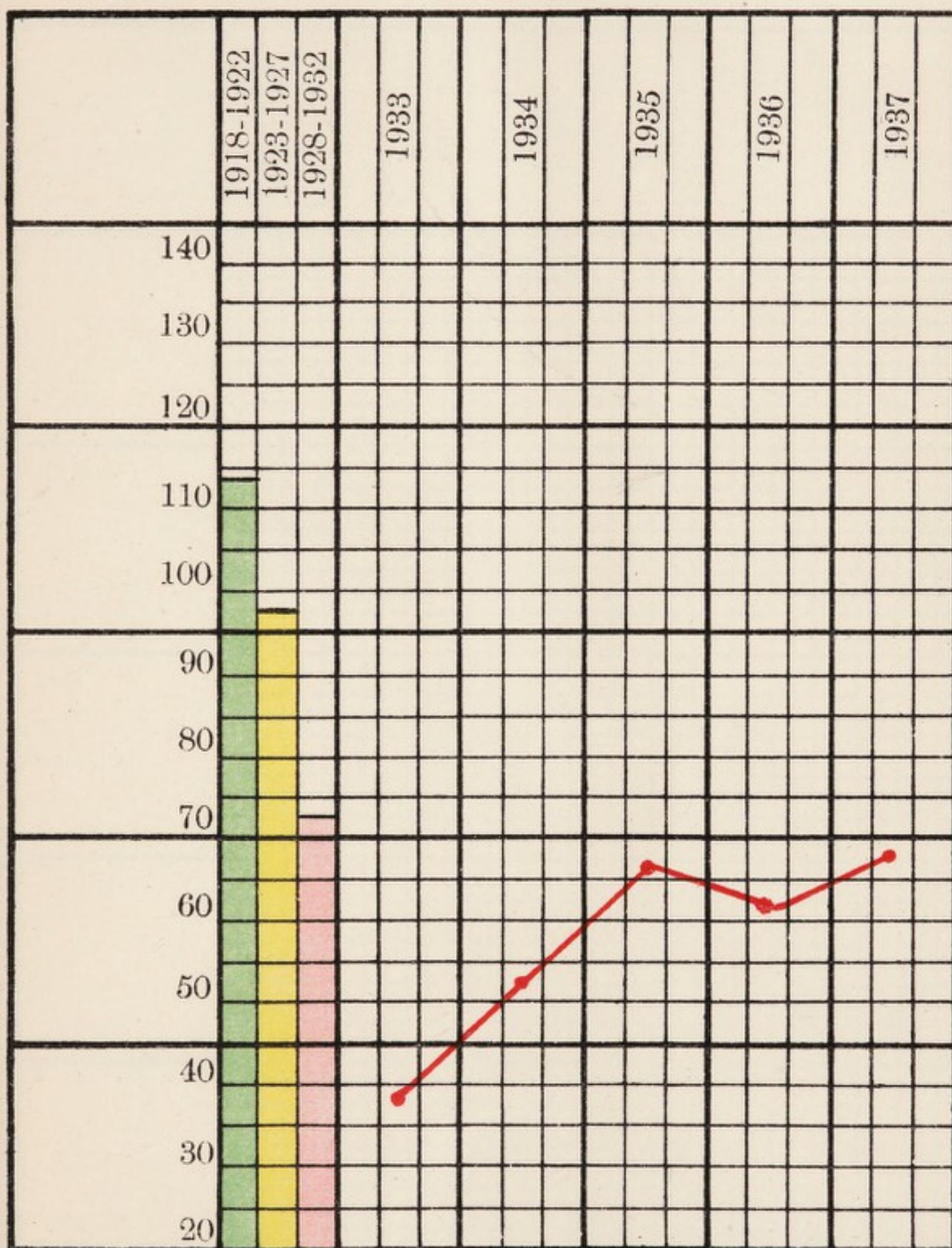
General Death Rate per 1,000 of Population (Total Civil)  
 Gibraltar, for the Decennial Periods  
 1918 - 1927 and 1928 - 1937.



Average	{	1918-1922 .... 18.39	1928-1932 .... 15.51
		1923-1927 .... <u>15.95</u>	1933-1937 .... <u>15.11</u>
		<u>1918-1927 .... 17.17</u>	<u>1928-1937 .... 15.31</u>



Infantile Mortality per 1,000 Births, Gibraltar,  
for the Decennial Periods  
1918 - 1927 and 1928 - 1937.



Average {	1918-1922 ....	113.26	1928-1932 ....	72.50
	1923-1927 ....	<u>97.92</u>	1933-1937 ....	<u>58.34</u>
	1918-1927 ....	<u>105.59</u>	1928-1937 ....	<u>65.5</u>





Zymotic Mortality per 1,000 of Total Civil Population  
 Gibraltar, for the Decennial Periods  
 1918 - 1927 and 1928 - 1937.



Average	{	1918-1922 .... 1.22	1928-1932 .... .80
		1923-1927 .... <u>.90</u>	1933-1937 .... <u>.43</u>
		<u>1918-1927 .... 1.06</u>	<u>1928-1937 .... .62</u>





