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City Council of Gibraltar

ANNUAL REPORT

ON THE

HEALTH OF GIBRALTAR

FOR THE YEAR

1951

BY

**JAMES A. DURANTE, M.R.C.S. (Eng.),
L.R.C.P. (Lond.).**

Medical Officer of Health,

**with which is included a summary of the work of the
Public Health Laboratories.**

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LISTS OF CONTENTS

	PAGE
METEOROLOGICAL REPORT	1
VITAL STATISTICS	5
NUMBER OF DEATHS	7
BIRTHS, DEATHS AND INFANTILE MORTALITY...	9
MATERNITY, CHILD WELFARE	12
CAUSES OF DEATH	16
CARE OF THE SICK AND AGED	16
PREVALENCE AND CONTROL OF INFECTIOUS DISEASES	19
INSECT VECTORS	36
RODENT CONTROL	38
PORT HEALTH WORK	42
SANITARY CIRCUMSTANCES	43
REFUSE COLLECTION AND DISPOSAL	44

LIST OF CONTENTS—*Continued.*

	PAGE
SEWAGE	44
PUBLIC HIGHWAYS	44
PUBLIC BATHS	45
WORK OF SANITARY DEPARTMENT	46
FOOD SUPPLIES	49
HOUSING AND TOWN PLANNING	53
AMBULANCE SERVICE	56
DISINFECTION	57
MEDICAL WORK DONE FOR THE COUNCIL	58
OTHER MATTERS AFFECTING THE HEALTH OF GIBRALTAR	59
SUMMARY OF THE WORK OF THE PUBLIC HEALTH LABORATORIES	62

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(till 30th November, 1951)

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The Royal Air Force Representative.

The Port Medical Officer.

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M. CAVILLA, Esq.

PREFACE

I have the honour to present this report on the Health of Gibraltar for the year 1951.

The various rates shown in the section on vital statistics have this year been calculated on the mid-year civil population estimated by the Census taken on the 3rd July, and it will be evident from the reasons given in the text that they are not strictly comparable with the corresponding rates of the preceding years which have been based on the estimated population recorded in the Police Registration Office on the 31st December of each calendar year. This consideration does not apply to data concerning the infant mortality.

Two hundred and forty-one deaths occurred during the year, the highest figure recorded since the repatriation of the population in 1945. The increase was principally due to the high mortality in the older age groups during the influenza epidemic in the early months of the year.

The chief causes of death were diseases of the heart and circulatory system, whilst cancer and malignant tumours constituted the second principal cause of mortality.

Notwithstanding the considerable increase in deaths, births outnumbered deaths by one hundred and forty-six.

The infant mortality rate was higher than in 1950, but still maintained the low level attained since 1945 and proved fifty per cent lower than in 1931 the previous Census year. It should be noted however, that out of a total of twelve deaths which occurred in infants in their first year of life, five were attributed to prematurity and congenital malformations which together with seventeen still-births indicate that though much has been achieved in reducing infant mortality, there remains ample scope for progress in the anti-natal care of expectant mothers, including the provision of favourable domiciliary conditions and relief from physical strain and mental anxiety; factors which reflect adversely on the developing infant.

The outstanding epidemiological events of the year were an epidemic of Measles which accounted for six hundred and ninety-two of the total notifications of infectious diseases received, an unusual prevalence of Scarlet Fever and the epidemic of Influenza which swept the European continent and eventually reached Gibraltar towards the end of January.

The lightning rapidity with which Influenza spread throughout the City in itself bears testimony to the overcrowded conditions which still prevail, and it is fortunate for the community that the causative virus of this disease did not exhibit the malignant virulence of its predecessor in the pandemic of 1918, else it would have left behind a trail of death, disablement and distress easily conceived by those who had experience of that outbreak.

It is providential that Gibraltar, notwithstanding its vulnerable position as a maritime and air port has, with the exception of Influenza, been spared the scourge of a visitation by a pestilential disease since the outbreaks of Yellow Fever which virtually decimated the population over a century ago, and the evident ineffectiveness of all recognised preventive measures to stem the progress of a virulent highly infectious virus experienced during the outbreak in our overcrowded community this year should serve as a corrective to any complacency there may be a temptation to entertain. For it is the experience of all concerned with health and housing in the City, which is confirmed by the estimate of housing requirements recently published by the Director of Labour and Welfare on which I have commented under the appropriate section in this Report, that there still exists a degree of overcrowding considerable enough to cause anxiety, not only on account of its detrimental influence on health in general, but also in regard to the potential dangers accruing from the introduction of a malignant rapidly spreading infectious disease in our midst. Confronted by this ever present threat the utmost vigilance must be exerted by all health authorities and a strict enforcement of preventive sanitary measures insisted upon.

It would appear from the School Medical Officer's report that the high standard attained in the school children's health has been maintained. Though owing to the disturbance caused to school attendance by the prevalence of infectious diseases and other factors, the number of children examined was considerably smaller than in previous years, ninety-eight per cent of those examined were considered to have been in good physical health; an improvement on the very satisfactory figures recorded in 1950.

The same cannot unfortunately be said with respect to the number of infants who were protected against Diphtheria which the Medical Officer to the Infant Welfare Centre states was still lower than the disquieting low number inoculated in previous years, and I cannot but warn parents again not to

allow themselves to be lulled into a state of false security by the present low incidence of this fell disease which cannot be guaranteed will continue indefinitely.

In conclusion it may be said that but for the abnormal prevalence of infectious diseases which have constituted the predominant feature in the vital panorama of the year under review, there has been no evidence of any deterioration in the health of the city, and when that most sensitive index of a community's health, the infant mortality, is compared with the corresponding data relating to the period between the taking of the Census in 1931 and the onset of war, the beneficial results of the health and social welfare measures initiated or improved upon since are rendered clearly evident.

It but remains for me to express my thanks to the Members of the Council for their courtesy and encouragement, and to record my appreciation of the work and loyalty of the Staff of my Department and of the helpful co-operation of all other Departments of the Council. My thanks are also due to the Press for their support in matters concerning public health.

J. A. DURANTE,

Medical Officer of Health.

Public Health Department,

City Hall,

Gibraltar, 18th April, 1952.

City Council of Gibraltar

PUBLIC HEALTH DEPARTMENT

Summary of Vital Statistics for the Year 1951

Total area of Gibraltar Territory	1,387 acres
Area of the City	104 acres
Estimated Total Civil Population of Gibraltar ...	21,100 persons
Estimated Fixed Civil Population of Gibraltar ...	19,739 persons
*Births in Fixed Civil Population, Males—205) } Females—182) }	387
Birth Rate per 1,000 Fixed Civil Population ...	19.6
Birth Rate per 1,000 Total Civil Population ...	18.76
*Deaths in Fixed Civil Population	241
Death Rate per 1,000 Fixed Civil Population ...	12.2
Crude Death Rate per 1,000 Total Civil Population ...	12.08
Infantile Mortality Rate Fixed Civil Population ...	31
Death Rate from Pulmonary Tuberculosis ..	0.28

**Vide note on Page 11.*

City Council of Gibraltar

PUBLIC HEALTH DEPARTMENT

Statement of Total Statistics for the Year 1931

The following table shows the total population of Gibraltar for the year 1931, and the number of births, deaths, marriages, divorces, and adoptions which have taken place during the year. The population of Gibraltar at the beginning of the year was 18,730 persons, and at the end of the year it was 19,100 persons. The total number of births was 287, of which 142 were males and 145 were females. The total number of deaths was 122, of which 61 were males and 61 were females. There were 241 marriages, 13 divorces, and 3 adoptions during the year.

Estimated Fixed Civil Population of Gibraltar - 18,730 persons	
Births in Fixed Civil Population	287
Deaths in Fixed Civil Population	122
Marriages	241
Divorces	13
Adoptions	3
Population at beginning of year	18,730
Population at end of year	19,100

* This item on Page 11

METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1951.

The following weather summary and tables have been kindly supplied by the Air Ministry's Meteorologist at Gibraltar.

The total rainfall in 1951 exceeded that in 1950 by 17 inches; November was the wettest month and December also proved much wetter than usual. Sunshine averaged nearly half an hour less per day than in 1950 while the average temperature, 65°F, was about one degree lower. The maximum, 94°F, was recorded on August the 20th, and the minimum, 42°F, on three days in January. The average relative humidity was similar to 1950, about 80 per cent at night and 60 per cent in the middle of the afternoon. Westerly winds were more prevalent than easterly, especially in January, February and May.

January was a fairly normal month with spells of wet and fine weather.

February was wetter than usual with nearly 6 inches of rain; it was also windy. The highest gust of the year, 59 knots, was recorded on the 6th.

Wet weather continued until the middle of March when it became fine and sunny. The good weather ended in mid-April; over 3 inches of rain fell during the last week of this month.

May was fine with only a few showers and an average of nearly 11 hours sunshine per day.

June, July and August were fine and dry as usual; sunshine averaged over 11 hours per day and temperatures exceeded 90°F on four occasions.

September brought the first of the autumn thunderstorms and several foggy days.

October was sunnier and drier than usual with over 8 hours sunshine per day and less than 1 inch of rain.

November and December were both very dull and wet; the total sunshine in December was the lowest recorded in any month for many years. The rainfall of the two months amounted to nearly 15 inches; over 4 inches fell in 24 hours on December the 22nd. A sandstorm on November the 5th reduced visibility to 880 yards, a most unusual occurrence in Gibraltar.

North Front. Lat. 36°09' N. Long. 05° 21' W. Barometer Height 11 Ft. Rain gauge 8 Ft. Above M.S.L

YEAR 1951 Months	Mean Pres- su at MSL	TEMPERATURE OF											REL. HUMIDITY				CLOUD AMOUNT (EIGHTHS)						
		MEANS						HIGHEST					LOWEST			03	09	15	21	03	09	15	21
		Dry		Bulb		Max. A	Min. B	Mean of A & B	Max	Date	Min	Date	Min on grass	Date									
		0300	0900	1500	2100																		
January	1019.8	51.3	52.2	59.6	53.8	60.9	48.8	54.9	70	15.18th	42	4th 29th 30th	35	4th	81	77	63	76	2.5	4.2	4.0	2.8	
February.....	1018.4	51.8	52.8	59.3	54.2	61.3	49.2	55.3	67	24th	43	14th	33	26th	82	79	63	77	3.8	4.5	4.8	3.7	
March	1014.5	56.1	58.0	63.1	58.0	65.4	53.7	59.5	80	24th	44	5th	39	5th	80	75	64	79	4.0	4.9	4.4	3.8	
April.....	1016.5	58.3	61.9	68.0	60.6	70.0	56.5	63.3	79	7th	49	2nd 11th	40	12th	80	72	57	76	2.8	4.4	4.1	3.0	
May	1015.3	59.0	63.8	69.6	61.2	72.3	57.0	64.7	81	24th	48	10.11th	43	11th	78	65	51	73	3.0	3.6	3.5	3.0	
June	1016.6	66.1	76.3	76.0	68.5	78.2	64.1	71.1	85	23rd	57	2nd	51	2nd	77	67	56	75	2.1	2.9	2.6	2.3	
July	1016.7	69.5	75.3	81.0	72.9	83.6	67.9	75.7	93	21st 23rd	62	13th	58	13th 17th	78	65	54	71	1.5	2.6	1.5	1.5	
August	1015.2	70.4	74.4	81.3	72.7	83.5	67.9	75.7	94	20th	63	5th	58	5th	77	69	54	73	1.9	2.8	1.8	2.2	
September ...	1016.2	67.9	71.3	76.5	69.8	78.6	66.0	72.3	84	1st 4th	62	16.29th	56	16th 29th	83	76	65	81	2.4	3.8	2.8	3.3	
October.....	1015.9	61.2	65.1	70.5	63.9	72.9	58.8	65.9	79	6th 12th	50	25th	42	25th	79	69	59	76	1.9	3.1	3.3	2.2	
November.....	1015.9	58.5	59.8	63.9	59.5	65.7	56.2	60.9	73	5th	49	15th	43	15th	84	82	72	83	4.4	5.8	5.4	4.3	
December	1021.4	57.1	57.8	61.5	57.7	62.6	55.2	58.9	70	11th	48	30th	40	31st	84	82	73	84	5.2	6.0	5.5	5.0	
Year	1016.9	60.6	64.1	69.2	62.7	71.3	58.4	64.9	94	20/8/51	42	4.29th & 30/1/51	35	26 2/51	80	73	61	77	3.0	4.1	3.6	3.1	

North Front. Lat. 36°09' N. Long. 05° 21' W. Barometer Height 11 ft. Rain gauge 8 ft Above M.L.S.

YEAR 1951 Month	RAINFALL		SUNSHINE		WEATHER									
	Total	Max in 24 hrs. 03-09	Date	Daily Mean	o/o of Pos- sible	Rain	Snow	Hail	No. of Days of					
									Thun- der	Over- cast Sky	Clear Sky	Gales	Fog	Frost
Jan	91.8	22.7	2nd	5.75	57.3	11	0	0	2	0	7	1	0	0
Feb	150.2	35.6	4th	5.62	51.0	13	0	1	1	0	6	1	0	0
Mar	140.5	30.0	10th	6.60	54.8	13	0	0	2	1	3	1	1	0
April	81.2	35.1	30th	8.48	65.1	7	0	0	0	1	3	0	1	0
May	9.0	3.1	5th	10.77	76.5	5	0	0	0	0	0	0	0	0
June	3.4	2.8	3rd	10.99	76.8	2	0	0	1	0	10	1	2	0
July	—	—	—	11.97	83.3	0	0	0	0	0	12	0	5	0
Aug	—	—	—	10.98	81.2	0	0	0	0	0	10	0	4	0
Sept	25.0	12.6	8th	8.82	71.0	7	0	0	2	0	8	0	4	0
Oct	16.4	9.4	19th	8.29	73.7	4	0	0	1	0	6	0	2	0
Nov	207.0	48.0	9th	4.09	39.7	14	0	0	4	1	0	2	2	0
Dec	167.9	83.6	22nd	2.99	30.6	12	0	1	2	3	1	2	0	0
Year	892.4	83.6	22/12	7.94	63.4	88	0	2	15	6	66	8	21	0

WIND

Frequency at 0300, 0900, 1500 & 2100.

Force 1—3 = 1—10 Knots. Force 4—5 = 11—21 Knots. Force 6—7 = 22—33 Knots.

Force 8 = 34—40 Knots.

YEAR 1951	FORCE						DIRECTION							
	8 or over	6-7	4-5	1-3	Calm		N.	NE.	E.	SE.	S.	SW.	W.	NW.
MONTHS														
January	—	7	45	66	6	3	7	11	—	1	25	64	7	
February	1	4	42	62	3	2	2	5	1	8	44	45	2	
March	2	14	60	45	3	—	14	37	2	1	23	42	2	
April	1	12	56	48	3	2	5	41	3	5	22	37	2	
May	—	6	76	41	1	—	3	9	—	3	29	76	3	
June	—	1	77	37	5	1	23	45	5	7	16	18	—	
July	—	2	62	54	6	—	14	30	1	13	33	27	—	
August	—	—	46	69	9	4	15	30	—	15	35	16	—	
September	—	—	38	72	10	1	26	32	—	8	26	17	—	
October	—	—	25	88	11	—	8	24	1	8	29	31	12	
November	1	18	46	51	4	3	11	23	1	8	23	46	1	
December	—	33	38	45	8	2	4	57	—	4	13	35	1	
Year	5	97	611	678	69	18	132	344	14	81	318	454	30	

VITAL STATISTICS

The civil population of Gibraltar was estimated by the Census taken on the 3rd of July, 1951 to comprise

British Subjects

Gibraltarians	18,172	
Statutory Aliens	3,186	
		21,358
Other Aliens	1,490	
		1,490
		22,848

This estimate includes families of personnel of Her Majesty's Forces and certain classes of aliens with which these vital statistics are not concerned. The figures relating to these two groups have therefore, in accordance with the practice adopted in past years, been eliminated for the purpose of calculating the data shown in this Report which are thus based and refer exclusively to the resultant resident civil population constituted as follows:—

	Men	Women	Children		Totals
			M.	F.	
British Subjects	6,927	7,808	2,593	2,411	19,739
Resident Aliens	284	1,012	34	31	1,361
Totals	7,211	8,820	2,627	2,442	21,100

Since the Census taken in April 1931, the Annual Vital Statistics have been based on the estimated civil population of Gibraltar as shown in the Records of the Police Registration Office on the 31st December of the particular year under review, further, it will be noted that the Census figures show a considerable decrease in the population when compared with those recorded in the last police estimate on the 31st December, 1950. Such a marked decrease occurring in the comparatively short period of six months which elapsed between these two estimates cannot be explained by the little emigration, principally to the United Kingdom, which has taken place during that period, nor by the temporary fluctuations which normally occur in the population at the time of the year when the Census was taken, and would appear to indicate the possibility that the progressive increase shown in the

Police records for some years past may be more apparent than real and requires correlating with the findings of the Census.

In view of these considerations the data for 1951 cannot be considered strictly comparable with those of the preceding years, though this does not necessarily detract from their value in assessing the general health of the population during the year. They are of particular interest in showing the progress accruing from public health and social measures instituted during the twenty years which have intervened between the taking of the present Census and that of 1931, and for this purpose the corresponding figures for the latter year have when obtainable and considered relevant been included in this Report.

The average number of persons entering and leaving Gibraltar daily:—

1946	7,500
1947	8,400
1948	8,300
1949	9,545
1950	8,742
1951	7,866

These figures also show a decrease as compared with 1950.

The alterations in population since 1931 are shown below:

How Estimated		British Subjects Fixed Population	Alien Subjects Floating Population	Total Population
Census April 1931		16,188	1,425	17,613
Police Estimate end of	1932	15,143	1,466	16,609
do.	1933	15,071	1,326	16,397
do.	1934	14,790	1,057	15,847
do.	1935	15,735	1,130	16,865
do.	1936	16,875	2,319	19,194
do.	1937	16,792	2,749	19,541
do.	1938	17,222	3,017	20,239
do.	1939	18,125	2,315	20,440
1940 to 1944 civil population evacuated during war years				
Police Estimate end of	1945	17,448	1,784	19,232
do.	1946	19,269	1,964	21,233
do.	1947	20,316	2,216	22,532
do.	1948	21,472	2,228	23,700
do.	1949	22,208	2,377	24,585
do.	1950	22,470	2,416	24,886
Census July 1951		19,739	1,361	21,100

Deaths

Two hundred and forty-one deaths, one hundred and twenty-seven males and one hundred and fourteen females were registered as having occurred in the resident British civil population during 1951, amounting to 12.2 per thousand. The corresponding figures for 1950 were 199 and 8.85 respectively. In addition there were fourteen deaths amongst resident aliens (10.2 per thousand) which equals a total of two hundred and fifty-five deaths or 12.08 per thousand of the total population. This represents an increase of forty-eight deaths over those recorded in 1950 and is mainly attributable to the high mortality in the older age groups during the influenza epidemic in the months of January and February; notwithstanding this adverse factor, there were fewer deaths than in 1931 when a total of 304 or 14.4 per thousand were registered.

The principal causes of death were:—

Cardio vascular diseases	105
Malignant neoplasms	32
Vascular lesions affecting the central nervous system	24
Pneumonia	13
Senility	6
Pulmonary Tuberculosis	6

The chief causes of death were conditions associated with the circulatory system of which seventeen occurred in persons under 55 years of age. Eighty-three or 32.5 per cent of all deaths occurred in persons aged 65 years or older, whilst the age group 55 and under 65 contributed twenty-nine deaths.

Cancer and other malignant tumours continued to constitute the second highest cause of death. Thirty-two or 12.5 per cent of all deaths were caused by these tumours which included six malignant neoplasms of the respiratory organs.

Pulmonary Tuberculosis caused six deaths. Four of these occurred in young subjects aged 28, 31, 33 and 37 years respectively.

A single maternal death occurred which was due to eclampsia.

The crude death rate for the years 1931-9 and 1945-51 has been:—

	Fixed Population	Total Population
1931	15.40	14.40
1932	16.17	15.59
1933	15.99	14.94
1934	15.21	14.51
1935	16.20	15.71
1936	15.82	15.47
1937	15.24	14.93
1938	14.28	13.74
1939	15.22	14.25
Evacuation period		
1945	8.88	8.42
1946	9.18	8.8
1947	7.18	6.56
1948	8.19	7.76
1949	8.15	7.52
1950	8.85	8.31
1951	12.2	12.08

Deaths by Months and Quarters

January	41	April	31
February	51	May	19
March	12	June	18
	—		—
1st Quarter ...	104	2nd Quarter ...	68
	—		—
July	21	October	19
August	17	November	18
September	26	December	9
	—		—
3rd Quarter ...	64	4th Quarter ...	46
	—		—

Includes twenty-seven deaths from cases landed from the Bay or brought into Town for treatment.

Birth, Death and Infant Mortality Rates in 1951 and the Previous Twenty Years

Year	Birth Rate	Death Rate	Infant Mortality (per 1,000)
1931 Census Year	23.2	14.4	61
1932	22.84	15.59	60.69
1933	23.68	14.94	39.2
1934	25.8	14.51	54.8
1935	16.9	15.71	67.4
1936	19.3	15.47	62.09
1937	22.69	14.93	68.24
1938	21.07	13.73	74.38
1939	20.85	14.25	79.36
Period of evacuation of civil population			
1945	34.84	8.42	32.89
1946	21.38	8.8	36.4
1947	18.75	6.56	47.24
1948	17.32	7.67	29.56
1949	18.37	8.15	34.2
1950	15.79	8.85	28.16
1951 Census Year	19.6	12.2	31.

Births

Three hundred and eighty-seven children, two hundred and five males and one hundred and eighty-two females were born from the civil population during the year 1951, providing a

birth rate of 19.6 per thousand fixed British population. This represents an increase of thirty-two over 1950, when the corresponding figures were three hundred and fifty-five and 15.79 respectively. In addition there were nine births to non-resident aliens amounting to a total of three hundred and ninety-six or 18.76 per thousand total civil population.

The distribution of births between hospitals, private practitioners and midwives were as follows:—

Colonial Hospital	333
Military Hospital	5
Medical Practitioners	5
Midwives	53
	396

It will be noted that the great majority of births took place in Hospital as has been the case every year since repatriation.

Illegitimate Births

Illegitimate births numbered seventeen or 4.29 per cent of all births.

Infant Mortality

Twelve infants died before attaining their first year, amounting to 31 per thousand. This represents a small increase over last year's figures (28.16), which were the lowest recorded since repatriation, and a decrease of almost fifty per cent as compared with 1931, the previous Census year. Five deaths occurred in the first month of life, representing a neonatal mortality rate of 12.9 per thousand.

The ages and causes of death were as follows:—

CAUSE OF DEATH	Under 1 week	1/2 weeks	2/3 weeks	3/4 weeks	Total under 4 weeks	1/3 months	3/6 months	6/9 months	9/12 months	Total under one year
Prematurity		1		1	2					2
Congenital Morbus Cordis								1		1
Congenital Malformation	1	1			2					2
Aplastic Anaemia ...	1				1					1
Acute Gastro-Enteritis							2			2
Enterocolitis							1			1
Broncho-Pneumonia						1	1	1		3
Totals	2	2		1	5	1	4	2		12

Still-Births

Seventeen still-births were registered during the year amounting to 41.16 per thousand total births. The corresponding figures for 1950 were 9 and 24.72 respectively, but it should be noted that statutory registration of still-births was not enforced until July of that year.

Infantile Mortality and Neo-natal Death Rates for 1945-51

	Infantile Mortality	Neo-Natal Mortality
1945	32.89	16.4
1946	36.4	9.7
1947	47.2	34.1
1948	29.56	13.5
1949	34.2	24.2
1950	28.16	8.4
1951	31	12.9

Note:

One hundred and forty-eight births and three deaths which occurred among aliens with which these statistics are not concerned are not included in the data recorded above.

The total number of births and deaths which occurred in the Colony during the year 1951 and the corresponding crude rates were therefore as follows:—

Births . . 544 or 23.81 per thousand total population.

Deaths . . 285 or 12.47 per thousand total population.

Deaths in
Infants under
one year of age . . 15 or 27.57 per thousand births.

MATERNITY, CHILD WELFARE AND SCHOOL MEDICAL SERVICES

The Colonial Government continue to be responsible for these services which are operated under the direction of the Chief Medical Officer who is also the Superintendent of the Colonial Hospital. The arrangement favours the integration of the preventive and curative organisations concerned.

Maternity Service

Dr. Cochrane, Physician-in-Charge of the Maternity Department at the Colonial Hospital, has kindly supplied the following information:—

Ante-natal clinics were held at the Colonial Hospital twice weekly. Attendance was very good. Calcium, iron and vitamin preparations were administered to those who required them. The majority of mothers were delivered in hospital. A few cases were attended in their homes by private doctors or registered midwives.

There were five registered midwives engaged in private practice.

The average stay in hospital was 7 days.

Child Welfare and School Medical Services

I am indebted to Dr. Miller, Chief Medical Officer to the Colonial Government, Dr. Ruggeri, School Medical Officer and Dr. Cassaglia, acting Child Welfare Officer, for the following reports:—

Infant Welfare Service

The activities of the Child Welfare Clinics were maintained throughout the year, with three sessions a week at the Town Clinic in the Exchange Building and one session a week at the South Clinic in Cumberland Road.

Medical advice was given regarding every child under five years brought for examination, and in addition, Health Visitors and their assistants visited homes to help and advise mothers on problems in the care and upbringing of infants and young children.

Voluntary helpers continued to give unstintingly of their time and service, assisting the staff generally.

Clinics were well attended.

The majority of children attending the clinics were under two years of age, and of these the age group under one year was greater in number than that from 1 to 2 years.

The number of immunizations against diphtheria dropped from 100 in 1950 to 72 in 1951. In addition to primary immunizations, anti-diphtheria boosting doses were given to several children approaching five years of age, and in a few instances primary inoculations or boosting doses were given to children over five years.

Combined diphtheria-pertussis vaccine was used in a considerable number of cases, whilst pertussis vaccine alone was only used in two cases.

Milk food and certain medical preparations (calcium, iron, vitamin C etc.) were supplied free or at reduced cost in necessitous cases. Other medicines prescribed were issued from the Dispensary at the Colonial Hospital.

As necessary, patients were referred to the various departments of the Colonial Hospital, and in certain cases for admission to the Children's Ward.

Attendances and Home Visits

	Number on Register	Attendances
Town Clinic	914	7,875
South Clinic	161	1,293
	<hr/>	<hr/>
	1,075	9,168
	<hr/>	<hr/>

Home visits

Primary	332
Under 1 year	463
Over 1 year	1,882
Special	74
Ante-natal	72
Houses	2,150
Fruitless	328
Removals (untraced)	126

Immunizations

Diphtheria Vaccine	1st dose	88
	2nd dose	72
	Boosting dose	8
Combined Diphtheria-Pertussis Vaccine	1st dose	80
	2nd dose	82
	3rd dose	72
Pertussis Vaccine	1st dose	1
	2nd dose	2
	3rd dose	2

School Medical Service

All schools were visited during the year but only 710 children were medically examined, compared with 1,640 in 1950. The reason for this drop were (i) the closing down of schools for some time after the "Bedenham" explosion and (ii) absenteeism caused by sickness amongst school children during the epidemics of influenza and measles.

Six hundred and ninety-nine (98%) were found to be in good physical health; eight (1%) were recorded as fair and three were in a poor state of health.

Upper respiratory infections continued to be prevalent and enlarged tonsils were common but only those children exhibiting gross symptoms were referred for operative treatment.

Twenty-three new children were found to have functional heart murmurs whilst three acute cases of rheumatic fever were detected.

Teeth, in general, were in better condition than in previous years.

Regular inspections were carried out by the school nurse; three thousand, six hundred and thirty-six children being inspected for cleanliness and three hundred and thirty-eight being tested for defects of vision.

Children who appeared to require some form of general treatment were referred to their own doctors or to the Pædiatrician.

Cases requiring special investigation were referred to special clinics —

Dental Clinic	13 cases
Ophthalmic Clinic	8 cases
Outpatient Clinic	13 cases

Children between the ages of 5 and 8 attending Infant Schools received a third of a pint of reconstituted milk a day during term time.

Owing to lack of space it is impossible to provide adequate playgrounds and most of the schools have only a 'patio' for recreation. However, the boys in the Secondary Schools played games and did physical exercises at the Stadium under the instructions of a P.T. Instructor. By kind permission of Lady Anderson the girls received suitable physical training in the ballroom of the Convent.

School children requiring dental treatment were referred to the dental surgeons (Mr. Danino and Mr. Cochrane). They attended at the private surgeries by appointment.

Two special sessions per week—Wednesday and Saturday—were held at the Colonial Hospital where extractions were carried out under gas-oxygen anaesthesia.

SUMMARY OF DENTAL TREATMENT

Dental Surgeon	Sessions for Treatment	Teeth Conserved	Teeth Extracted	Attendance for Scaling and Gum Treatment
Mr. A. A. Danino ..	123	669	135	60
Mr. J. J. Cochrane ..	32	115	155	33

CARE OF THE SICK AND AGED

An average of about thirty aged and infirm women are satisfactorily housed and well cared for by the Government in Beriro's Home to which many improvements have been effected during the year.

A smaller number of women and a few old men live at the Little Sisters of the Poor Transit Centre where the dilapidated state of the building and other factors militate against their proper housing and care which is virtually limited to the provision of the bare necessities of life.

I have written at length on this subject in my previous annual reports and beyond again stressing the necessity to overcome the difficulties which are delaying existing projects designed to meet the requirements of these old folks from being implemented, there is nothing further to add to what has already been said which would serve a useful purpose.

PREVALENCE AND CONTROL OF INFECTIOUS DISEASES

The diseases statutorily notifiable in Gibraltar are: Smallpox, Cholera, Epidemic Typhus, Plague, Yellow Fever, Dysentery, Diphtheria, Cerebro-Spinal Meningitis, Scarlatina or Scarlet Fever, Typhoid or Enteric Fever, Undulant Fever, Acute Encephalities, Acute Poliomyelitis, Chicken Pox, Epidemic Parotitis, Erysipelas, Leprosy, Measles, Meningococcal Infection, Ophthalmia Neonatorum, Paratyphoid Fever, Pertussis, Puerperal Fever, Rubella, Trachoma, Tuberculosis (all forms), Venereal disease.

Eight hundred and thirty-six cases of infectious disease have been notified from the civil population during the year which represents an incidence of 39.6 per thousand. These are the highest figures recorded since the repatriation of the population in 1945.

The increase has been due to an extensive outbreak of Measles which accounted for 692 notifications and which together with Gibraltar's participation in the pandemic of Influenza and an unusual prevalence of Scarlet Fever, constitute the prominent features in the epidemiological field in the year under review.

There were eight deaths from infectious diseases, six of which were caused by Pulmonary Tuberculosis, one by Tuberculous Meningitis and another by Undulant Fever.

The years 1945 to 1950 rendered an average of 174 notifications per annum.

Measles

The epidemic of Measles, referred to above, started in late January. The disease spread rapidly throughout the City, attained its highest incidence in March, and subsequently declined rapidly to end in July, when only six cases were reported.

Six hundred and ninety-two notifications were received from the civil population, which constitutes the highest incidence during an epidemic period since 1932, when 777 cases were recorded.

Over sixty per cent of the cases occurred in the central district which is the most densely populated. There were no deaths.

It is very probable that these figures do not represent the true incidence, as the disease was generally so mild that a doctor may not have been called in a considerable number of cases which thus escaped notification.

With the exception of a few patients whose living conditions were such as to preclude domiciliary treatment and who were admitted to hospital, the majority were isolated, as far as possible, in their homes but with a disease with a comparatively long prodromal period during which the patient is highly infectious, and the overcrowded state of most dwellings, such measures could not be expected to stay its spread. It was not considered that closure of the schools would have served a useful purpose as a measure of prevention, but patients and their contacts were excluded for the customary quarantine period, and all homes wherein cases had occurred were disinfected.

Outbreaks of Measles occur cyclically every two or three years in Gibraltar and as the disease had not assumed epidemic proportions since 1947-8, the present outbreak was not altogether unexpected, neither was the rapidity with which it spread surprising in view of the existence of a large vulnerable child population living to a great extent under overcrowded and often unhygienic conditions.

Because this disease has for some years past, and particularly in Gibraltar, been usually of a benign nature and seldom fatal, it is often regarded as of little importance and as "something a child has to get over", but the fact that children in the most vital periods of their lives when important metabolic developments are taking place are the commonest victims, that however mild the attack it may prepare the soil for graver infections and that not infrequently it leaves behind trails of ill-health and life long disability should receive careful consideration, and in the absence of effective preventive agents warrants the seeking of medical advice and care for every child affected however trivial the illness may appear.

Preventive sera are being used which are of proven value in special circumstances, but which are unsuitable for general application; it is hoped however that investigations which are being carried out will succeed in perfecting them and will ensure the advent of a time when the protection of every child from the hazards of an attack will become a reality.

Epidemics of Measles in Gibraltar from 1932 to 1951

Year	1932	1935	1937-38	Evacuation Period	1947-48	1951
Cases	777	134	560			196	692

Seasonal Prevalence of Measles during 1951

Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Cases	15	78	359	161	59	13	6	1	—	—	—	—

Age and Sex Incidence

Age and Sex	Under 1 year		1 year and under 5		5 years and under 15		15 years and under 25		25 years and under 45		45 years and over	
	M	F	M	F	M	F	M	F	M	F	M	F
Cases	8	5	120	120	204	212	6	15	1	1	—	—

Pulmonary Tuberculosis

Twenty-two cases of Pulmonary Tuberculosis were notified during the year. There were six deaths. This represents an increase of three in the incidence as compared with 1950, when nineteen notifications were received. The number of deaths recorded was the same.

Of the cases notified the youngest was a girl aged 15 years, two were males in their fifties and the eldest a female aged 67 years.

The only significant change concerns an increase in the incidence of the disease in the age groups 15 and under 45 years. Eighteen cases, nine males and nine females occurred in these groups in 1951, whilst twelve cases, five males and seven females were reported in the previous year.

The incidence and mortality rates for 1951 were 1.04 and 0.28 per thousand population respectively. The corresponding figures for 1950 were 0.76 and 0.24.

The discovery of two patients, one in the course of a routine housing inquiry and another admitted urgently to hospital in a moribund condition, who were being treated by practitioners outside Gibraltar and thus had escaped notification is rather disquieting, and reminiscent of past days when the number of such cases was considerable.

Though the number is small, it suggests the possible existence of others unknown to the Health Authorities, and as the unknown and therefore uncontrolled patient constitutes the

greater factor in the dissemination of the disease, the presence of even a small number cannot but be viewed with concern.

Considering the excellent modern hospital facilities and high standard of treatment for Tuberculosis available in Gibraltar, there is no reason why all those affected should not avail themselves of them, but human nature being what it is, old conceptions, however erroneous, tend to die hard and it is obvious that the stigma attached to the disease still lingers in the minds of some who to avoid publicity resort to seeking treatment elsewhere.

The problem of breaking down this prejudice presents many difficulties and requires much patience and perseverance, for it is tactful handling, persuasion and education which offer the best hopes of success.

Tables showing the incidence and mortality from Pulmonary Tuberculosis in the periods 1935-9 and 1945-51 are appended.

Non-Respiratory Tuberculosis

The only case of Non-Respiratory Tuberculosis notified was an infant aged 3 years suffering from Tuberculosis Meningitis which proved fatal. This represents an incidence and mortality rate of .04 per thousand.

Incidence and Mortality from Pulmonary Tuberculosis 1935-1939 and 1945-1951

Year	Cases	Deaths	Incidence per thousand	Deaths per thousand
1935	23	15	—	0.88
1936	30	19	1.90	1.20 (T.B. Officer appointed)
1937	34	21	1.74	1.08
1938	8	16	0.39	0.79
1939	16	14	0.8	—

Civil population evacuated during the War

1945	42	7	2.4	0.4
1946	30	6	1.55	0.31
1947	31	7	1.52	0.34
1948	17	12	0.72	0.51
1949	22	8	0.89	0.32
1950	19	6	0.76	0.24
1951	22	6	1.04	0.28

Enteric Fever

Eight cases of Typhoid and one of Paratyphoid Fever were notified during the year. There were no deaths.

Four of the Typhoid cases occurred in December and the persons concerned were all members of a household in the central district of the Town. The disease originated in an infant aged two years from whom the mother and an aunt contracted the disease whilst nursing it. This child had not been away from Gibraltar, nor had it been in contact with any known case of the disease, and it is surmised that he was infected by a maid who eventually proved to be an ambulant case and was admitted to hospital for treatment.

This girl presumably was herself infected by her mother who was reported to have been suffering from "fever" at the relevant time, the nature of which could not be ascertained because she lived outside the Department's jurisdiction.

The other cases were distributed in various districts, and careful investigations which were carried out failed to reveal a common source of infection. Three of these patients however, who were notified about the same time in February, almost certainly acquired the infection during visits to a neighbouring town, where a severe water-borne outbreak of the disease was in progress, and where they admitted having partaken of food and drink.

The remaining Typhoid and the Paratyphoid patients in all probability contracted the disease outside Gibraltar.

Infections by *Salmonella Typhi-Murium*

Salmonella Typhi-Murium was isolated in pure culture from the faeces of two children aged seven years and twelve months respectively who were suffering from pyrexia associated with gastro-intestinal symptoms. Investigations failed to establish the origin of the infection. There are reasons to believe that infections by this type of salmonellae are far from uncommon in Gibraltar, but are only discovered casually when faeces from patients suffering from pyrexial or gastro-intestinal syndromes which have failed to respond rapidly to antibiotic or chemotherapy are submitted for investigation.

Infections by these organisms are usually of animal origin, but it has been established that, as in Typhoid and Paratyphoid Fever, the faeces of patients and convalescents are also sources of infection. As modern therapeutic agents rapidly render patients symptomless, bacteriological investigations are apt to be omitted; these salmonellae however, often persist in the excreta for considerable periods after all symptoms have disappeared, and such individuals may inadvert-

ently become a danger to others, particularly if they are engaged in occupations connected with the handling, preparation or serving of food.

The danger of temporary or permanent carriers escaping detection was noted in my annual report for 1950, and I would again stress the importance, from a preventive aspect, of submitting specimens of excreta for bacteriological examination from all patients suffering from gastro-intestinal affections however mild or of short duration.

Dysentery

Three cases of Bacillary Dysentery were notified during the year. Two were caused by shigella paradysenterial (Flexner) and one by *S. sonnei*.

No notifications of amoebic dysentery were received.

Scarlet Fever

Scarlet Fever has been unusually prevalent throughout the year, the incidence being highest in March, October and November. Thirty-seven cases were notified from the civil population which together with twelve reported among children belonging to Service families produced a total of forty-nine. With the exception of two adults in their thirties, all the infections occurred in children, the majority being of school age.

In two patients the disease was described by the practitioners in attendance as severe, otherwise the clinical symptoms were so mild and the exanthem of such short duration as to render the diagnosis doubtful in some cases. Of the civilian cases two were admitted to Hospital, the others were isolated in their homes. No fatalities occurred.

Absenteeism from schools caused by mild attacks of pyrexia associated with sore throats was above the average during the months of highest incidence, but with a few exceptions in which a Haemolytic Streptococcus Type G. was found throat swabs taken from a number of these children proved negative.

Though infections by Haemolytic Streptococci are a frequent occurrence, Scarlet Fever is a comparatively rare disease in Gibraltar. The quinquennia 1935-39 and 1946-50 produced a yearly average of 18 and 3 notifications respectively, but in 1923 a severe outbreak occurred between the months of February and November, during which 218 cases with 5 deaths were recorded. As far as it has been possible to ascertain from existing records, this is the only occasion in which the disease has manifested itself in epidemic form in the past sixty years.

In view of this, anxiety was felt as to whether the unusual incidence might be the prelude to a similar out-break, and as the disease appeared to be practically limited to children of school age and the highest incidence to be among those attending the infant and junior schools where milk is normally issued, it was deemed expedient to supplement the customary domiciliary visits and routine preventive measures by special investigations of all the schools concerned.

These were visited by the Medical Officer of Health and the Sanitary Inspectors, inquiries made as to the means available and methods in use for preparing and distributing milk to the children, and throat swabs obtained from all the teachers and other attendants concerned with the preparation and serving of milk. Head-teachers were also requested to submit frequently lists of children who were absent from school for unknown reasons, and the homes of these children were visited by the Sanitary Staff to ascertain the cause of their absence.

Careful inquiries failed to reveal any illness among the teaching staff and with one exception, where a few colonies of Haemolytic Streptococcus Type G. were isolated, all the swabs taken proved consistently negative on bacteriological examination. No cases were notified from the school attended by this teacher.

Following these investigations, recommendations were made to improve the equipment and methods of preparing and issuing milk, and advice was given regarding precautionary measures to prevent spread in the schools.

As only sterilized tinned milk made up to the required strength with boiling water at the time of issue is served in schools, and as the explosive features of a milk borne out-break were lacking, it is reasonable to assume that spread was by direct contact between children in school, at home and in places of entertainment. The widespread distribution of cases in all districts of the city, and the irregular intervals between their onsets, also give support to this view.

It is significant that an increase in the incidence of this disease in Spain during the year under review has been reported by the World Health Organization.

Seasonal Incidence of Scarlet Fever during 1951

Months	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Civilian	—	1	1	3	2	2	—	2	3	8	9	6
Services	—	—	6	1	—	1	—	—	—	2	2	—
Totals	—	1	7	4	2	3	—	2	3	10	11	6

Age Distribution with relation to Schools

Years	1	2	3	4	5	6	7	8	9	10	11	12
Children	—	1	1	3	9	11	6	3	2	6	2	3
School	Pre-School Total: 5			Schools issuing Milk Total: 29					Schools not issuing Milk Total: 13			

Diphtheria

Five cases of Diphtheria, four pharyngeal and one aural were notified during the year. The disease was in every case mild and responded readily to treatment.

The position with respect to the immunization of infants against this disease continues to be far from satisfactory. The infrequent occurrence of cases of Diphtheria and the benign nature of the infections is tending to develop in parents an attitude of "laissez-faire" and a false sense of security from which it can only be hoped that there will not some day be a rude and regrettable awakening. In an effort to combat this apathy and to promote the adoption of this preventive measure, the opportunity has been taken by the Public Vaccinator to explain to parents individually when they bring their children for statutory vaccination, the nature, simplicity and proven efficacy of immunization, and to encourage them to adopt it for their children, whilst at the same time explanatory leaflets have been distributed to them.

This ensures that the parents of all children born in Gibraltar during the year become personally acquainted with the dangers of Diphtheria and the advantage of preventive inoculation, and it is hoped that the seed thus laboriously sown may bear fruit in the not too distant future.

Whooping-Cough

The incidence of this disease was lower than in 1950. Twenty-nine cases were notified as compared with forty-two in the previous year. No deaths occurred.

Chicken-Pox

Chicken-Pox was prevalent throughout the year. Twenty-one notifications were received.

Undulant Fever

Three sporadic cases of Undulant Fever have been notified during the year. All were caused by *Brucella Melitensis* and one, a male aged 65, proved fatal. Careful investigations failed to reveal any local source of infection, and it can only be presumed that the disease was contracted from milk or goats' cheese bought privately outside Gibraltar.

Puerperal Pyrexia

Two cases of Puerperal Pyrexia were notified. One patient was being attended privately by a midwife who was temporarily suspended.

Ophthalmia Neonatorum

Two notifications were received.

Trachoma

Three cases were notified.

Meningococcal Meningitis

A sporadic case was notified in an infant eight months old.

Poliomyelitis

No notifications of this disease were received from the civil population during the year.

Smallpox

No cases of Smallpox occurred in Gibraltar during the year under review, and none was landed from the Bay.

Vaccinations

Number of children born	396*
Number who died before vaccination ...	7
Number who left Gibraltar before vaccination ...	9
Certified as insusceptible to vaccination	1
Vaccination postponed on medical grounds	14
Number successfully vaccinated (children born in 1951) ...	247
Objectors to vaccination	NIL
Outstanding	118

(*includes 9 non-resident aliens)

In addition eleven children born outside Gibraltar, and one hundred and thirty-three children who were found not to have been vaccinated or whose vaccination had been postponed on account of illness were vaccinated.

Thus three hundred and ninety-two vaccinations and two hundred and seventy-five re-vaccinations on children who had attained the age of twelve years were performed during the year. Forty-six adults were also re-vaccinated.

Three hundred and sixty-four of these vaccinations and three hundred and seventeen re-vaccinations were carried out by the Public Vaccinator. There have been no objectors to vaccination in 1951. Of the 118 outstanding, 95 had not attained the age of three months and notices were served on the remaining twenty-four.

Rabies

There were no cases of rabies in Gibraltar during 1951.

The brains of two cats and a dog who died under suspicious circumstances were sent to the Institute Pasteur at Tangier for examination, but the disease was not confirmed in any of the cases.

A person who had been bitten by one of these cats underwent anti-rabic treatment, as a precautionary measure pending the results of the investigations.

Hardly a year lapses during which one or more persons are not subjected to such preventive treatment because of having been bitten by dogs or cats who have died under suspicion of having suffered from rabies, and I make no apologies for again stressing, as I have done in my previous annual reports and on other occasions, the importance of a strict enforcement of the quarantine and muzzling regulations and of an effective control of the cat population.

In 1925 and again in 1933 outbreaks of rabies of sufficient importance to give rise to anxiety have occurred. In both instances a considerable number of dogs, cats and human beings were involved, and it was many months before the complete freedom of the city from infection could be ensured.

Though fortunately such outbreaks have not occurred recently, sporadic cases continue to make their appearance with disquieting frequency. Such occurrences almost invariably imply that human beings have to undergo anti-rabic treatment and should serve as constant reminders of the ever present danger to the population from the introduction of this deadly disease.

The annual campaign to reduce the number of stray, starving and often diseased cats was waged from the 14th August to the 8th September, during which 259 cats were caught and painlessly destroyed at the Quarantine Kennels.

Stray cats caught by Council cat catchers (for detention and destruction if unclaimed)	194
Cats delivered by private individuals	30
Cats caught by the Services	35
	<hr/>
Total number of cats delivered to the Govern- ment Quarantine Kennels and painlessly destroyed	259
	<hr/>

I am indebted to the Commissioner of Police who is in charge of the Government Quarantine Kennels, where dogs and cats are detained under observation and painlessly destroyed if unclaimed, for the following information about the work done there during the year.

Number of stray dogs admitted	68
Number of stray dogs claimed by owners	25
Number of stray dogs destroyed	43
Number of dogs detained after biting persons ...	17
Number of dogs claimed by owners	14
Number of dogs destroyed	3
Number of dogs detained in transit	30
Number of dogs humanely destroyed at owner's request	53

Influenza Epidemic 1950-1951

The outbreak of Influenza which occurred in Gibraltar was a manifestation of the extensive epidemic of the disease which, originating in some countries in the North of Europe in November and in an apparently independent focus in Northern Spain in December 1950, swept throughout the Continent reaching the City about the last week in January 1951.

In view of this, a brief summary of the succession of incidents reported by the epidemiological section of the World Health Organization*, which eventually led to the invasion of our town is of considerable interest, and warrants its inclusion in this report regarding the local developments.

Small foci of a benign form of Influenza caused by A' type virus occurred in Sweden in May-June 1950. It has been observed that summer outbreaks of this type are frequently followed by an autumnal recrudescence, and such was the sequence of events in the epidemic under review.

In November 1950 the disease appeared almost simultaneously in Denmark, Norway and the North of Sweden, whence it spread rapidly throughout Sweden in December and eventually reached Finland. In the middle of that month apparently independent foci were reported in Belgrade and Istanbul, and towards Christmas it appeared in the Netherlands (Flushing), England (Newcastle) and shortly afterwards in Northern Ireland (Belfast), on the banks of the Mersey (Liverpool), in Scotland (Glasgow), and in North-West Germany (Hamburg, Schleswig-Holstein). These outbreaks occurred at about the same time and the infection was undoubtedly sea borne. An important focus, which appeared to have no connection with these, became evident in San Sebastian, Bilbao, and the neighbouring provinces in Spain, about the

end of December. By the 10th of January, 1951, the northern half of the country was affected, and thence the disease spread rapidly southwards to involve the whole country, attaining a peak during the week ended the 20th January, after which notifications progressively decreased. France was involved early in January, the infection probably originating in Spain and in the countries adjoining her north-eastern frontier, and within a few days the disease appeared in Berlin and Portugal.

Switzerland, Italy, Austria and the Republic of Ireland were invaded shortly afterwards, and towards the end of January the incidence increased in Trieste and Greece and finally the disease reached Gibraltar.

More or less, important influenzal occurrences observed in Algeria, Morocco, Tangiers and Tripolitania in late January may be considered as extensions of the European epidemic.

A high incidence was also reported in many localities in North and South America between December 1950 and February 1951, whilst in Japan a serious outbreak occurred in October 1950 followed by a recrudescence in March 1951.

Investigations undertaken from the very outset of the epidemic by the network of World Health Organization "Influenza Centres" would appear to point to the Group A' viruses to have been the cause of the epidemics in the very large majority of cases.

* E. V. S. 47. Vol. IV, No. 4. April 1951.

Gibraltar

In Gibraltar the disease appeared with almost dramatic suddenness towards the end of January, spread with lightning rapidity throughout the City, attained a peak within a fortnight of its onset, and quickly subsided, the outbreak terminating by the end of the third week in February.

As influenza is not a notifiable disease in this Colony, it was not possible to estimate with any degree of accuracy the extent of the incidence, but judging from records of absenteeism obtained from some government departments, from schools and from interviews with medical practitioners, it would be reasonable to assess it approximately at from 50 to 60 per cent of the population. Employees of departments engaged in work in the open suffered less than those confined in offices and workshops, whilst the incidence among members of the medical profession and nursing staffs of hospitals was very high.

The disease maintained benign clinical characteristics throughout, and exhibited little tendency to the complications in young adults which were so frequent in the 1918 pandemic.

Eleven deaths from pneumonia and four from influenza were registered, all in subjects over sixty years of age, but in view of the increase in deaths in old people during the relevant period as compared with previous years, I suspect that many which were certified as having been due to cardio vascular diseases, bronchitis and other respiratory affections, may have been precipitated by attacks of influenza.

With a view to control the spread of the disease, as far as possible, the public were warned through the medium of the Press and by the Health Department Inspectorate of the hazards of indiscriminate spitting, coughing or sneezing in close proximity of others, and advised to reduce the opportunities of infection by abstaining from visits to infected households, crowded halls and stores and limiting their use of public conveyances; also by ensuring adequate ventilation of buildings and spending as much time as possible in the open. A letter was also addressed by the Medical Officer of Health to all Medical Practitioners requesting their co-operation by advising patients on these measures of prevention.

How the disease was introduced into Gibraltar is a matter for conjecture, and could not be determined owing to the frequent arrival of persons by sea and air from many countries already affected, and the daily influx of some thousands of workmen and visitors from the neighbouring towns in Spain, where influenza was also prevalent at the time.

Encephalitis Lethargica

A youth, one of a small party of students on a caravan tour, was admitted to hospital and diagnosed as suffering from Encephalitis Lethargica. The infection had been probably contracted in Morocco. This disease has been practically non-existent in Gibraltar for many years past, and as a measure of prevention the movements of the other members of the party were restricted to the open areas outside the city and to the less frequented beaches.

Notifications of Infectious Diseases with Age and Sex Incidence — Civil Population 1951

Notifiable Diseases	NUMBER OF CASES														Districts			No. of cases removed to Hospital				
	All Ages	Under 1 year		1 and under 5 years		5 and under 15 years		15 and under 25 years		25 and under 45 years		45 and under 65 years		65 and over		North	Central		South			
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.							
																				M.		F.
Pulmonary Tuberculosis	22	—	—	—	—	—	—	—	5	3	4	6	3	—	—	—	2	18	2	18		
Non-respiratory Tuberculosis ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	
Meningococcal Meningitis ...	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Chicken Pox	21	1	—	2	5	6	—	2	—	—	—	—	—	—	—	—	1	16	4	3	3	
Enteric Fever	9	—	—	1	1	2	—	—	—	—	—	3	1	—	—	—	1	7	1	2	2	
Trachoma	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	
Dysentery	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	
Whooping Cough	29	3	—	5	6	4	—	—	—	—	—	—	—	—	—	—	5	14	10	1	1	
Mumps	3	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	1	1	
Diphtheria	5	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	1	3	1	—	—	
Rubella	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	
Measles	692	8	5	120	204	212	15	6	1	1	1	1	—	—	—	—	35	466	191	11	11	
Ophthalmia Neonatorum ...	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	
Scarlet Fever	37	—	—	—	12	20	—	—	—	—	—	2	—	—	—	—	—	28	9	—	2	
Erysipelas	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Undulant Fever	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	—	
Puerperal Pyrexia	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	
TOTALS	836	16	8	131	198	245	23	14	5	14	6	3	—	—	—	—	49	564	223	45	45	

Infectious Diseases — Monthly and Quarterly Incidence — Civil Population, 1951

Disease	January	February	March	1st Qr.	April	May	June	2nd Qr.	July	August	Sept.	3rd Qr.	October	November	December	4th Qr.	Total	Deaths
Pulmonary Tuberculosis	3	—	3	6	2	1	2	5	1	2	3	6	1	2	2	5	22	6
Non-Respiratory Tuberculosis	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	1	1
Chicken Pox	1	2	1	4	3	—	3	6	1	4	—	5	—	3	3	6	21	—
Enteric Fever	—	3	—	3	—	—	—	—	1	1	—	1	—	1	5	5	9	—
Trachoma	—	—	1	1	—	—	—	—	—	—	—	1	2	—	—	2	3	—
Dysentery	—	—	—	—	—	—	—	—	1	2	—	1	—	—	—	2	3	—
Pertussis	2	2	3	7	—	5	5	10	6	2	—	8	—	4	—	4	29	—
Mumps	—	—	—	—	—	—	2	2	—	—	—	—	—	—	1	1	3	—
Diphtheria	2	—	1	3	2	—	—	2	—	—	—	—	—	—	—	—	5	—
Rubella	—	—	—	—	—	1	—	1	—	—	—	—	1	—	—	—	2	—
Scarlet Fever	—	1	1	2	3	2	2	7	—	—	—	5	8	—	—	23	37	—
Measles	15	78	359	452	161	59	13	233	6	1	—	7	—	—	—	692	—	—
Ophthalmia Neonatorum	—	—	1	1	—	—	—	—	—	1	—	1	—	—	—	—	2	—
Puerperal Pyrexia	—	—	1	1	—	—	—	—	1	1	—	1	—	—	—	—	2	—
Undulant Fever	—	—	—	—	—	—	1	1	—	—	—	2	1	—	—	—	3	1
Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—
Meningococcal Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	—
TOTALS	23	86	371	480	171	69	28	268	18	14	6	38	13	19	18	50	836	8

Infectious Diseases — Monthly and Quarterly Return of Cases Landed from the Bay or Brought into Town for Treatment, 1951

Disease	January	February	March	1st Qr.	April	May	June	2nd Qr.	July	August	Sept.	3rd Qr.	October	November	December	4th Qr.	Total	Deaths
Pulmonary Tuberculosis	1	—	3	4	3	5	5	13	6	8	2	16	1	2	2	5	38	5
Non-Respiratory Tuberculosis	—	—	—	—	—	—	—	—	—	1	1	2	1	—	—	1	3	—
Trachoma	1	—	—	1	—	—	2	2	—	3	2	5	4	2	5	11	19	—
Measles	1	—	1	2	—	—	—	—	—	—	—	—	—	1	—	1	3	—
Chicken Pox	—	—	—	—	—	1	—	1	—	—	1	1	—	—	—	—	2	—
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	1	—
Pertussis	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	2	2	—
Poliomyelitis	—	—	—	—	—	—	—	—	2	—	—	2	—	—	—	—	2	—
TOTALS	3	—	4	7	3	6	7	16	8	13	6	27	8	5	7	20	70	5

INVESTIGATION AND PREVENTION OF OTHER DISEASES

INSECT VECTORS

Flies

With the exception of a few days during the month of October when flies were prevalent, these insects have not proved troublesome during 1951.

One thousand two hundred and twenty gallons of the five per cent solution of D.D.T. prepared for use in sprayers have been sold to the public.

Following demolitions and repairs which were being carried out to houses damaged by the "Bedenham" explosion, accumulations of rubble, to which other house refuse and discarded food was added caused nuisances which it was feared might have proved excellent breeding places for flies, and energetic action had to be taken by the Sanitary Inspectorate and the refuse disposal section of the City Engineer's Department to clear these dumps and prevent their recurrence. Notices were also published in the Press requesting the co-operation of the public in preventing these accumulations from taking place and pointing out the dangers to health accruing from them.

Mosquitoes

Though these insects have not been unusually prevalent during the year, considerable trouble was experienced in clearing certain sites in the South District where they proved a nuisance and a source of frequent complaints. Intensive repeated searches were made in co-ordination with the services sanitarians, breeding places found and eliminated, and the incidence finally abated.

All anti-mosquito measures were carried out by the regular sanitary staff of the Department without the employment of extra personnel.

Thirty-eight specimens were taken for identification, the following species being found:—

Culex pipiens 28 (between May and October)
Theobaldia longiareolata 10 (between May and October)

No *Aedes argenteus* were found during the year, an unusual occurrence in Gibraltar.

During 26,608 visits of inspection, one hundred and one breeding places were found as follows:—

Tubs	13
Barrels	20
Earthenware vessels	2
Miscellaneous	66

MOSQUITO CAMPAIGN 1951

Months	Visits paid to Premises	Breeding Places Found—by Districts					Totals
		Town Lower	Town Middle	Town Upper	South	North	
January	1,993	—	—	—	—	—	NIL
February	2,106	—	—	—	—	—	NIL
March	2,404	1	—	1	—	—	2
April	2,100	—	—	—	—	1	1
May	1,982	1	—	—	2	7	10
June	2,638	17	1	2	10	6	36
July	2,165	1	5	7	2	2	17
August	1,766	—	4	4	—	1	9
September	2,640	—	—	6	4	2	12
October	2,048	—	—	6	1	1	8
November	2,205	1	—	1	—	—	2
December	2,561	1	—	—	2	1	4
Totals	26,608	22	10	27	21	21	101

Breeding places found consisted of:—Washing tubs, drains, drinking troughs, fresh water tanks, flushing tanks, tubs, barrels, pits &c.

RODENT CONTROL

Control of infestation by rodents was maintained throughout the year. Co-operation between the civilian and services personnel engaged in these activities continued to be satisfactory and enabled the work to be carried out with efficiency and economy of baits and poisons.

Judging from the comparatively large number of carcasses of *Mus musculus* recovered and the nature of the complaints received, it is probable that mice constitute the predominant infesting factor, and that the measures in use effectively maintain the rat population under control.

Sewers, storm water drains, and electricity and telephone pits were treated on four occasions with satisfactory results.

A total of 51,875 points were prebaited and 22,869 poison baits were subsequently laid in 882 premises by civilian and services teams from which 13,028 takes were recorded, the estimated kill being 3,304.

The carcasses of six rats were examined bacteriologically in the City Council Laboratories and found free from plague bacilli.

The Anti-Rat Co-ordinating Committee met four times during the year.

RODENT CONTROL—SUMMARY OF TREATMENT BY COMBINED SERVICES DURING THE YEAR 1951

Service	No. of Premises Treated	Prebait Laid	Poison Baits Laid	Total Takes	Carcasses Found			Estimated Kill
					RR	RN	MM	
Civilian	438	16,904	10,408	6,217	44	—	573	1,372
Military	128	9,611	5,734	3,154	19	—	50	980
H.M. Dockyard...	217	24,162	5,770	3,095	6	—	44	631
R.A.F.	8	827	683	298	8	—	11	105
Sewers, Drains, Electric Light and Telephone Pits	91 manholes	371	274	264	2	—	—	261
Totals	882	51,875	22,869	13,028	79	—	678	3,304

RODENT CONTROL — SUMMARY OF TREATMENT OF CIVILIAN PREMISES DURING 1951

Campaign Weeks	Premises Treated	Prebaits Laid	Poison Baits Laid	Total Takes	Carcasses Found			Estimated Kill
					RR	RN	MM	
2/51 to 13/51	122	4966	3281	2051	15	—	102	496
14/51 to 26/51	101	3557	1864	1118	2	—	98	210
27/51 to 39/51	106	4449	2819	1687	17	—	257	325
40/51 to 51/51	109	3932	2444	1361	10	—	116	296
Totals ...	438	16,904	10,408	6,217	44	—	573	1,327

**RODENT CONTROL—TREATMENT OF SEWERS, DRAINS, ELECTRIC LIGHT AND TELEPHONE PITS DURING
THE YEAR 1951**

Campaign Week	Date	Manholes Treated	Prebait Laid	Poison Baits Laid	Total Takes	Carcasses Found			Estimated Kill
						RR	RN	MM	
25/51	18/6/51-22/6/51	11	44	43	43	—	—	—	54
26/51	25/6/51-29/6/51	36	151	138	128	2	—	—	96
27/51	2/7/51-6/7/51	17	68	25	25	—	—	—	31
30/51	23/7/51-27/7/51	27	108	68	68	—	—	—	80
	Totals ...	91	371	274	264	2	—	—	261

PORT HEALTH WORK

Maritime

The Colonial Government are responsible for the control of the port health work which is carried out by two medical practitioners employed part time as Health Officers, together with a number of Boarding Officers working under the administrative direction of the Captain of the Port.

The Medical Officer of Health is, under the provisions of the Quarantine Ordinance, also vested with the status of a Health Officer, which empowers him to board ships, examine persons suspected of suffering from infectious disease, and order quarantine restrictions to be imposed if and when necessary.

The following information relating to the work of this Department during the year 1951 has been kindly supplied by the Captain of the Port.

Number of ships entered during 1951	...	...	5,633
Number of ships visited by the Health Officer	...	...	167
Number of ships inspected by the Health Officer, placed in quarantine and later admitted to practice	...	...	1
(Case of suspected Smallpox not confirmed).			
Number of patients landed (seven of these were suspected of or suffering from infectious disease)	...	...	206

Air

All matters related to health in connection with the Air Port have remained throughout 1951 under the control of the Senior Medical Officer of the Royal Air Force who is vested with the powers of a Health Officer, but arrangements were made towards the end of the year which have been implemented at the time of writing this report, by which the Colonial Government authorities have assumed responsibility for the Sanitary Control, including disinfection and disinsectization of Civil Aircraft. This work is now carried out under the direction of the Chief Medical Officer or his deputy.

The sanitary control of Service Aircraft continues the responsibility of the Senior Medical Officer of the Royal Air Force as heretofore.

SANITARY CIRCUMSTANCES

I am indebted to the City Engineer Mr. F. L. Ruggeri, M.B.E., M.I. Mun.E., M.I.Struct.E., for assistance in the preparation of this part of the report.

WATER SUPPLY

Potable Water

The population obtain potable water by two methods (a) from roof catchments and underground tanks attached to each individual house, and (b) from the City Council's supply. The latter is distributed mainly direct by pipes through permanent meters, but a small proportion is drawn by bucket or barrel from the Council's street fountains. The demand for supplies from fountains is decreasing in consequence of the large number of premises which are being provided with direct supplies from the City Council mains. In addition, potable water is supplied to private underground tanks during the dry season through temporary meters and flexible hoses and in smaller quantities by tank lorry to those consumers whose premises are not within a reasonable distance from the distributing mains.

All barrels are steam sterilized at weekly intervals. The sanitary staff are constantly on the watch for possible pollution of underground tanks. Samples from eighty-five suspected tanks were taken in 1951.

Though the stock of potable water at the beginning of the year was relatively low, heavy rains during the months of February and March enabled the stocks to be built up before the onset of the dry season. It was not found necessary to import any water during 1951.

On an average of 500,000 gallons per week drawn from the wells were treated at the Base Exchange Water Softening Plant which continued to function throughout the year. The hardness of well water is reduced from approximately thirty-two degrees to zero, then blended with raw water to the optimum degree of hardness, viz., ten degrees. The blended water after chloramination is pumped into a service tank and then lifted into the Council's reservoirs for distribution to the public, after it has been subjected to a bacteriological examination to establish its purity.

The quantity of potable water collected and issued during the year amounted to about 50 million gallons.

Rainfall at the catchments during the calendar year 1951 totalled 33.70 inches.

The supply of boiler water to Shipping from Council's sources at the Watering Jetty was maintained throughout the year.

Brackish Water

Sanitary water is supplied by the Council for general sanitary purposes, fire fighting and other requirements.

New electrically driven centrifugal pumps were installed in the brackish water pumping stations towards the end of 1950.

The quantity of brackish water pumped during the year amounted to some 356 million gallons.

Collection and Disposal of Refuse

Domestic refuse is collected and disposed of daily by the City Council.

There has been no change in the arrangements for the collection and disposal of refuse except that the new scavenging lorry with special containers now removes the refuse from the new buildings erected by the Admiralty in addition to that from the Government Housing Estate off Red Sands Road.

Sewage Disposal

The whole of the sewage of Gibraltar eventually discharges into the sea at Europa Point Outfall.

Numerous storm overflows exist along the line of the main sewer and come into operation during times of heavy floods. The configuration of the Rock is such that very large volumes of storm water rapidly reach the lower levels and the main sewer is then taxed to the utmost. The rate of run off is such that during heavy rains boulders and much silt reach the sewers.

The installation of new sewage pumps and the laying of a new sewer to deal with the bulk of the sewage from the North Front Area was completed towards the end of the year.

The quantity of sewage and storm water pumped from low level during 1951 was 134.5 million gallons.

Public Highways and Street Cleansing

An extensive programme for road improvements which is contemplated cannot be commenced until funds become available, but minor improvements were carried out and the public highways were maintained in as good a condition as circumstances permitted.

In addition to the normal sweeping of streets a system of periodical flushing is customary in Gibraltar.

Public Baths

The Tarik hot and cold fresh water slipper baths were open the year round,, and the Sea Bathing Establishment at Montagu continued to be well patronized. Fresh water shower baths, introduced a couple of years ago, have become very popular.

The Eastern Beach which is much favoured by the residents is controlled by the City Council during the bathing season. A boat patrols the beach throughout the day and two chalets provided with sanitary accommodation are available free of charge to bathers for use as changing rooms. These are kept open daily until half an hour after sunset.

WORK OF THE SANITARY DEPARTMENT

The summary of work done by the Sanitary Inspectors shows that fourteen thousand, nine hundred and forty-eight house-to-house inspections were carried out during the year. These include about four hundred made in compliance with requests from the Resettlement Board for information with respect to accommodation or to investigate complaints related to living conditions made direct to the Health Department by applicants for improved accommodation, and some three hundred to report on applications for permission to sublet civilian accommodation (vide section on Housing).

In addition seven hundred and eighteen visits concerned with the investigation and prevention of infectious diseases and to determine the causes of unexplained absenteeism among school children in connection with the unusual prevalence of Scarlet Fever were also made.

Catering establishments were inspected on one thousand and fifty-nine occasions, and one hundred and seventy visits were made to dairies to promote the highest possible standards in food hygiene and ensure compliance with the provisions of the food laws. Seventy-nine samples of foods and drugs were taken and analysed in the City Council Laboratories during the year.

Summary of Work done by the Sanitary Inspectors

Complaints received:

Written	3
Verbal	654

Premises Inspected:

House-to-house inspection	14,948
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Statutory Notices:

General defects	3
Minor Nuisances	221

Nuisances Found:

Defective drains	...	...	...	...	...	94
Obstructed drains	...	...	...	...	...	375
Defective W.Cs	...	...	...	...	...	63
Defective W.C. fittings	...	...	...	...	...	425

Defective water fittings	150
Defective rainwater pipes	52
Defective eaves gutters	108
Defective roofs	169
Defective yard paving	2
Dampness	26
Premises dirty	46
Defective or no dust bin	187
Other minor defects	930
Suspected pollution of water in underground tank...	85
Underground tank not insect proof	2
Brackish water tank not insect proof or no cover ...	4
Brackish water running to waste	200
Street water fittings found defective	82
Premises disinfected for infectious disease ...	226
Premises disinfected for vermin, etc.	29
Articles disinfected at Disinfecting Station	1,473
Visits of enquiry re Infectious Disease	718
Cases removed in the ambulance:	
Local	225
Bay	106
Samples of food and drugs taken for analysis ...	79
Samples of water taken for analysis	91
Visits to milk shops	170
Visits to eating houses	1,059
Visits to mineral water factories	327
Visits to common lodging houses	84
Visits to premises on which notice for abatement of nuisance has been served and are revisited for the purpose of ascertaining if requirements are being complied with	3,362
Vaccination notices served	508
Legal proceedings instituted	—

Footstuffs etc., condemned as unsound:

Tinned Ham	2,627 lbs.
Smoked Ham	18 $\frac{3}{4}$ lbs.
Luncheon Meat	178 lbs.
Sausage	177 lbs.
Brawn	24 lbs.
Streaky Bacon	4 lbs.
Cheese	225 lbs.
Eggs	2,210 dozs
Raw Coffee	3,480 kgs.

An unusually large number of tinned hams and other preserved meats of British and Foreign origin had to be condemned this year as unfit for human consumption. Though the tins were in good condition, the contents had undergone bacterial decomposition indicating faulty processing or sterilization, and similar experiences reported by some Health Authorities in the United Kingdom have been commented on in the Press on several occasions. Apart from the danger to health, the waste of food in these times of scarcity demands the adoption of effective remedial measures.

Lodging Houses

There is only one common lodging house in Gibraltar, which was visited regularly throughout the year. No cases of infectious disease have occurred, nor has any infringement of the Bye-Laws been reported.

FOOD IN RELATION TO HEALTH AND DISEASE

Supplies of food have been adequate in Gibraltar throughout the year. Essential foods continued to be rationed, thus ensuring an equitable distribution of all supplies available.

Groceries

Supplies of groceries imported principally through the United Kingdom have been adequate and of satisfactory quality.

Meat

With the exception of small quantities of fresh meat introduced from Spain by special arrangements for the use of the Hebrew Community, all supplies have been imported frozen, jointly with the Services provisions and stored in refrigerators by the military authorities from which they were issued when required to the butchers on application to the Controller of Civil Supplies. The weekly ration has remained at two pounds per person.

Supplies of mutton which were scarce early in the year ceased to be available altogether about the middle, whilst pork has not been obtainable at all. Supplies of poultry of Spanish origin have been adequate, the controlled price ranging from 2/6d. to 3/- a pound.

Eggs

The principal sources of supplies have been Tangiers and Casablanca. The controlled price has ranged from 2/6d. to 3/9d. a dozen according to size.

Fruit and Vegetables

Ample supplies of these commodities were imported daily from Spain and sold in the markets and shops in town, or hawked about the streets by licensed itinerant vendors. An average of seventy tickets have been issued daily to street vendors throughout the year.

Fish

Though the average daily importations of fish, 1,500 pounds, mainly from La Linea, shows a small increase as compared with the previous year, they have been subject to such wide periodical fluctuations due to weather conditions and other factors outside the Markets Authorities' control, as to render

supplies at times extremely meagre. Small quantities occasionally came to market from Catalan Bay, but the amount was practically negligible.

All fish is inspected by the Market Inspectors before it is exposed for sale in the market stalls or in the streets by itinerant vendors who are licensed daily before they are allowed to ply their wares. An average of twenty tickets have been issued daily which represents an appreciable decrease over the corresponding figures for the previous year when the average daily issue was thirty.

Condemnation of Food

The following foods were found unfit for human consumption and condemned:—

	Health Department Inspectors	Market Inspectors
Frozen Beef ... ..	...	340 lbs.
Fowls ... ..	...	9 lbs.
Fish ... ..	...	929 lbs.
Tinned Ham ... ..	...2,627	lbs.
Smoked Ham ... ..	... 18 $\frac{3}{4}$	lbs.
Luncheon Meat ... ..	... 178	lbs.
Sausages ... ..	... 177	lbs.
Brawn ... ..	... 24	lbs.
Bacon ... ..	... 4	lbs.
Cheese ... ..	... 225	lbs.
Eggs ... ..	...2,210	dozens
Raw Coffee ... ..	...3,480	kilogrammes.

Milk

There has been a considerable increase in the quantity of fresh milk imported from Spain during the year which amounted to a total of 56,600 litres of goats and 124,700 litres of cow's milk. The principal supplies were however tinned — condensed or evaporated, which was rationed at one tin (approximately two pints) weekly per person. Children under ten received extra rations.

In accordance with the Council's Bye-Laws, all fresh milk imported into Gibraltar must be boiled before it is sold to the public. Milk can constitute the vehicle, not only of such infectious diseases as enteric fever, scarlet fever and diphtheria if contaminated by human carriers but also of undulant fever, bovine tuberculosis and other diseases of animal origin, and it is this wise provision that has practically eliminated the former, which in the past has been very prevalent in Gibraltar, and rendered diseases caused by the bovine tubercle bacillus a rare occurrence. In this respect I cannot

but stress the importance of abstaining from drinking unboiled fresh milk, a custom which judging from the occasional occurrence of sporadic cases of undulant fever, appears to be favoured by some members of the community.

Ice-Cream

All premises wherein ice-creams are manufactured must be registered with the Council under the Food and Drugs Ordinance, and before such registration is effected, they are inspected personally by the Medical Officer of Health to ensure that the conditions conform with the requirements of the Ordinance.

Frequent visits have been made to these establishments and the strictest vigilance exerted by the Department's Inspectors during the year to safeguard the health of the public with regard to this popular article of food, and it is creditable to the manufacturers concerned that all the numerous samples taken proved satisfactory on bacteriological examination.

Eating Houses, Confectioneries and Cafes

All premises where meat or fish is prepared by any process of cooking or which are used for the manufacture of sausages, potted, pressed, pickled or preserved food intended for human consumption are registered under the provisions of the Food and Drugs Ordinance with the City Council, whilst the owners of confectioneries, cafes, fruit shops and other such establishments, as well as itinerant food vendors, are registered under the Council's Food Bye-Laws.

All catering establishments are inspected frequently by the Department's Inspectors who in the course of their visits advise owners on ways and means of ensuring the highest standards of hygiene and cleanliness possible in the storing, handling, preparation and serving of food.

Owing to lack of space and of a piped supply of hot water, difficulties have frequently to be surmounted and advise as to the most practical means of making the best use of all available facilities is also given when requested. Notwithstanding these handicaps, there is no doubt that much can be done to ensure the cleanliness and safety of food by adopting such elementary measures of hygiene as are recommended in the message which was addressed to all members of the food industry last year and which, I understand, have been implemented by many.

One thousand, two hundred and twenty-nine visits have been made by the Department's Inspectors to dairies and establishments concerned with the storing, handling, preparation and serving of food to ensure that the provisions of the Food Laws were being complied with. It has not been necessary to institute legal proceedings in any case for non-compliance with these provisions during the year.

Food Poisoning

No major outbreak of food poisoning has been reported to the Health Department during the year.

Two independent minor incidents restricted to two families involving three persons in one and two in the other were notified. The causative agents suspected in both cases were mussels, but investigations which were carried out failed to furnish sufficient evidence to confirm the suspicion.

Large outbreaks of food poisoning are fortunately not a frequent occurrence in Gibraltar, probably because outside hotels, communal feeding is not common and because food is normally consumed soon after preparation, but there is reliable evidence which indicates that undoubtedly, many small familial outbreaks and single cases do occur, particularly during Spring and early Autumn which are not notified and thus escape investigation.

It is important that such minor occurrences be brought to the notice of the Health Department as their investigation often leads to the discovery and elimination of agents which if undetected may eventually cause extensive outbreaks, and I would therefore request all medical practitioners to co-operate by notifying and supplying all relevant information without delay in these cases.

HOUSING AND TOWN PLANNING

The unprecedented and catastrophic explosion which occurred in A.S.C. BEDENHAM caused grievous harm and temporarily retarded the building programme for the year.

A considerable number of houses were so damaged as to render them dangerous and irreparable whilst many others became temporarily unfit for human habitation. Fortunately, the structure of the recently constructed group of buildings in Governor's Meadows, which were in a particularly vulnerable position, successfully stood the test though much damage was sustained by many of the flats which rendered them uninhabitable for the time being.

The demands for repairs, building materials, and re-accommodation of families rendered homeless were such as to severely tax the capabilities of public works departments, building contractors, allied firms, and the sanitary and housing authorities, and much credit is due to all who in those harassing days faced a situation pregnant with difficulties with such effectiveness and expedition as to, for practical purposes, normalize the position within a few weeks of the fateful occurrence. The success of these operations was also greatly contributed to by the patient tolerance of domestic discomfort and disruption of family life on the part of the many involved.

Notwithstanding this contretemps, the remaining eighty-four flats in Kingsway which were under construction, and thirty-four flats at Hospital Hill Road and Seud Hill of a simpler yet modern type to be let at rentals accessible to the lower income earners, amounting to a total of one hundred and eighteen flats, were terminated and occupied during the year. The construction of forty more such flats at Lower Calpe and Gas Works Site was also started and they are expected to be ready for occupation in 1952.

Though the gross overcrowding which has long existed in Gibraltar and which was accentuated by the intervention of the last world war has to an extent been abated, the position remains still far from satisfactory and cannot be viewed with complacency. In this respect, an analysis based on the situation as existing on the 1st January, 1952 prepared by the Director of Labour and Welfare is significant and deserves careful consideration. On that date there remained to be dealt with a total of 1,197 applications for re-accommodation which had been submitted to the Resettlement Board, of which 230 were applicants living under conditions which afforded

only 30 sq.ft. of floor area per person and who therefore must be considered as grossly overcrowded. One hundred and sixty-one other applicants had less than 50 sq.ft. but over 30 sq.ft. per person who were also overcrowded yet not grossly so. The balance of 806 applicants had 50 or more square feet floor space per person in the premises they occupied and were thus not overcrowded.

With the completion of the tenements being built at Lower Calpe and Gas Works Sites and two other blocks totalling 40 flats whose construction is contemplated in the near future together with other accommodation which when vacated will presumably be available for re-accommodation, it is envisaged that the position of the grossly overcrowded families will be alleviated but there will still remain the 161 applicants who are also overcrowded and who will have to be adequately housed.

To cover these urgent needs and to meet the overall housing requirements, the Director of Labour and Welfare estimates that there is need for from 600 to 650 dwellings.

Though this estimate would appear to meet the requirements based on applications submitted to the Resettlement Board, it must be appreciated that a standard of 50 sq.ft. per person affords the minimum living space requirements and often means that all rooms have to be used as dormitory accommodation, and further that there is a considerable number of families who for financial or other reasons best known to themselves, have not attempted to improve their accommodation but who are living in tenements of the basement or semi-basement type or even in converted stores which under other circumstances would and indeed should be condemned as unfit for human habitation as soon as the housing position permits. Whilst even a few of the latter units exist the problem of overcrowding with all its detrimental influence on health and happiness cannot be said to have been surmounted.

Some four hundred houses were inspected and reported on by the Sanitary Inspectors at the request of the Resettlement Board or following complaints about living conditions made direct to the Public Health Department by persons seeking re-accommodation. In addition two hundred and seventy houses were inspected and recommendations made regarding applications for permission to sub-let civilian accommodation. With respect to the latter, I cannot but again condemn a practice which with its attendant evils is always undesirable and more so under the overcrowded conditions existing at present.

By the repeal of certain sections of the Repatriation and Resettlement Ordinance, 1946, a number of the restrictions imposed on owners of residential premises with respect to

letting have been abolished, whilst the powers relating to the allocation of Government owned housing accommodation formerly exercised by the Resettlement Board have been vested in the Commissioner of Lands and Works, as from the 31st December, 1951.

My thanks are due to the Commissioner of Lands and Works for supplying the following information related to the progress of the Government Housing Scheme during the year 1951.

Houses Completed — permanent

“M” Block, Kingsway	84 flats
Hospital Hill Road	28 flats
Belvedere, Seud Hill	6 flats
	—
	118 flats
	—

Houses Under Construction — permanent

Lower Calpe Site	20 flats
Gas Works Site (Naval Hospital Rd.)	20 flats
	—
	40 flats
	—

Town Planning

Regular meetings were held throughout the year by the Central Planning Commission appointed under the provisions of the Building (Interim Control) Ordinance at which plans for improvements to existing structures, erection of new buildings and other constructional projects were considered.

Seventy-seven applications for permission to effect structural alterations to existing premises or to erect new buildings were considered and reported on under the powers vested in the City Council by the Public Health Ordinance.

AMBULANCE SERVICE

A fleet of four ambulances is maintained by the City Council primarily for the conveyance of patients suffering from infectious diseases, but which in fact constitutes the only available Ambulance Service for the transport of civilian patients and those landed from the Bay.

A total of three hundred and thirty-one patients have been conveyed by the Ambulances during the year, of which twelve local and seven bay cases were patients suffering from infectious diseases, the rest were accidents or persons suffering from non-infectious conditions.

	Local Cases	Bay Cases
Tuberculosis	7	1
Typhoid Fever	1	1
Pneumonia	5	1
Measles	1	2
Varicella	—	1
Diphtheria	—	1
Malaria	—	1
Influenza	3	1
Cancer	2	1
Appendicitis	6	18
Bronchitis and Asthma	7	1
Maternity Cases	18	—
Mental Cases	25	2
Heart Disease	12	1
Fractures and Injuries	43	30
Miscellaneous		
(medical and surgical cases)	95	44
Totals	225	106

DISINFECTION

Disinfection of bedding, clothing, etc., continued to be carried out at the Disinfection Station in Line Wall Road.

Table below gives details of the work done at the station during 1951.

Months	Beds and Mattresses	Bolsters and Pillows	Blankets and Quilts	Sheets	Counterpanes	Sundries	Totals
January	7	13	13	15	—	28	76
February	22	28	30	28	9	90	207
March	50	61	44	50	2	75	282
April	18	17	19	13	—	27	94
May	9	12	7	8	—	14	50
June	35	34	28	—	—	110	207
July	—	—	—	—	—	—	—
August	4	8	9	12	—	30	63
September	9	17	21	11	—	18	76
October	12	16	21	19	—	31	99
November	16	28	21	20	—	67	152
December	47	34	37	12	7	30	167
Totals	229	268	250	188	18	520	1473

MEDICAL WORK DONE FOR THE COUNCIL

One hundred and sixty-three Council employees were examined during the year. The majority were routine examinations to determine the fitness of applicants prior to employment. A few concerned the assessment of disablements attributed to accidents or to the nature of the employee's work.

All the workmen engaged in the Council's Gas Works were examined for evidence of early Tar Dermatitis.

Applicants suspected of suffering from Pulmonary Disease were referred to the Physician at King George V. Hospital for radiological examination.

January	34
February	6
March	21
April	34
May	15
June	1
July	26
August	5
September	6
October	7
November	5
December	3
Total ...	<u>163</u>

OTHER MATTERS AFFECTING THE HEALTH OF GIBRALTAR

Board of Health

The Board of Health constitutes the co-ordinating body in medical matters between Her Majesty's Armed Forces, the Colonial Government and Public Health Authorities.

The following represent some of the subjects which were discussed and on which recommendations were made at Meetings of the Board which were held regularly throughout the year:—

- Yellow Fever inoculations.
- Isolation Hospital.
- Sanitary Control of Civil Aircraft.
- Influenza Epidemic.
- Supplies of Oxygen for medical purposes.
- Epidemic of Typhoid Fever in a neighbouring town.
- Pulmonary Tuberculosis in alien employees.
- Methods of distribution of Milk to public.
- Rabies and control of dogs and cats.
- Prevalence of Scarlet Fever.
- Miniature Radiography.

General Medical Practitioner Service

There has been no change in the number of general medical practitioners which remained at ten: a ratio of one to 2,110 population. The majority continued to hold part-time appointments with the Colonial Government, an arrangement which ensures a high degree of co-operation between the hospital, child welfare and the general practitioner medical services.

Nursing Services

The position with respect to domiciliary nursing remained as described in the Annual Report for 1950. There are five midwives, one registered state nurse and a small number of the religious nursing order of Bon Secours at present practising in the City. These are insufficient to meet the requirements of the population, particularly in view of the increasingly frequent use of penicillin and other modern therapeutic agents which are normally administered by injection under the direction of the attending medical practitioner. The demands for trained nurses able to render such services made during the influenza epidemic rendered the necessity all the more evident.

There is also a pressing need in Gibraltar for district nurses, the appointment of which would not only prove beneficial to the patients and helpful to their medical attendants, but would reflect advantageously on the hospital services by relieving beds which are occupied by chronic patients who could effectively be nursed at home, and decongesting the out-patients department by the elimination of patients who attend solely for the purpose of receiving injections and other forms of treatment which could be rendered equally well in their homes.

The fact that these nurses if suitably trained are in a key position to gain the confidence of patients and their families, and so can become the most effective agents for the propagation of health education and advising on the prevention of diseases should, apart from other considerations, be sufficient justification for their appointment, and this important aspect should be borne in mind in selecting candidates for the purpose. Unfortunately, though much lip service is paid to the old adage that prevention is better than cure, it appears to be in danger of becoming a mere platitude which is frequently forgotten in medical planning, and opportunities for promoting a preventive attitude towards disease at little or no extra cost are thereby lost.

I understand that the appointment of one or two district nurses to work under the supervision of the District Medical Officers is now under consideration, and I cannot too strongly recommend that this matter be expedited as much as possible.

Legislation relevant to Medical and Public Health Interests enacted during the year

The Mental Treatment (Amendment) Ordinance 1951 provides for the admission and treatment of voluntary patients.

The Dangerous Drugs (Amendment) Ordinance 1951 and Dangerous Drugs (Raw Opium) Rules 1951 introduce measures for controlling and restricting the production, possession or sale of raw opium, coca leaves and Indian hemp.

The Dangerous Drugs Order of 18th October, 1951 makes Part III of the Dangerous Drugs Ordinance applicable to a number of new drugs.

The adoption of Children Ordinance 1951 amends and consolidates the law relating to the adoption of children and repeals the Ordinance of 1934.

PUBLIC HEALTH LABORATORIES

I am indebted to Mr. H. J. Bruzon, A.I.M.L.T., Chief Laboratory Assistant and Deputy Public Analyst, for his assistance in the preparation of this summary of the work of the Laboratories.

Thirteen thousand, five hundred and thirty-five investigations were carried out on specimens submitted to the Laboratories during the year, of which 12,499 were related to pathological, bio-chemical and bacteriological determinations, necessary for the clinical treatment and prevention of disease.

The great majority of these were examinations of specimens of blood and included 2,471 cell counts, 1,999 Wassermann Reactions and 1,992 Khan Flocculation Tests.

One thousand, one hundred and ninety-nine specimens of sputum were examined for the presence of *Mycobacterium Tuberculosis* and included 56 investigations by culture.

Fifty-nine specimens of pathological tissues were submitted for histological investigation, and the brains of two cats and a dog who had died under circumstances suggestive of rabies were extracted and sent to the Pasteur Institute at Tangiers for investigation.

Chemical analyses and Bacteriological Examinations of water and food performed to meet the requirements of the Public Health Department with respect to the administration of the Food and Drugs Ordinance and Bye-Laws, and other purposes totalled 1,027.

It is thus evident that by far the greater proportion of the work performed in the Laboratories is normally concerned with Clinical Pathology and Bacteriology, and it is envisaged that developments in modern medical practice will progressively increase the demands from clinicians for such investigations.

The Laboratories are recognised by the World Health Organization as an approved centre for carrying out inoculations against Yellow Fever, and a number of these inoculations were performed during the year.

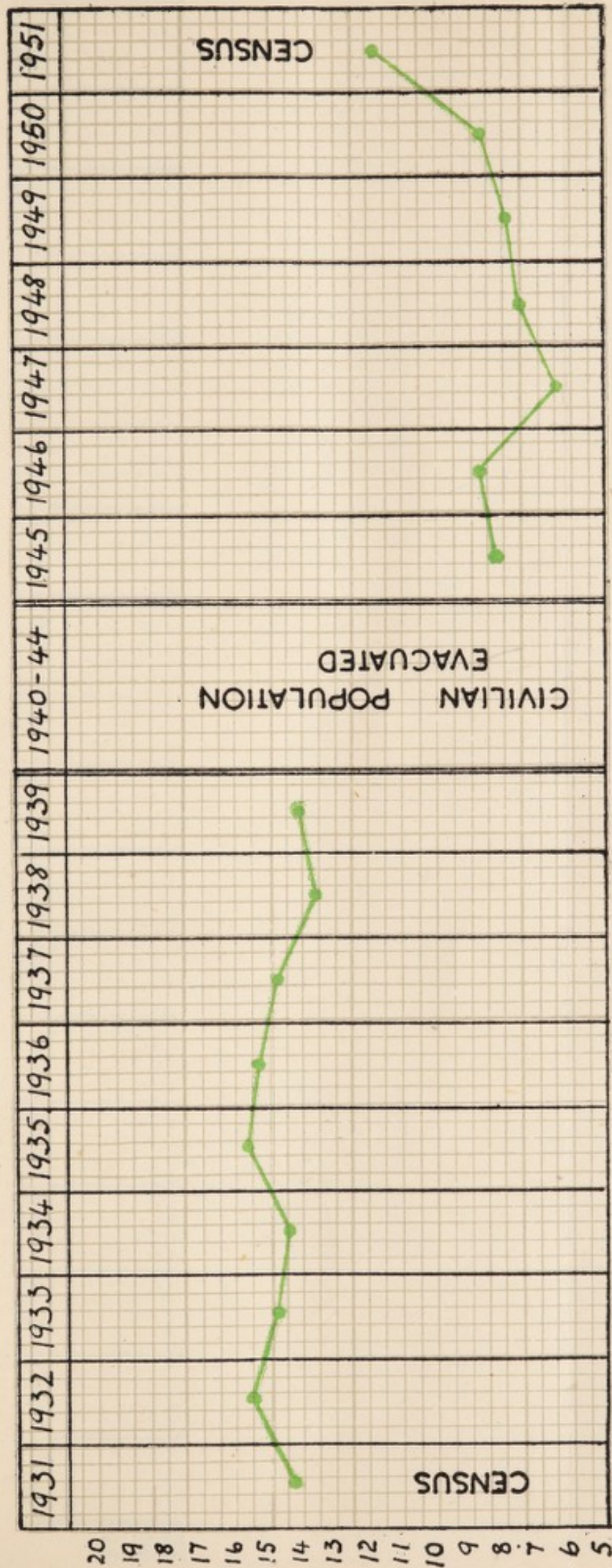
SUMMARY OF INVESTIGATIONS CARRIED OUT IN THE CITY LABORATORIES

- I. For the Public Health Department, private Medical Practitioners, business firms and others.
- II. For the Colonial Government Medical Services.
- III. For the Army and Royal Air Force.
- IV. For the Royal Navy.

Clinical Pathological Investigations	I.	II.	III.	IV.	Totals
BLOOD.					
(a) Serology					
Wassermann Reaction	133	346	1,103	827	1,969
Kahn Reaction	133	346	1,103	321	1,969
Gonococcal Fixation Tests	1	1	423	—	425
Widal Agglutination Tests	38	98	—	—	136
"Cold" Agglutinin and Paul Bunnell Tests	2	9	—	—	11
(b) Haematology					
Grouping tests for compatibility.					
Erythrocyte sedimentation rates, fragility tests, bleeding and coagulability tests	47	218	—	—	265
Erythrocyte, leucocyte and differential counts, and mean cell diameter estimations	680	1,791	—	—	2,471
Films for Parasite	6	15	—	—	21
(c) Bacteriology					
Cultures for organisms	10	7	—	—	17
(d) Chemistry					
Including qualitative and quantitative investigations of Bio-chemical constituents	282	229	25	—	529
CEREBRO-SPINAL FLUID.					
(a) Cytological and Bio-chemical investigations ..	8	87	3	—	98
(b) Wassermann Reactions	1	23	23	—	54
Lange's Colloidal Gold Tests	—	30	23	—	53
(c) Bacteriological investigations including cultures for organisms other than M. Tuberculosis ..	4	7	—	—	11
(d) Cultures for M. Tuberculosis	4	7	—	—	11
PLEURAL AND PERITONEAL EXUDATES, PUS AND OTHER PATHOLOGICAL FLUIDS.					
Cytological, Chemical and Bacteriological Investigations	—	72	—	—	72
URINE.					
(a) General physical and chemical examinations including tests for Acetone, Bile salts and pigments, indican, etc., and microscopic investigations	857	286	—	—	1,143
(b) Quantitative estimations of protein, glucose, chlorides, urea, etc.	430	144	—	—	574
(c) Cultures for organisms other than M. Tuberculosis	36	100	—	—	136
Cultures for M. Tuberculosis	10	32	—	—	42
FAECES.					
(a) Microscopical Examinations including detection of parasites and ova	23	98	—	—	121
(b) Chemical Investigations	3	4	1	—	8
(c) Cultures for organisms	154	104	—	—	258
SPUTUM					
(a) Microscopical Examinations for organisms other than M. Tuberculosis, malignant cells, fungi, etc.	2	37	—	—	39
(b) Examination of Smears for M. Tuberculosis ..	34	1,109	—	—	1,143
(c) Cultures for M. Tuberculosis	8	48	—	—	56
(d) Cultures for other organisms	8	30	—	—	38
GASTRIC AND DUODENAL JUICES.					
(a) Microscopical and Chemical Examinations ..	13	132	—	—	145
(b) Cultures of specimens of Gastric Lavage for M. Tuberculosis	3	2	—	—	5
SWABS					
examined for C. Diphtheriae, Streptococcus Haemolyticus and other organisms	237	351	—	—	588
DARK GROUND EXAMINATIONS for T. Pallidum ...					
TISSUE SPECIMENS for histological examinations ...	20	5	—	1	26
ANIMAL INOCULATIONS and Morbid Anatomical Examinations of animals	—	59	—	—	59
MISCELLANEOUS					
Examinations of animals	10	—	—	—	10
Examinations of animals	2	11	—	—	13
PART II					
Bacteriological Examinations					
WATER (including mineral waters)	211	—	1	63	274
FOODS	10	—	—	—	10
Chemical Analyses					
WATER (including mineral waters)	552	—	1	94	646
FOODS AND DRUGS	95	—	—	—	95
OTHER MATERIALS	9	—	—	—	9
TOTALS	4,076	5,767	2,886	806	13,535

DEATH RATE PER 1,000 CIVIL POPULATION

1931-39 & 1945-51



PRE WAR

- 1931-33=14.9
- 1934-36=15.2
- 1937-39=14.3
- 1931-39=14.8

AVERAGE TRIENNIAL PERIODS

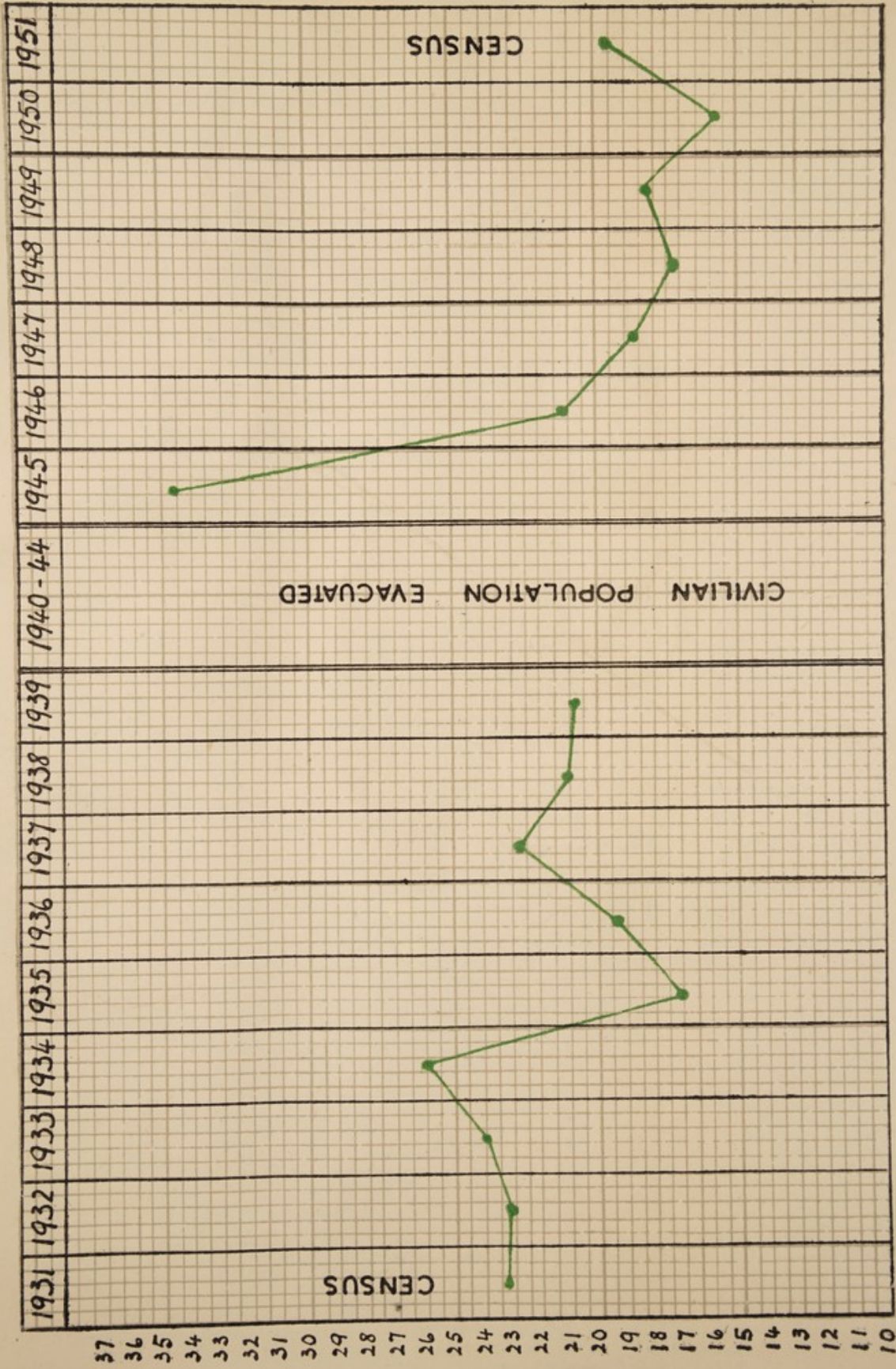
1951=12.2

POST WAR

- 1945-47=7.9
- 1948-50=8.2
- 1945-47=8.0

BIRTH RATE PER 1,000 CIVIL POPULATION

1931-39 & 1945-51



POST WAR

1945-47=24.9
 1948-50=17.2
 1945-50=21.0

AVERAGE TRIENNIAL PERIODS

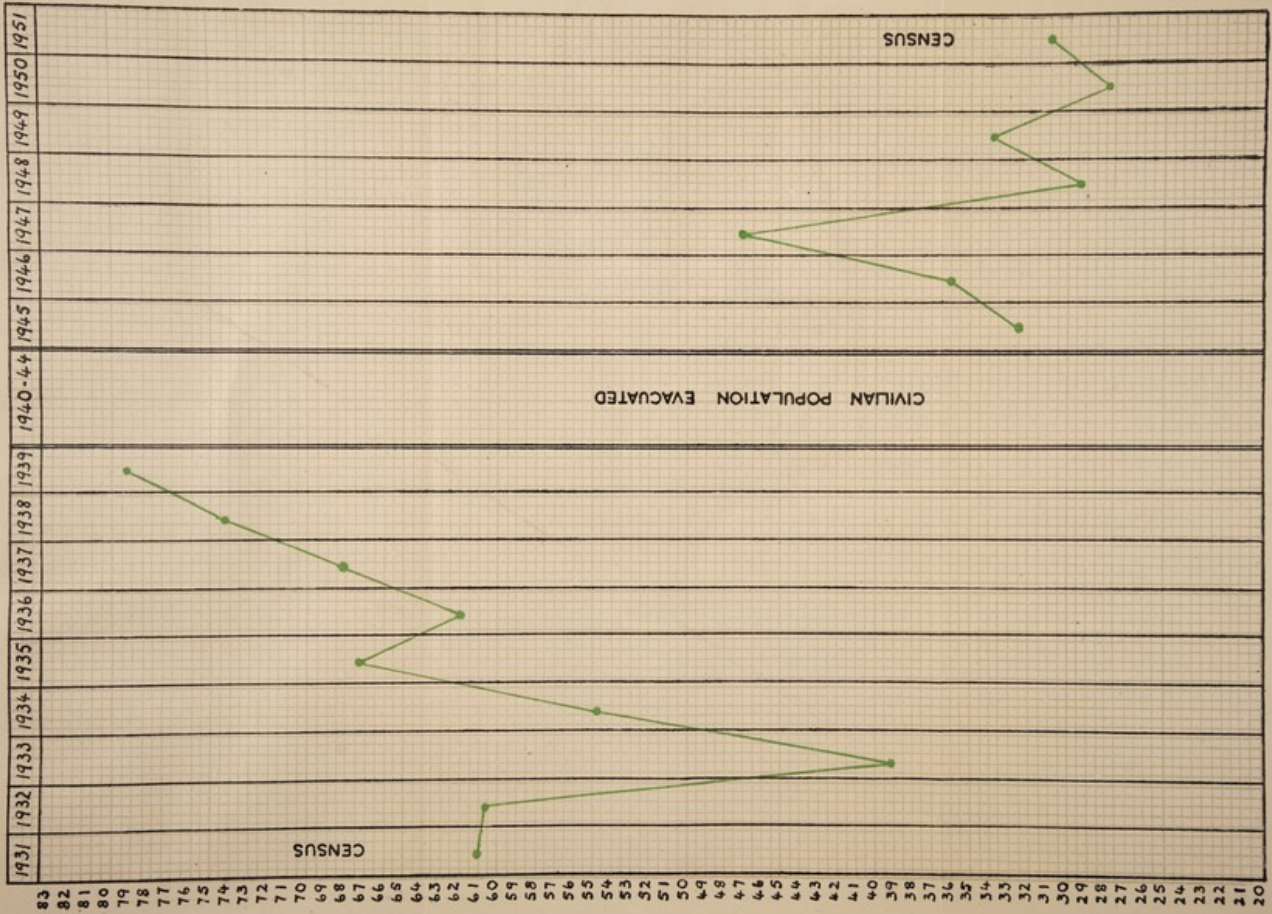
1951- = 19.6

PRE WAR

1931-33=23.2
 1934-36=20.6
 1937-39=21.5
 1931-39=21.7

INFANT MORTALITY PER 1,000 BIRTHS CIVIL POPULATION

1931-39 & 1945-51



POST WAR
 1945-47=38.8
 1948-50=30.6
 1945-50=34.7

1951=31

PRE WAR
 1931-33=53.6
 1934-36=61.4
 1937-39=73.9
 1931-39=62.9

AVERAGE TRIENNIAL PERIODS

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ИМЕНЕМ МОСКОВСКОГО ГОСУДАРСТВЕННОГО УНИВЕРСИТЕТА

