

## **Annual report of the Public Health Department of the City of Port-of-Spain.**

### **Contributors**

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# ANNUAL REPORT

OF THE

Public Health Department of the  
City of Port-of-Spain

FOR THE YEAR

1941

BY

RODERICK MARCANO, M.D. (Lond.), M.R.C.P. (Lond.), D.P.H. (Lond.),  
MEDICAL OFFICER OF HEALTH.

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TRINIDAD :

PRINTED BY THE GOVERNMENT PRINTER,  
GOVERNMENT PRINTING OFFICE,  
PORT-OF-SPAIN.

1942.

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*With the Compliments  
of  
The Medical Officer of Health*

*Port-of-Spain,  
Trinidad, B.W.I.*

With the Complaints  
of  
The Medical Officer of Health

Port of Spain,  
Trinidad, B.W.I.





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# ANNUAL REPORT

Public Health Department of the  
City of Portland

1941

ROBERTO MARGALE, M.D. (Portland, D.P.H. 1941)  
MEDICAL OFFICER IN CHARGE

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Local Authority in the Urban Sanitary District of the City of Port-of-Spain.

1940-41.

The City Council.

HIS WORSHIP THE MAYOR (COUNCILLOR ALFRED RICHARDS, J.P.)

*Deputy-Mayor.*

COUNCILLOR LEO ALEXANDER PUJADAS.

*Aldermen.*

A. P. T. AMBARD.

GASTON JOHNSTON, K.C.

HON. A. A. CIPRIANI.

H. A. DE FREITAS.

MURCHISON RIGSBY.

*Councillors.*

N. K. ABLACK.

E. M. MITCHELL.

G. CABRAL.

M. G. SINANAN.

A. GOMES.

G. L. THOMAS.

H. W. HUDSON-PHILLIPS, LL.B.

V. R. VIDALE.

B. T. KYDD.

L. WALCOTT.

J. E. LAI-FOOK.

R. A. YOUNG.

G. J. MCCARTHY.



# Annual Report of the Public Health Department of the City of Port-of-Spain, 1941.

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PUBLIC HEALTH DEPARTMENT,  
35, FREDERICK STREET,  
PORT-OF-SPAIN,  
TRINIDAD, B.W.I.,

12th October, 1942.

**URBAN SANITARY DISTRICT OF THE CITY OF PORT-OF-SPAIN.**

SECRETARY, LOCAL AUTHORITY,

SIR,

I have the honour to submit, for the information of the Local Authority, the Annual Report on the health and sanitary condition of the Urban Sanitary District of the City of Port-of-Spain for the year ended 31st December, 1941.

Except for an outbreak of Acute Anterior Poliomyelitis which occurred in October and continued right on to April of the current year and, which did not attain to any marked degree of severity, there was nothing unusual to report in the year under review.

In spite of the slight upward trend in the mortality figures, the cause of which is not apparent, the state of the public health remained satisfactory.

The population to December, 1941, has been estimated by the Registrar-General at 97,531, as compared with 92,302 in 1940—an increase of 5,229 souls; of this figure 1,183 represent the natural increase, *i.e.*, the excess of births over deaths. (At the time of going to press a rough compilation of the returns obtained in the course of the registration of the population of the Colony which took place during the last week of the month of August places the population of the City at 120,000 plus.) The population was distributed as follows: City Proper 33,550; St. Clair 1,636; East Dry River 21,649; Belmont 16,866; Woodbrook 12,377; St. James 11,453.

The birth rate was 29.61 per 1,000 as compared with 31.82 in 1940; the death rate 17.48 per 1,000 as compared with 16.99 in 1940; the maternal mortality rate 5.89 and the infant mortality rate 108.73 per 1,000 live births as compared with 4.09 and 99.08 respectively in 1940.

The infectious diseases morbidity rate worked out at 4.27 per 1,000 as compared with 4.58 in 1940, the corresponding mortality rates were 2.5 and 2.25 per 1,000; 1.27 of this figure represented the death rate from Pulmonary Tuberculosis—in other words Pulmonary Tuberculosis was responsible for one-half the mortality attributable to the notifiable Infectious Diseases.

56 cases of enteric fever were reported and 14 deaths recorded, giving a death rate of .14 per 1,000 as compared with 70 notifications and 11 deaths in the previous year.

Syphilis claimed 19 victims during 1941 as compared with 35 in 1940, giving a death rate of .19 per 1,000 as against .38 per 1,000 in 1940.

The completion of the second year of war and the commencement of the third has left the health of the City comparatively unaffected, and, but for some overcrowding due to the influx of immigrant population coupled with an increase in the cost of living index due to a relative scarcity of certain essential foodstuffs and to the consequent rise in their purchasing price, no effect directly attributable to the war that is being waged has been observed in the urban population in the year under review.



The problem of an adequate supply of potable water still remains unsolved ; in fact the problem has been rendered acute by the occurrence of another very dry season and by the greatly increased number of people now living in the Urban Sanitary District.

The housing situation continues to deteriorate because of the large number of inhabitants for whom it is now necessary to cater and by reason of the fact that, due to the lack of building materials, reconstruction of insanitary premises and the building of new houses on vacant lots of land have slowed down to a minimum. As a direct result the Department has been seriously handicapped in its work of ridding the City of barracks and old insanitary dwellings and it does not seem likely that this work will regain the momentum which it developed, until after the cessation of hostilities and the full flow of building materials becomes established once more.

I am to record my grateful thanks to His Worship the Mayor, Aldermen and Councillors for the unfailing interest they take in all matters concerning the public health and for the active help they give in all action taken for its improvement. I am encouraged also by the ready assistance given me by the City Engineer's and the Town Clerk's Department in all matters which are of mutual concern.

Mr. T. H. Scott, ex City Engineer, went into retirement in May, 1941, after long and meritorious service. I desire to record my sincere appreciation of the great interest he took in, and the unstinting help he rendered to, the Department in all matters which had a bearing on the public health.

A word of welcome and of thanks for their kind and fruitful co-operation is due to our friends—the American Army and Navy Authorities. Their help and goodwill are keenly appreciated.

I have the honour to be,

Sir,

Your obedient Servant,

RODERICK MARCANO,

*Medical Officer of Health.*



# SANITARY CIRCUMSTANCES.

## Water.

The maintenance of a potable water supply to the inhabitants of the Sanitary District is one of the main preoccupations of the Department and, though its function in this respect is purely advisory to the City Engineer's Department, a very close scrutiny is made of the results of the daily examination of the mixed water supply and of the weekly samples of the various river and well sources with a view to maintaining a high degree of purity.

All sources are chlorinated and in view of the great daily, sometimes hourly variation, not only in their volume but also in their organic content, a very close check on the chlorinating system has to be kept to ensure the best results.

There is evidence that the standard of the *unchlorinated* water has undergone a slight deterioration judging by the comparatively larger number of such samples which are, bacteriologically, not up to standard. The reason for this is not quite clear and, as I write, efforts are under way to make a comprehensive survey of the whole system of supply and distribution with a view to determining the underlying cause.

### Bacteriological Examination of Water Supply. (Mixed).

No. of daily samples examined.	No. of samples with B. Coli present. (B. Coli in 50 C.C.)	Percentage of Samples with B. Coli present.	No. of samples with B. Coli absent. (B. Coli in 50 C.C.)	Percentage of samples with B. Coli absent.
364	102	28.02	264	71.98

### Bacteriological Examination of Water Supply.

#### No. of Weekly Samples Giving Positive Results. (B. Coli present in 100 c.c.)

Where Derived.	Before Chlorination.	After Chlorination
*Maraval (River) ... ..	21 out of 21	5 out of 59
*St. Clair (Wells) ... ..	1 .. 21	3 .. 55
Quare Flow into Knaggs' Hill (Reservoir) ... ..	Nil .. 1	1 .. 49
†St. Ann's (River) ... ..	13 .. 24	1 .. 49
†Ariapita (Stream) ... ..	13 .. 22	1 .. 26
†Cascade (River) ... ..	13 .. 23	Nil .. 53
†Cocorite (Wells) ... ..	8 .. 43	1 .. 51
†Diego Martin (Wells) ... ..	6 .. 21	6 .. 52
†Electric Ice Co. (Well) ... ..	2 .. 5	—
†Walters Brewery (Well) ... ..	3 .. 3	—
†Trinidad Trading Ice Co. (Well) ... ..	4 .. 4	—
†Alston & Co. (Well) ... ..	3 .. 3	—
†Sanitary Laundry (Well) ... ..	3 .. 3	—
†Maraval (New Well) ... ..	1 .. 1	—
Total ... ..	91 out of 195	18 out of 394

\*Filtered after Chlorination.

†Filtered before Chlorination.

‡Not filtered.

Our gratitude and thanks again go out to Dr. J. L. Pawan, Senior Pathologist, whose great skill and care in the performance of these tests enable us to detect, at the earliest possible opportunity, potentially dangerous water and, by adjusting the chlorine content, render it safe for human consumption.

### Scavenging and Refuse Disposal.

The scavenging of the City was the cause of great anxiety to the Department during the year under review by reason of the fact that the scavengers went on strike no less than three times: in April, in July, and in October.

On the first occasion refuse accumulated in the various parts of the City and the nuisance was particularly acute in the congested down-town parts of the City—in Henry, Charlotte, George, Nelson and Duncan Streets. After four days the strikers returned to work.

On the second occasion volunteers from the Public Health Department were organised into scavenging gangs and the accumulation of refuse was thereby kept under control until the scavengers were satisfied and work resumed.

On the third occasion, in addition to the help of voluntary workers from the Public Health Department, the assistance of Government was solicited and prisoners at the Royal Gaol and inmates of the Young Offenders' Detention Institute were detailed to sweep and clean the streets until the scavengers decided to return to work. This was carried out without incident for nine days.

Our thanks are due to Government for their ready help and co-operation in this difficult period.



## SANITARY INSPECTION OF THE DISTRICT.

### Anti-Rat and Anti-Mosquito Measures.

An effective check is kept on the rat and mosquito population by measures directed to their elimination—measures which are carried out by anti-rat and anti-mosquito units working in the various sub-districts of the City.

All rats caught are examined by Dr. J. L. Pawan, Senior Pathologist; no rat showing signs of plague or infected with the germ of plague was discovered during the year under review.

#### Anti-Rat Measures.

##### DESTRUCTION OF RATS AND MICE.

Rats caught by Trappers	...	...	...	...	7,058
Rats bought	...	...	...	...	238
Total	...	...	...	...	7,296
Mice caught and destroyed	...	...	...	...	2,974

##### EXAMINATION OF RATS BY GOVERNMENT BACTERIOLOGIST.

Rats examined for Plague	...	...	...	7,289
Rats found infected with Plague	...	...	...	—
Immature Rats not examined	...	...	...	7

##### SPECIES.

	<i>Decumanus.</i>	<i>Rattus.</i>	Total.
Males	2,182	2,066	4,248
Females	1,460	1,581	3,041
Total	3,642	3,647	7,289

#### Anti-Mosquito Measures.

##### Inspection of Eaves Gutters, &c.

	Total Entire City.	Total St. James only.
Number of Inspections of Premises...	93,787	20,033
Number of Inspections of Eaves Gutters	28,339	420
Occasions found in good order	27,191	344
Occasions found defective	1,148	76
Occasions found containing water	267	1
Occasions found containing water and larvae	213	1
Occasions mosquito larvae were found in tubs, antiformicas, tin cans, etc.	3,381	1,129
Yards cleared of receptacles	4,406	1,456

##### Premises used for Human Habitation.

The problem of providing a sufficiency of housing accommodation for the inhabitants of the Urban Sanitary District has been rendered more difficult of solution because of the fact that the rate of reconstruction of insanitary premises into modern dwelling houses and of erection of new houses on vacant lots has slowed down considerably, due to the difficulty in obtaining building materials; whilst at the same time the population of the City continues to increase as a result of new arrivals from the country districts and from abroad.

In addition, because of preoccupation in the San Fernando and the country districts, no new houses for members of the working classes were erected by the Planning and Housing Commission in or within the precincts of the City in the year under report, thereby affording no relief to a solution which is admittedly grave.

In the circumstances overcrowding is inevitable, and in the down-town areas, particularly, congestion of dwelling houses, boarding houses, hotels &c, is rife, many premises being now converted by hurriedly improvised partitions into "common lodging houses."

The efforts of the Department to eliminate the barrack system which, so far, have been very successful in the slum areas of the City, have, however, resulted in an evil which may be just as detrimental, if allowed to proceed unchecked *i.e.* the occupation of private dwelling houses in the suburbs, as barracks, without the conveniences that owners of the former barrack ranges were made to provide.

The solution is, more, and yet more dwelling houses on vacant lots in and around the City. In this respect the City Council have taken the necessary step to open up the Gonzales Place Estate by the construction of roads and drains, and by the laying out of new lots; and already houses are being erected on premises which have been leased to applicants for the purpose.



An area of land in the east of the City near the St. Joseph Road playground, between St. Joseph Road and South Quay, which was formerly used to store sewer pipes is also being opened up for the erection of dwelling houses, and works of road reconstruction and drainage were complete by the end of the year under report.

#### Housing.

	<i>Resulting from Service of Nuisance Notices.</i>	<i>Voluntarily on Owners' part.</i>	<i>Total</i>
Barracks and other premises reconstructed or reconditioned ...	63	121	184
Barracks demolished and sites left vacant	—	5	5
Barracks vacated ...	5	2	7
Total ...	68	128	196

#### Food.

Under this heading in spite of the great leeway which has yet to be made up, I am able to record progress in our efforts to secure good, clean, and wholesome food for the general public though it must be admitted that the position as regards quantity of available foodstuffs—and, particularly, of the essential protective foodstuffs like milk, butter, cheese, eggs, fresh meat, fish, ham, bacon—has deteriorated.

A greater and more effective sense of responsibility and a more enlightened outlook are being shown in this matter by owners of parlours, cookshops, restaurants, boarding houses and hotels, etc., and a better check is thus being kept on the handlers and purveyors of food in these places with a view to obtaining compliance with the provision of the byelaws with respect to the Sale of Foodstuffs.

Itinerant vendors, also, are applying for registration in increasing numbers and, as a result of a greater appreciation of the reasons for the provisions of the byelaws, are making a more determined attempt to comply with the various requirements.

#### DAIRIES AND MILK SHOPS.

<i>Sub-District.</i>	<i>Cowshed Licences. Issued.</i>
City Proper (sewered) ...	2
East Dry River (unsewered) ...	—
Belmont (unsewered) ...	4
Woodbrook (partly unsewered) ...	12
St. James (unsewered) ...	9
Total ...	27

#### DAIRYMAN'S LICENCES.

Dairyman's Licences issued to cowkeepers and other purveyors of milk ...	27
Dairyman's Licences issued to shops, milk bars, and refreshment parlours ...	57
Total ...	84

#### MILK VENDOR'S LICENCES AND BADGES.

<i>City and Out-Districts</i>	<i>Milk Vendors' Licences.</i>	<i>Cows Tuberculin Tested.</i>	<i>Badges.</i>
Port-of-Spain ...	83	315	44
Out-Districts ...	51	209	70
Total ...	134	524	114

#### Sale of Foodstuffs Bye-Laws.

##### REGISTRATION OF SHOPS, &c.

	<i>No.</i>
Provision, Meat and Spirit Shops, Restaurants, Hotels, Refreshment Parlours ...	438
Ground Provision and Fruit Shops ...	23
Bakehouses ...	38
Confectionery Shops ...	6
Aerated Water Factories ...	5
Other Factories ...	—
	510



REGISTRATION OF VENDORS.						No.
Bread and Cakes	...	...	...	...	...	28
Confectionery	...	...	...	...	...	5
Cooked Food including Fries, Soupe, &c.	...	...	...	...	...	14
Meat, Fish and Cheese	...	...	...	...	...	44
Ice Cream and Palets	...	...	...	...	...	48
Sweet Drinks	...	...	...	...	...	12
Vegetables, Greens and Fruits	...	...	...	...	...	111
Miscellaneous	...	...	...	...	...	45
Total						307
No. of Badges issued to itinerant vendors						307
No. of Oyster Vendors licensed under Sale of Oyster Bye-laws						3

**Foodstuffs seized and destroyed under Part X (a) of the Public Health Ordinance, Cap. 12. No. 4.**

Cakes	...	...	...	107	Milk	...	...	...tins	...	41
Fish	...	...	...pounds...	15	Mixed Fruits	...	...	...tins	...	49
Ham	...	...	...pounds...	15	Sardines	...	...	...tins	...	44

**VITAL STATISTICS OF THE DISTRICT.**

**Comparative Summary of Vital Statistics.**

(Unless otherwise stated rates are per 1,000 population.)

	1921	1931	1940	1941
Area of City in Acres (pastures and open spaces included)	1,793	1,793	2,540	2,540
Estimated Population	61,386	70,462	92,302	97,531
Density of Population (persons per acre)	34.2	39.3	36.3	38.4
Total Live Births	1,687	1,956	2,937	2,888
Birth Rate	27.28	27.76	31.82	29.61
Still Births Registered	154	139	214	211
*Still Birth Rate	91.3	71.1	72.8	73.06
Marriages registered	534	622	987	1,274
Marriage Rate	8.64	8.33	10.69	13.06
Total Deaths	1,659	1,223	1,568	1,705
Death Rate	26.83	17.36	16.99	17.48
Natural Increase of Population	28	733	1,369	1,183
Deaths under one year	287	222	291	314
*Infant Mortality Rate	170.12	113.50	99.08	108.73
Death Rates:				
Notifiable Infectious Diseases	6.21	3.14	2.25	2.50
Pulmonary Tuberculosis	2.49	1.90	1.28	1.27
Tuberculosis (other forms)	.26	.10	.15	.06
Enteric Fever	1.25	.16	.12	.14
Pneumonia (all forms)	1.97	.92	.68	.90
Bronchitis	1.36	.97	.48	.46
Diphtheria	.02	.03	.02	.02
Malaria	.89	.54	.20	.24
Syphilis	.21	.26	.38	.19
Diarrhoea and Enteritis	1.91	.78	.79	1.07
Influenza	.26	.06	.01	.04
Ankylostomiasis	.15	.03	.03	.03
Bright's Disease and Nephritis	2.09	1.14	.90	1.12
Diseases of the Heart and Blood Vessels	2.65	2.60	2.28	1.79
Diseases of the Nervous System				
including Cerebral Haemorrhage	1.70	1.15	1.50	1.55
Cancer and other Malignant Diseases	.63	.64	.85	.71

\*Per 1,000 births.

**Births and Birth Rates.**

**Deaths and Death Rates.**

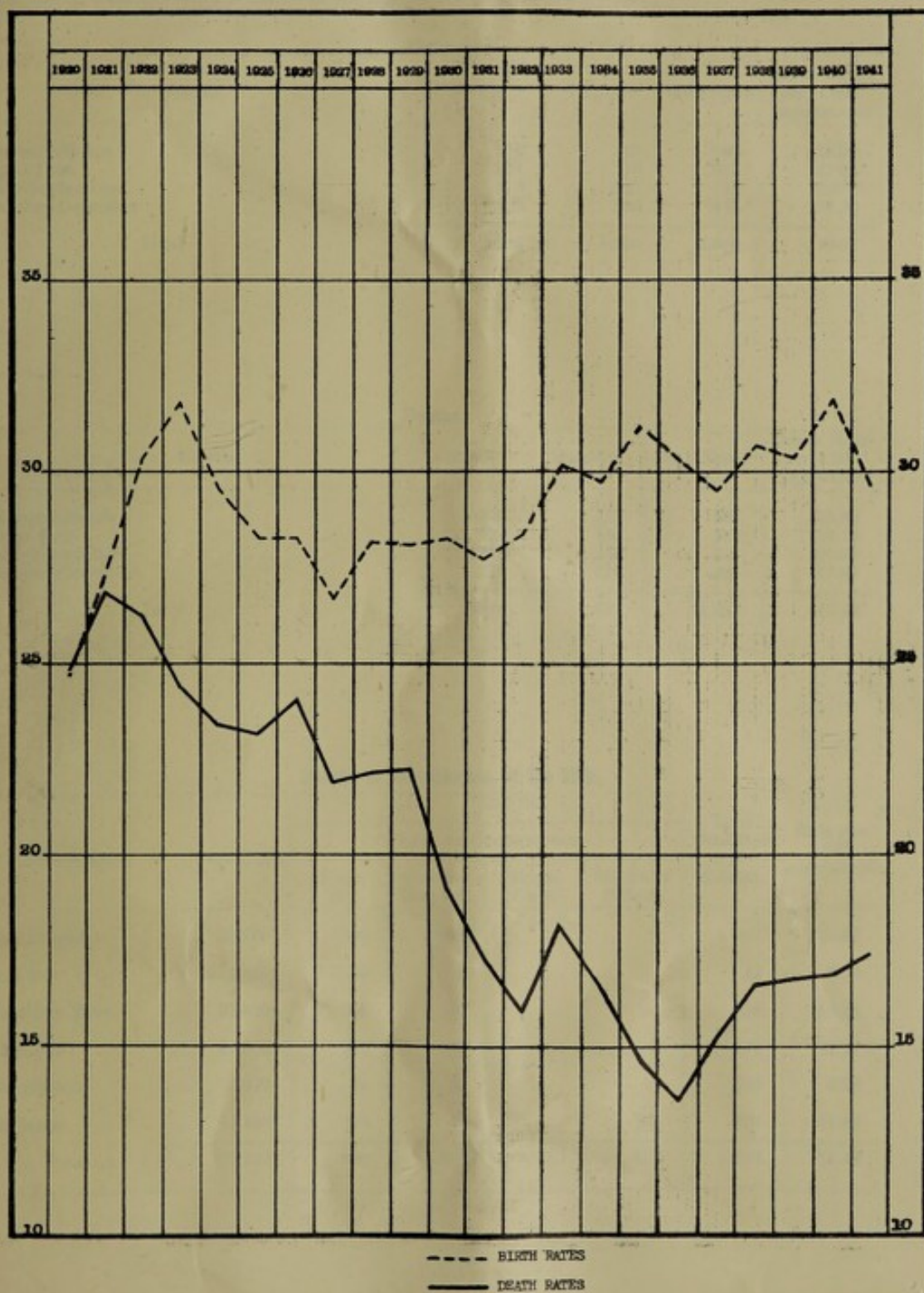
As I have stated previously, the figures for both the birth rate and death rate for 1941 showed a slight deterioration over the corresponding for the previous year: 29.61 and 17.48 per 1,000 as compared with 31.8 and 16.99 per 1,000, in 1940.

The East Dry River District again furnished proportionately the largest number of deaths, at all ages, of all the sub-districts, and the St. Clair District the lowest: 16.55 per 1,000 and 7.34, per 1,000 population respectively.

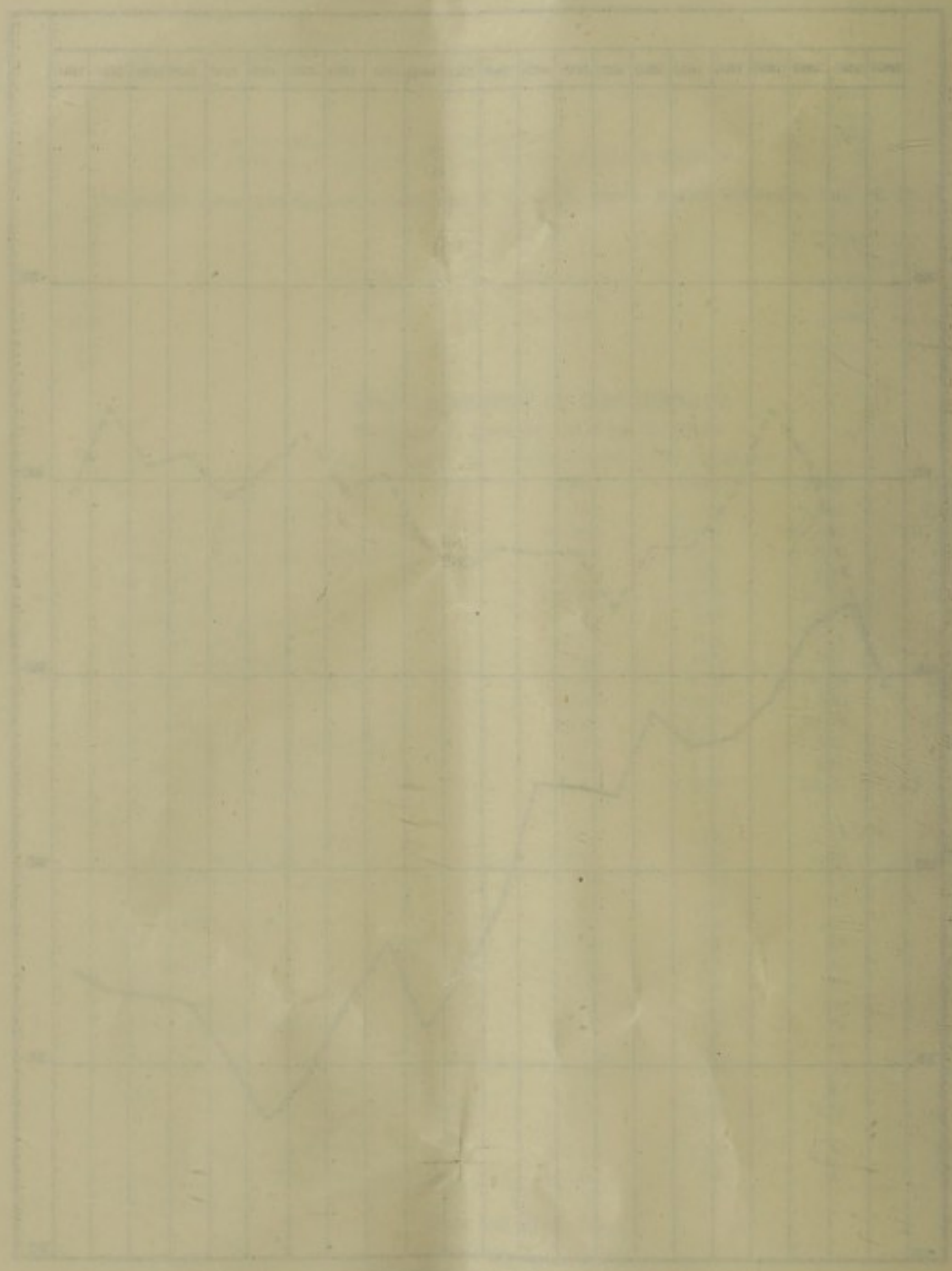


Chart A  
Port-of-Spain

BIRTH-RATES and DEATH-RATES per 1,000 Pbpulation, 1920-1941



STATIONARY AND MOVING AVERAGE  
OF THE  
STOCK MARKET





In all my previous reports I have repeatedly called attention to this fact and have pointed out that the remedy is a comprehensive plan of major works for this area:—wider and better roads, a better and more efficient drainage system, the establishment of the sewerage system, larger lots and more open spaces, &c.

It is of interest to note, as indicating the increasing longevity of the population, that 34.84 per cent. of the total mortality occurred in the age periods over 60 years.

#### Births.

Months.				Males.	Females.	Both Sexes.	Birth Rate per 1,000 population.
January-March	...	...	...	356	327	683	28.02
April-June	...	...	...	354	319	673	27.61
July-September	...	...	...	373	342	715	29.32
October-December	...	...	...	429	388	817	34.30
Total	...	...	...	1,512	1,376	2,888	29.61

#### Deaths.

Months.				Males.	Females.	Both Sexes.	Death Rate per 1,000 population.
January-March	...	...	...	208	179	387	15.88
April-June	...	...	...	189	180	369	15.14
July-September	...	...	...	262	249	511	20.96
October-December	...	...	...	222	216	438	17.97
Total	...	...	...	881	824	1,705	17.48

#### Deaths in Sub-districts of the City.

Sub-District.	Population	DEATHS.				Total Deaths in Sub-district.	Rate per 1,000 population.
		PLACE OF OCCURRENCE.					
		Home, &c.	Colonial Hospital.	Royal Gaol.	House of Refuge.		
City Proper ...	33,550	239	258	...	...	497	14.82
St. Clair ...	1,636	10	2	...	...	12	7.34
East Dry River	21,649	208	150	...	...	358	16.54
Belmont ...	16,866	153	95	...	...	248	14.71
Woodbrook	12,377	86	30	...	...	116	9.38
St. James ...	11,453	134	66	...	274	474	41.40
Total ...	97,531	830	601	...	274	1,705	17.48

## Age Distribution of Deaths.

Period.				Males.	Females.	Both Sexes.	Percentage of Total Mortality at All Ages.
Under 1 year	...	...	...	195	119	314	18.42
1- 5 years	...	...	...	44	41	85	4.99
6-10 do.	...	...	...	8	7	15	0.88
11-20 do.	...	...	...	24	31	55	3.22
21-30 do.	...	...	...	52	76	128	7.51
31-40 do.	...	...	...	60	75	135	7.92
41-50 do.	...	...	...	101	77	178	10.44
51-60 do.	...	...	...	111	90	201	11.79
Over 60 years	...	...	...	286	308	594	34.84
Total	...	...	...	881	824	1,705	...

## Comparison of Deaths at different Age Periods, 1928-41.

Period.	Total Deaths at All Ages.	DEATHS UNDER 1 YEAR.		DEATHS 1-5 YEARS.		DEATHS 56-60 YEARS.		DEATHS OVER 60 YEARS.	
		No.	Percentage of Total Deaths.	No.	Percentage of Total Deaths.	No.	Percentage of Total Deaths.	No.	Percentage of Total Deaths.
Yearly Averages:									
1928-32	1,327	230	17.42	81	6.06	94	7.09	336	25.10
1933-37	1,167	215	18.24	62	5.29	87	7.57	289	24.74
1938	1,410	204	14.46	69	4.89	107	7.58	484	34.33
1939	1,516	242	15.96	56	3.69	108	7.13	539	35.55
1940	1,568	291	18.56	59	3.76	101	6.44	564	35.97
1941	1,705	314	18.42	85	4.99	113	6.63	594	34.84

## Comparison of Death Rates.

	No. of Deaths.	Death Rate per 1,000 population.
(1) City (St. James excluded) ...	1,231	14.30
(2) City, including St. James ...	1,705	17.48
(3) City, as in (2), but omitting House of Refuge	1,431	14.67
(4) St. James (House of Refuge excluded)	200	17.46



## Causes of Deaths.

## I.—GENERAL DISEASES.

## (a) Notifiable Infectious Diseases.

Enteric Fever	...	...	14
Diphtheria	...	...	2
Membranous Croup	...	...	—
Pulmonary Tuberculosis	...	...	124
Tuberculosis (other forms)	...	...	6
Pneumonia (all forms)	...	...	88
Chicken Pox	...	...	—
Ophthalmia Neonatorum	...	...	—
Plague	...	...	—
Cholera	...	...	—
Small Pox	...	...	—
Typhus Fever	...	...	—
Yellow Fever	...	...	—
Encephalitis Lethargica	...	...	—
Acute Poliomyelitis	...	...	4
Acute Ascending Myelitis	...	...	—
Cerebro-Spinal Fever	...	...	—
Puerperal Fever	...	...	6
			<hr/> 244

## (b) Non-Notifiable Infectious Diseases.

Malaria	...	...	23
Whooping Cough	...	...	—
Influenza	...	...	4
Dysentery	...	...	11
Ankylostomiasis	...	...	3
Syphilis	...	...	19
Other Venereal Diseases	...	...	—
Black Water Fever	...	...	—
			<hr/> 60

## II.—OTHER DISEASES.

## (a) General Diseases not included above.

Cancer and other Malignant Diseases	69
Pellagra ... ..	2
Leprosy ... ..	2
Other General Diseases ... ..	43
	<hr/> 116

## (b) Diseases of the Nervous System and Organs of Special Sense.

Simple Meningitis ... ..	5
Cerebral Haemorrhage ... ..	79
Apoplexy ... ..	7
Convulsions of Children under 5 years	13
Other diseases of the Nervous System	47
	151

## (c) Diseases of the Circulatory System.

Cardiac and Vascular Diseases	...	...	175
			<hr/>

## (d) Diseases of the Respiratory System.

Bronchitis	...	...	45
Other diseases of the Respiratory System	...	...	36
			<hr/> 81

## (e) Diseases of the Digestive System.

Diarrhoea and Enteritis	...	...	104
Cirrhosis of Liver	...	...	5
Other diseases of the Digestive System	...	...	81
			<hr/> 190

## (f) Non-Venereal Diseases of the Genito-Urinary System.

Bright's Disease	...	...	—
Nephritis	...	...	109
Other Non-Venereal Diseases	...	...	66
			<hr/> 175

(g) Diseases of the Puerperal State.  
(Other than Puerperal Fevers.)

Puerperal Eclampsia	...	...	3
Puerperal Haemorrhage	...	...	—
Other Puerperal Diseases	...	...	8
			<hr/> 11

## (h) Diseases of Early Infancy

	...	...	150
			<hr/>

## (i) Old Age

	...	...	253
			<hr/>

## (j) Affections produced by External Causes.

Burns and Scalds	...	...	6
Accidents and Injuries	...	...	33
			<hr/> 39

## (k) Other Causes of Death

	...	...	60
			<hr/>

Grand Total

1,705



### INFANT MORTALITY.

Three hundred and fourteen (314) deaths of infants under one year took place in 1941, giving an infant mortality rate of 108.73. This figure is the highest since 1934 when the figure was 111.21; in the intervening years, with the exception of 1937, the figure has been below the 100 mark and this rise represents a set back, the explanation of which it is not quite clear.

A still greater saving of infant life is possible, and, commendable as are the efforts of those bodies concerned with Maternity and Child Welfare, still further intensive work is needed,—the aim being the attainment of a figure below the 50 mark. The directions in which these efforts should be expended are clear and have been detailed in previous reports.

Of the 314 infants who died before they were one year old, 137 did not live to see the end of the first month of extra uterine life, in other words, the neo-natal mortality constituted 43.63 per cent. of the total infant mortality.

#### Infant Mortality.

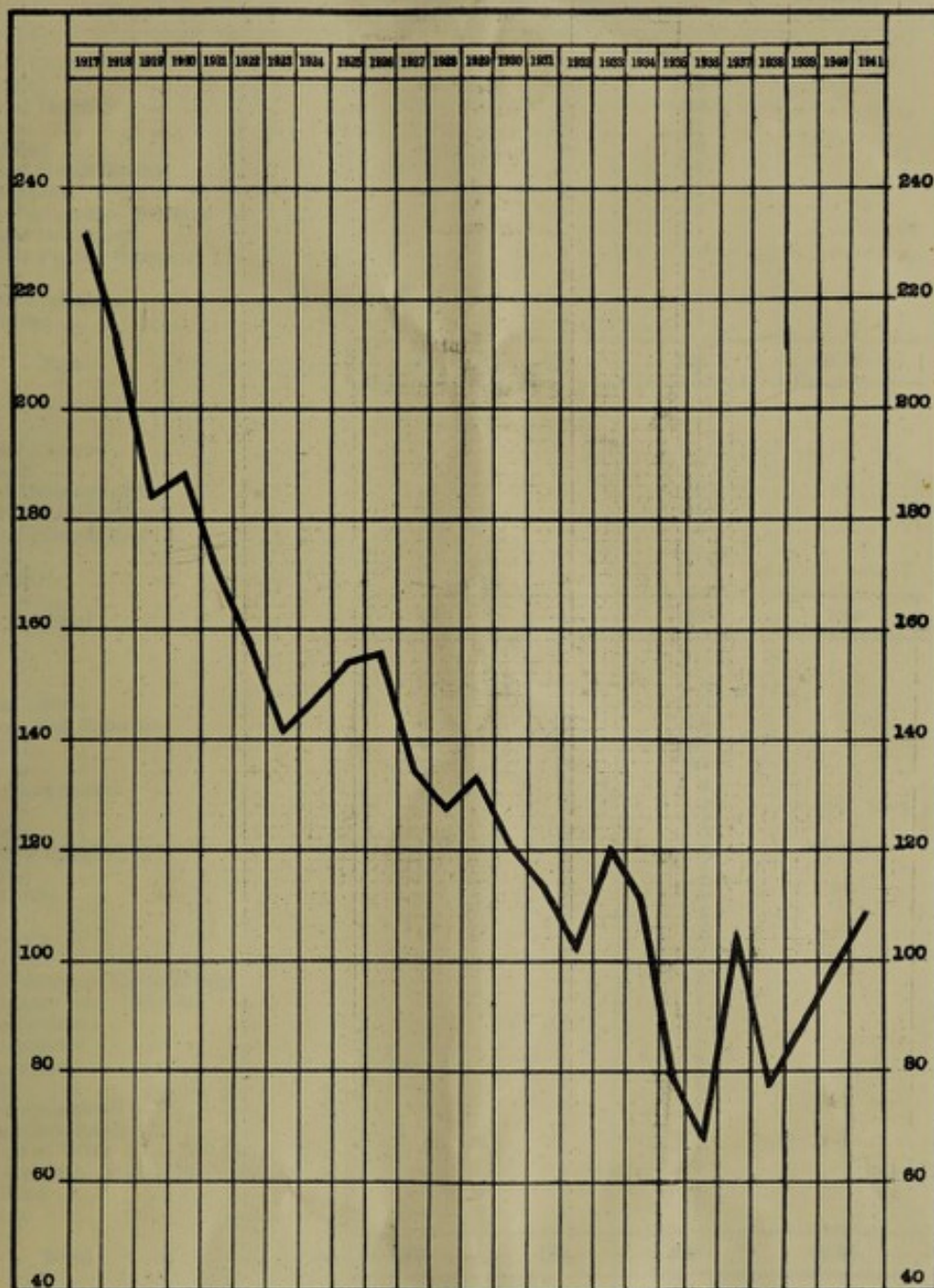
##### Births and Deaths of Infants under 1 year, 1917-41.

Period.					No. of Births.	No. of Deaths under 1 year.	Infant Mortality Rate.
Year 1917	...	...	...	...	1,770	412	232.77
Yearly Averages :							
1918-22	...	...	...	...	1,700	310	182.94
1923-27	...	...	...	...	1,862	274	146.96
1928-32	...	...	...	...	1,925	230	119.13
Average 1918-32	...	...	...	...	1,832	271	149.68
Year 1933	...	...	...	...	2,167	264	121.83
1934	...	...	...	...	2,185	243	111.21
1935	...	...	...	...	2,319	181	78.05
1936	...	...	...	...	2,295	149	64.92
1937	...	...	...	...	2,273	237	104.26
Average 1933-37	...	...	...	...	2,248	215	96.05
Year 1938	...	...	...	...	2,591	204	78.73
1939	...	...	...	...	2,752	242	87.94
1940	...	...	...	...	2,937	291	99.08
1941	...	...	...	...	2,888	314	108.73

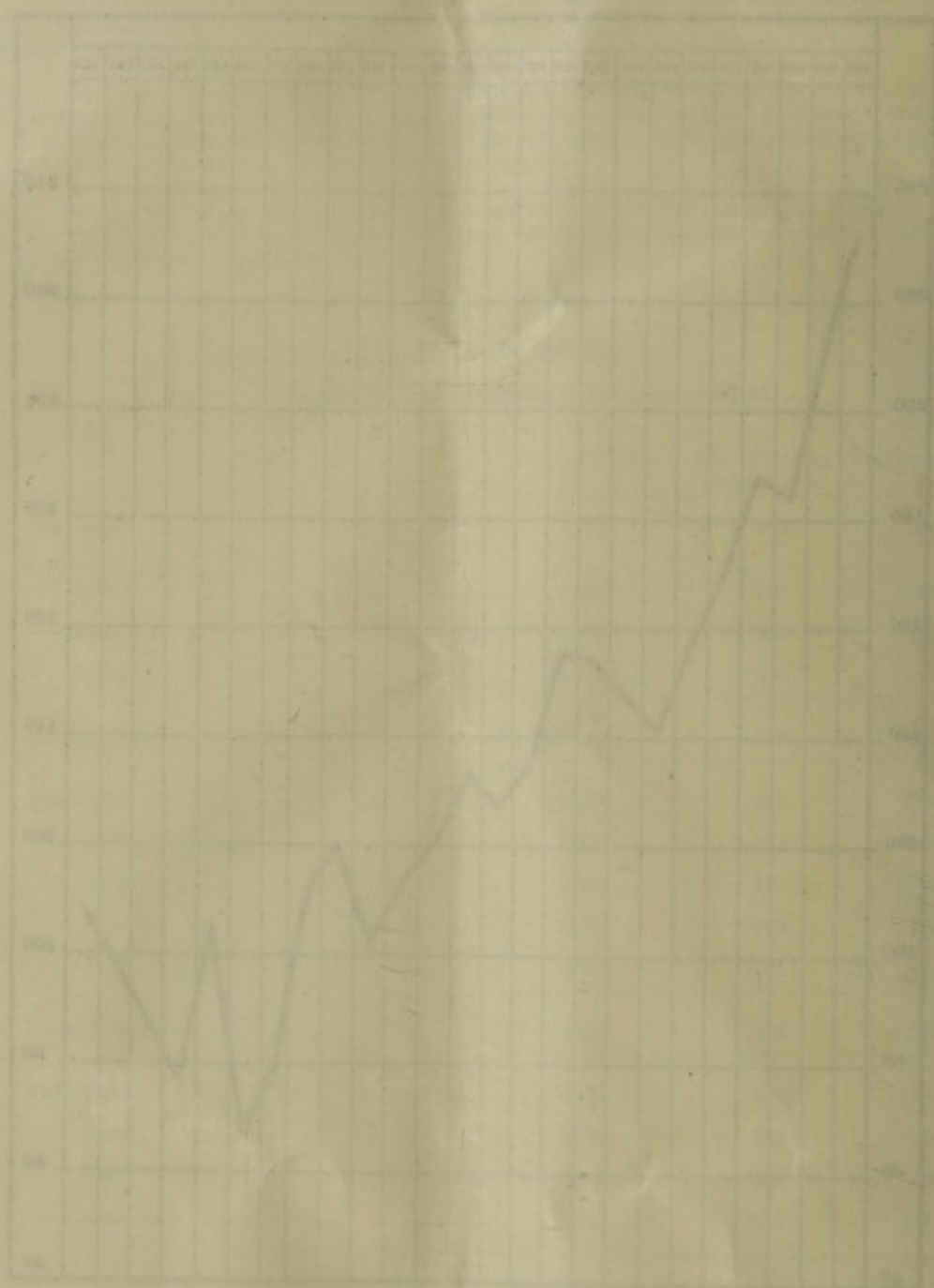
# Chart B

## Port-of-Spain

INFANT MORTALITY RATES—per 1,000 Live Births, 1917-1941.







## Causes of Deaths under 1 year.

Causes of Deaths.	Neo-Natal: Deaths under 1 month.	Deaths 1 month and under 1 year.	Total	Percentage of Total Infant Mortality.
<i>Ante-Natal Causes :</i>				
Prematurity ...	54	—	54	
Congenital Debility ...	26	6	32	
Marasmus ...	3	18	21	
Malnutrition ...	—	9	9	
Congenital Heart Disease ...	4	—	4	
Hydrocephalus ...	—	2	2	
Chondrodystrophia Foetalis ...	1	—	1	
Congenital Deformity ...	1	—	1	
Congenital Pyloric Stenosis ...	—	1	1	
Inanition ...	—	1	1	
Meningo-myelocele ...	1	—	1	
Spina Bifida ...	—	1	1	
Total ...	90	38	128	40.76
<i>Intra-Natal Causes :</i>				
Atelectasis ...	7	—	7	
Cerebral Haemorrhage ...	6	—	6	
Neo-Natal Haemorrhage ...	5	—	5	
Umbilical Haemorrhage ...	4	—	4	
Asphyxia ...	1	—	1	
Exomphalos ...	1	—	1	
Total ...	24	—	24	7.64
<i>Post-Natal Causes :</i>				
Diarrhoea and Enteritis ...	4	71	75	
Pneumonia ...	4	24	28	
Bronchitis ...	1	19	20	
Icterus Neonatorum ...	5	1	6	
Colitis ...	—	4	4	
Dysentery ...	—	3	3	
Pulmonary Congestion ...	—	2	2	
Stomatitis ...	—	2	2	
Appendicitis ...	—	1	1	
Asthma ...	—	1	1	
Convulsions ...	1	—	1	
Diphtheria ...	—	1	1	
Gastro-Intestinal Haemorrhage ...	1	—	1	
Haemorrhage into Thymus ...	1	—	1	
Hepatic Cirrhosis ...	—	1	1	
Hydronephrosis ...	—	1	1	
Intussusception ...	—	1	1	
Malaria ...	—	1	1	
Miliary Tuberculosis ...	—	1	1	
Pyrexia (Undefined) ...	—	1	1	
Retention of Urine ...	—	1	1	
Septic Arthritis—Hip Joint ...	—	1	1	
Septic Head ...	—	1	1	
Meningitis ...	—	1	1	
Total ...	17	139	156	49.68
<i>Ill-Defined Causes :</i>				
Unknown ...	6	—	6	1.91
Grand total ...	137	177	314	—



## Duration of Life of Infants dying under one year of Age.

Duration of Life.	No. of infants.	Percentage of total deaths under 1 year.	Corresponding percentage, 1940.
Under 1 day ... ..	19	6.05	4.12
1 day and under 1st week ... ..	96	30.57	28.18
1st week and under 1 month ... ..	22	7.01	13.06
Total under one month ... ..	137	43.63	45.36
1 month to 3 months ... ..	44	14.01	17.87
Over 3 to 5 months ... ..	37	11.78	13.06
" 5 to 7 " ... ..	37	11.78	8.25
" 7 to 9 " ... ..	38	12.10	10.65
" 9 to 11 " ... ..	21	6.69	4.81
" 11 months and under 1 year ... ..	—	—	—
Total ... ..	314	—	—

## Neo-Natal Mortality (Deaths under 1 month), 1930-41.

Period.	No. of Deaths under 1 month.	Percentage of total deaths under 1 year.	Neo-Natal Mortality Rate per 1,000 Births.
Yearly Average : 1930-34 ... ..	90.6	38.60	44.03
Year 1935 ... ..	91	50.28	39.24
1936 ... ..	61	40.94	26.58
1937 ... ..	110	46.41	48.39
1938 ... ..	117	57.35	45.16
1939 ... ..	122	50.41	44.33
Average 1935-39 ... ..	100.2	49.08	40.74
Year 1940 ... ..	132	45.36	44.94
1941 ... ..	137	43.63	47.44

## Still Births.

Year.	Total Still Births.	Rate per 1,000 Live Births.
1941 ... ..	211	73.06
1940 ... ..	214	72.86
1939 ... ..	190	69.04

THE PRE-SCHOOL CHILD.  
Causes of Death at Ages 1-5.

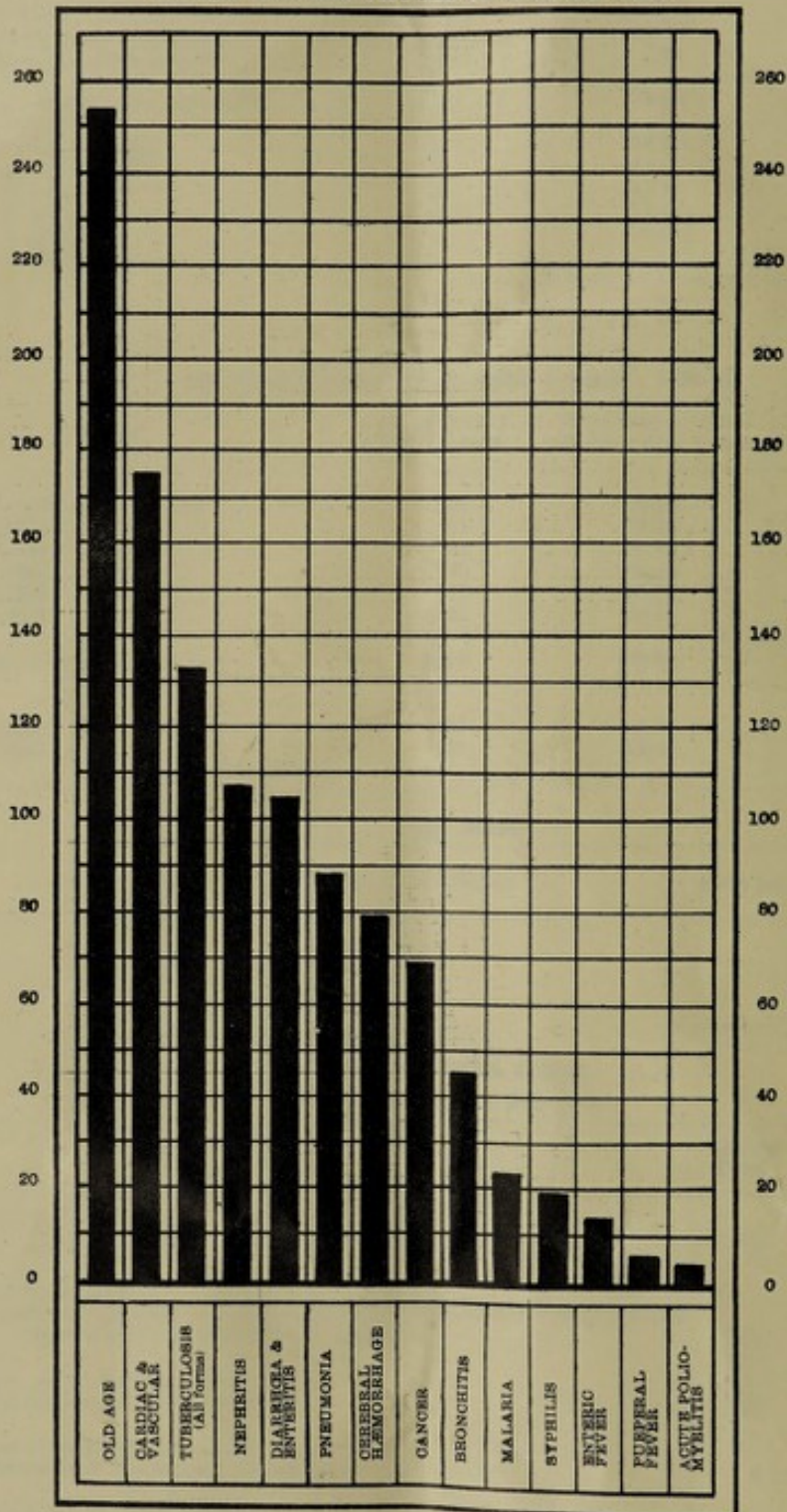
Groups.	Group Total.	Percentage of Total Mortality at Ages 1-5.
<i>Diseases, &amp;c., Attributable to Ante-Natal Causes :</i> Avitaminosis 1, Malnutrition 1, Marasmus 1 ... ..	3	3.53
<i>Communicable Diseases :</i> Pneumonia 12, Malaria 5, Tuberculosis 4, Acute Anterior Poliomyelitis 3, Enteric Fever 2, Diphtheria 1, Tetanus 1 ... ..	28	32.94
<i>Diseases of the Nervous System :</i> Convulsions 12, Encephalitis 1 ... ..	13	15.29
<i>Diseases of the Respiratory System :</i> Bronchitis 5, Pulmonary Congestion 1 ... ..	6	7.06
<i>Diseases of the Digestive System :</i> Diarrhoea and Enteritis 18, Colitis 3, Ascariasis 2, Intussusception 2 ... ..	25	29.41
<i>Other Causes :</i> Accidents 4, Nephritis 2, Cardiac Syncope 1, Epistaxis 1, Pyaemia 1, Septic Foot 1 ... ..	10	11.76
Total ... ..	*85	—

\*M.44, F.41.





Chart C  
Port-of-Spain  
Principal Individual CAUSES OF DEATHS-1941.





**MATERNAL MORTALITY.**

Seventeen (17) mothers died as a result of pregnancy in the year under review ; six (6) of these were victims of Puerperal Sepsis and three (3) of Eclampsia. These figures are higher than the corresponding figures for the previous year.

**Causes of Maternal Deaths.**

Causes of Maternal Deaths.	Under 16.	16 to 25	26 to 35	36 and upwards.	Total All Ages.	Rate per 1,000 Births.	
						1941.	Average 1936-40.
Puerperal Sepsis ...	1	2	2	1	6	2.08	0.77
Eclampsia ...	—	3	—	—	3	1.04	1.27
Haemorrhage ...	—	—	1	—	1	0.35	0.67
Pernicious Vomiting ...	—	—	1	—	1	0.35	0.17
*Other Causes ...	—	—	6	—	6	2.08	2.36
Total ...	1	5	10	1	17	5.89	5.24

\*Other causes include : Ectopic Gestation, Retained Placenta, Abortion, Ruptured Uterus.

**PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES.****Notifiable Infectious Diseases.**

One addition to the list of notifiable infectious diseases has been made : Puerperal Fever having been declared a notifiable infectious disease in July, 1941.

Four hundred and seven notifications were received and 244 deaths recorded during the year under review, as compared with 423 notifications and 208 deaths in the previous year.

Pneumonia and Pulmonary Tuberculosis furnished, far and away, the largest number of notifications and deaths—138 cases of, and 88 deaths from, Pneumonia having been recorded as compared with 67 and 63 respectively in the previous year ; and 113 cases of and 124 deaths from Pulmonary Tuberculosis as compared with 155 and 118 respectively, in the previous year.

The case-mortality rate for pneumonia worked out to be 63.7 per cent. which is on the high side, particularly when one takes into account the fact that drugs of the sulphanilamide group are freely exhibited, by practitioners in these diseases of the respiratory tract. The only feasible explanation is that only a certain number of cases of pneumonia are notified. This is regrettable if the preventive measures of disinfection and isolation are to be carried out promptly.

As is to be expected the East Dry River District furnished the highest case rate for all infectious diseases of all the sub-districts in the Urban Sanitary Area.

**Infectious Diseases—Notifications and Deaths—1931 to 1941.**

Infectious Diseases.	NOTIFICATIONS.				DEATHS.			
	Average 1931-35.	Average 1936-40.	1940.	1941.	Average 1931-35.	Average 1936-40.	1940.	1941.
Diphtheria ...	31.6	33.2	37	30	4.8	3.	2	2
Enteric Fever ...	51.2	56.6	70	56	13.8	11.	11	14
Pulmonary Tuberculosis ...	146.2	147.6	155	113	121.8	134.8	118	124
Tuberculosis (Other forms) ...	15.4	9.2	9	3	11.	12.4	14	6
Pneumonia ...	130.	119.	69	138	74.2	74.8	63	88
Ophthalmia Neonatorum ...	27.2	25.6	25	28	—	—	—	—
Chicken Pox ...	76.2	80.8	58	20	—	—	—	—
Encephalitis Lethargica ...	0.2	0.2	—	—	0.2	—	—	—
Acute Poliomyelitis ...	0.6	3.2	—	15	0.4	0.2	—	4
*Puerperal Fever ...	—	—	—	4	—	—	—	6
Total ...	478.6	475.4	423	407	223.2	236.2	208	244
Rate per 1,000 population ...	6.62	5.70	4.58	4.17	3.09	2.84	2.25	2.50

\* Puerperal Fever proclaimed a notifiable infectious disease as from July, 1941.



## Distribution of Cases and Deaths from Notifiable Infectious Diseases.

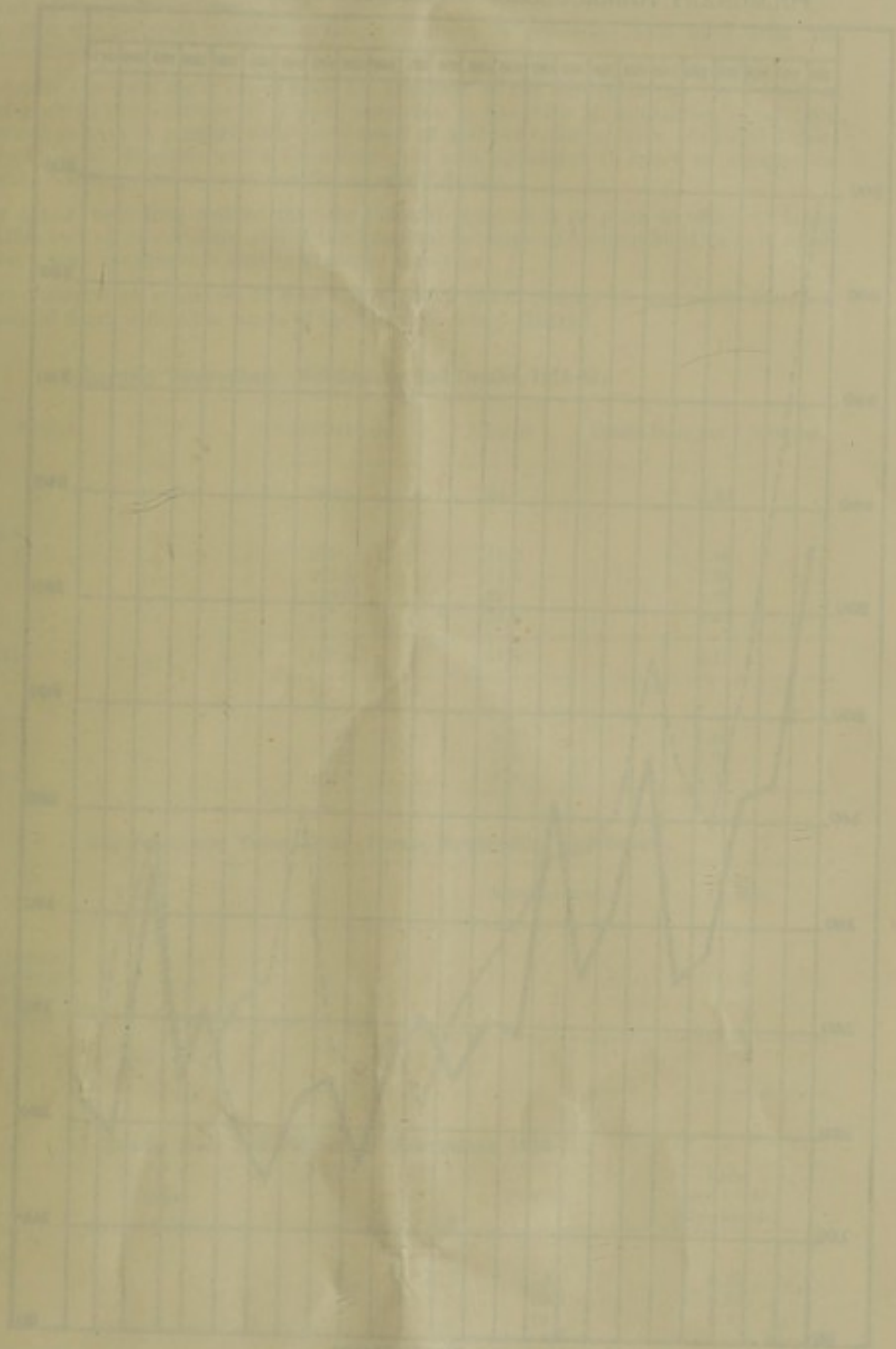
Diseases.	City Proper.		St. Clair		East Dry River		Belmont		Woodbrook		St. James	
	Cases notified.	Deaths	Cases notified.	Deaths	Cases notified.	Deaths	Cases notified.	Deaths	Cases notified.	Deaths	Cases notified.	Deaths
Diphtheria ...	9	1	1	...	3	1	8	...	7	...	2	...
Enteric Fever ...	9	3	1	...	17	4	13	3	1	...	15	4
Pulmonary Tuberculosis ...	47	49	...	...	23	27	26	24	10	9	7	15
Tuberculosis (Other forms) ...	1	2	...	...	2	2	...	2	...	...	...	...
Pneumonia (All forms) ...	41	35	...	...	46	19	26	9	8	5	17	20
Ophthalmia Neonatorum ...	6	...	...	...	15	...	3	...	1	...	3	...
Chicken Pox ...	11	...	1	...	7	...	...	...	1	...	...	...
Acute Poliomyelitis ...	7	2	1	1	3	1	3	...	1	...	...	...
Puerperal Fever ...	1	1	...	...	1	4	2	1	...	...	...	...
Total ...	132	93	4	1	117	58	81	39	29	14	44	39
Rate per 1,000 population in each sub-district	3.94	2.77	2.45	0.61	5.40	2.68	4.80	2.31	2.34	1.13	3.84	3.41

## Notifiable Infectious Diseases—Home and Hospital Deaths.

Diseases.	Died at Home.	Died at Hospital.	Total Deaths.	Percentage of cases isolated in Hospital before death.	Corresponding percentage for the year 1940.
Diphtheria ...	...	2	2	100.00	100.00
Enteric Fever ...	1	13	14	92.86	90.91
Pulmonary Tuberculosis ...	52	72	124	58.06	59.32
Tuberculosis (other forms) ...	...	6	6	100.00	64.29
Pneumonia ...	49	39	88	44.31	44.44
Acute Poliomyelitis ...	1	3	4	75.00	...
Puerperal Fever ...	1	5	6	83.33	...
Total ...	104	140	244	57.38	57.21

STATION 100  
DATE 10/1/1913  
TIME 10:00 AM

WIND DIRECTION 100  
WIND VELOCITY 10  
TEMPERATURE 60  
HUMIDITY 60  
PRESSURE 30.0

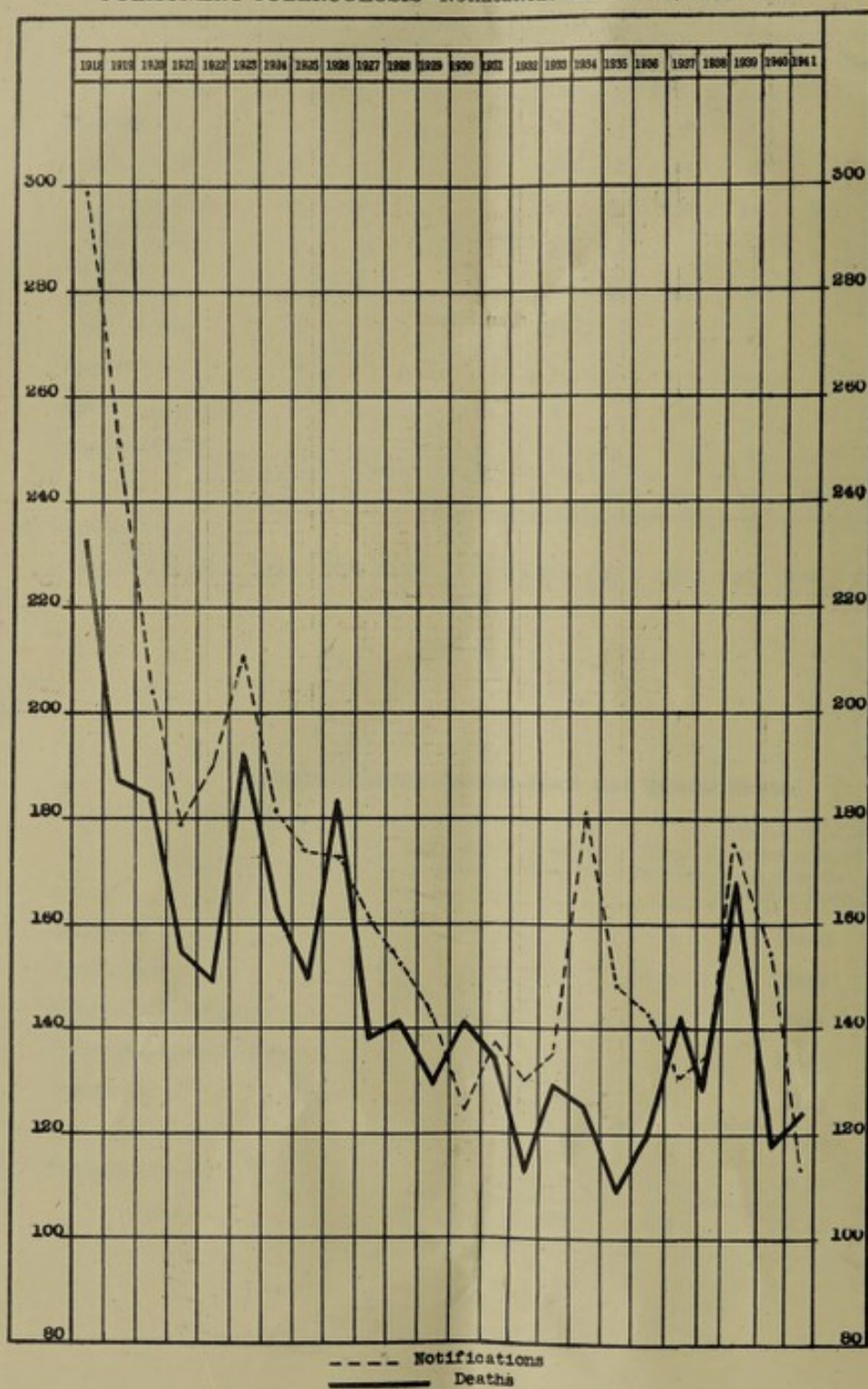


STATION 100  
DATE 10/1/1913  
TIME 10:00 AM



Chart D  
Port-of-Spain

PULMONARY TUBERCULOSIS—Notifications and Deaths, 1918-1941.



## TUBERCULOSIS.

## Pulmonary Tuberculosis.

The position as regards Tuberculosis is substantially the same as was detailed in my report of last year and of the previous year.

It is clear that the proposed Sanatorium-Hospital cannot be proceeded with until after the cessation of hostilities.

At the moment I write a slight ray of hope has appeared on the horizon in that, as a result of representations made to the Governor by a joint delegation of the three Municipalities, it has been decided to proceed as soon as possible with the removal of patients suffering from advanced Tuberculosis from the Colonial Hospitals and a Committee has been appointed to select an appropriate site for temporary buildings and to work out the necessary details.

It has, of course, been long realised that the Colonial Hospital is no place in which to house chronic incurable cases of tuberculosis, and if this proposal becomes an accomplished fact, it would undoubtedly be a very considerable step in the right direction.

Pulmonary Tuberculosis continues to take a very heavy toll of human life and ranks fourth in the list of causes of death within the limits of the Urban Sanitary District.

## Pulmonary Tuberculosis—Notifications and Deaths, 1918-41.

Period.				Notifications.	Deaths.	Death Rate per 1,000 pop.
Year 1918	...	...	...	299	233	3.43
Yearly Averages :						
1919-23	...	...	...	207	173.2	2.65
1924-28	...	...	...	167.6	154.6	2.38
1929-33	...	...	...	133.6	129	1.85
1934-38	...	...	...	147.4	124.6	1.62
Average 1919-38	...	...	...	163.9	145.4	2.13
Year 1939	...	...	...	175	167	1.85
1940	...	...	...	155	118	1.28
1941	...	...	...	113	124	1.27

## Non-Pulmonary Tuberculosis—Forms, Notifications and Deaths.

Forms.				Notifications.	Deaths.
Tuberculous Arthritis	...	...	...	...	1
Tuberculous Meningitis	...	...	...	...	2
Tuberculous Peritonitis	...	...	...	2	...
Miliary Tuberculosis	...	...	...	1	3
Total	...	...	...	3	6

## Deaths from Non-Pulmonary Tuberculosis 1924-41.

Period.				Deaths.	Rate per 1,000 population.
Yearly Averages :					
1924-28	...	...	...	15	0.23
1929-33	...	...	...	15.2	0.22
1934-38	...	...	...	10	0.13
Average 1924-38	...	...	...	13.4	0.19
Year 1939	...	...	...	15	0.17
1940	...	...	...	14	0.15
1941	...	...	...	6	0.06



**ENTERIC FEVER.**

The number of cases of enteric fever showed a drop by 14 on the number reported in the previous year: 56 as compared with 70. By way of compensation, as it were, for this satisfactory state of affairs, the number of deaths was 3 greater than in the previous year—14 as against 11, giving a death rate of .14 per 1,000 of the population.

As has been remarked upon before, the disease was more prevalent in children under 10 and conformed in all respects to the so-called juvenile type of the disease.

**Enteric Fever.  
Notifications and Deaths, 1918-1941.**

Period.	Notifications.	Deaths.	Death Rates per 1,000 population.
Year 1918 ... ..	495	104	1.52
Yearly Averages:			
1919-23 ... ..	301.8	67.8	1.03
1924-28 ... ..	162.4	25.2	0.39
1929-33 ... ..	37	10.8	0.16
1934-38 ... ..	59.8	14.6	0.19
Average 1919-38 ... ..	140.3	29.6	0.44
Year 1939 ... ..	75	15	0.17
1940 ... ..	70	11	0.12
1941 ... ..	56	14	0.14

**Inoculation of Enteric Fever Contacts.  
T.A.B. Injections.**

No. receiving one injection.	No. receiving two injections.	Total.
66	30	96

**PNEUMONIA.**

The number of cases of pneumonia reported during the past nine years has shown such an increase that great concern is felt by the Department as to the possibility of the epidemic spread of the disease

And what makes matters worse is that no obvious cause for this increase in morbidity and mortality is apparent. It is true that overcrowding, dampness and malnutrition play a very important part as predisposing factors in this disease but it cannot be said with any degree of certainty that these conditions have been more apparent during the past nine years; in fact, with the single exception of overcrowding, the contrary is true.

It is a fact that there has been a large influx of immigrants to the Colony, and it is just possible that the explanation may be an undue amount of overcrowding coupled with an enhanced virulence of the causative organism.

A careful investigation of all the cases notified is being undertaken with a view to determining a common underlying factor, *if any*. As can be confidently predicted from the well known insanitary conditions extant in this sub-district, the East Dry River District furnished the highest number of notifications and the greatest number of deaths.

**Pneumonia (All Forms).  
Notifications and Deaths, 1922-41.**

Period.	Notifications.	Deaths.	Death Rate per 1,000 population.
Yearly Averages:			
1922-26 ... ..	111.8	78	1.23
1927-31 ... ..	69.8	53.4	0.79
1932-36 ... ..	155.4	80.6	1.10
Average 1922-36 ... ..	112.3	70.7	1.04
Year 1937 ... ..	125	85	1.10
1938 ... ..	101	70	0.83
1939 ... ..	107	59	0.65
1940 ... ..	69	63	0.68
1941 ... ..	138	88	0.90



**DIPHTHERIA.**

Thirty cases of diphtheria were notified during the year under review and two (2) deaths certified.

**Diphtheria.**  
**Notifications and Deaths, 1917-41.**

Period.	Notifications.	Deaths.	Death Rate per 1,000 population.
<b>Yearly Averages</b>			
1917-21 ... ..	11.8	1.4	0.02
1922-26 ... ..	14.8	2	0.03
1927-31 ... ..	23.8	1.6	0.02
1932-36 ... ..	29.8	2.2	0.03
Average 1917-36 ... ..	20	1.8	0.03
<b>Year</b>			
1937 ... ..	30	4	0.05
1938 ... ..	16	3	0.04
1939 ... ..	61	2	0.02
1940 ... ..	37	2	0.02
1941 ... ..	30	2	0.02

**Chicken Pox—Notifications, 1924-41.**

Period.	Notifications.	Period.	Notifications.
<b>Yearly Averages :</b>			
1924-28 ... ..	19.8	Year 1939 ... ..	72
1929-33 ... ..	41	1940 ... ..	58
1934-38 ... ..	110.4	1941 ... ..	20

**ACUTE ANTERIOR POLIOMYELITIS.**

As mentioned in the introductory part of this report an outbreak of acute anterior poliomyelitis occurred in October 1941 and continued into the early part of 1942.

**Acute Anterior Poliomyelitis**  
**Notifications and Deaths, 1927-41.**

Year.	No. of Cases.	Deaths.	Year.	No. of Cases.	Deaths.	Year.	No. of Cases.	Deaths.
1927-29 ... ..	—	—	1933-35 ... ..	—	—	1939 ... ..	1	—
1930 ... ..	5	1	1936 ... ..	3	—	1940 ... ..	—	—
1931 ... ..	—	2	1937 ... ..	10	1	1941 ... ..	15	4
1932 ... ..	3	—	1938 ... ..	2	—			

**Cases and Deaths in Age-Groups, 1941.**

	1-5 years.	6-10 years.	16-20 years.	31-35 years.	Total.
Cases Notified ... ..	11	1	2	1	15
Deaths ... ..	3	—	1	—	4

No case of **Encephalitis Lethargica** or **Paralytic Rabies** was notified to the Department during the year under report. In fact there was no report of any case of Paralytic Rabies in humans, anywhere in the Colony.

None of the quarantinable diseases: **Plague, Yellow Fever, Typhus, Cholera, Small Pox or Alastrim** was reported as having occurred in the Colony.



### NON-NOTIFIABLE INFECTIOUS DISEASES.

Analysis of these figures shows that 23 deaths, with addresses within the limits of the City, were certified to Malaria and 19 to Syphilis. This is an altogether different thing from saying that these 23 cases and 19 cases respectively contracted the disease they died from within the limits of the City.

As a matter of actual fact it is clear—and it has been verified by numerous observers—that infection by the parasite of malaria hardly ever occurs within the limits of the Urban Sanitary District and on the rare occasions that it has occurred, it is the inhabitants of the outlying districts which adjoin malarious areas outside the City, that are invariably the victims.

#### Non-Notifiable Infectious Diseases—Home and Hospital Deaths.

Diseases.	Died at Home &c.	Died at Hospital.	Total Deaths.	Percentage of cases isolated in Hospital before death.	Corresponding percentage for the year 1940.
Malaria .. ..	6	17	23	73.91	38.89
Black Water Fever .. ..	..	..	..	..	100.00
Whooping Cough .. ..	..	..	..	..	..
Influenza .. ..	3	1	4	25.00	..
Dysentery .. ..	8	3	11	27.27	44.44
Ankylostomiasis .. ..	2	1	3	33.33	66.67
Syphilis .. ..	14	5	19	26.32	34.29
Total .. ..	33	27	60	45.00	38.80

#### Malaria.

The position as regards malaria in the City remains substantially the same as has been outlined in all my previous reports *viz.*: no anopheline larvae or mosquitoes are found in the City itself but, in those areas on the outskirts of the City that adjoin well known malarious regions such as Success Village and Four Roads, it is possible for infected mosquitoes to attack residents and to give rise to cases of malaria—tertian, subtertian or quartan.

That there are many cases of all varieties of malaria undergoing treatment or convalescence in the City there can be no doubt, and in view of this fact, the work of the Department in keeping the mosquito population in check and under control and particularly, in eliminating by appropriate measures all potential breeding grounds of anopheline mosquitoes, is one of paramount importance.

#### Malaria—Local Distribution of Deaths.

Sub-districts.	Deaths.
City Proper .. ..	3
St. Clair .. ..	1
East Dry River... ..	10
Belmont .. ..	6
Woodbrook .. ..	—
St. James .. ..	3
Total .. ..	23

#### SYPHILIS.

Considering the large number of soldiers and sailors, both local and foreign, who are always on holiday leave in the City and who frequent the various places of amusement, it is perhaps inevitable that an increase in the incidence of venereal diseases, both syphilis and gonorrhoea has been observed at the various clinics, and the writer has seen personally more primary chancres and buboes among the troops since the War began, than he had seen in all the years put together before the War, during which he was in private practice.

It is, however, in the tertiary stage that the disease exerts its maximum lethal effect and all the deaths listed below are deaths due to the late effects of syphilis contracted either in the mothers' womb (congenital syphilis) or acquired in early adult life (acquired syphilis). In either case—congenital or acquired—it is the delicate tissues of the heart and blood vessels, or of the brain and spinal cord that suffer most.

#### Deaths from Syphilis according to Age—1931-41.

Ages.	Average No. of Deaths, 1931-40.	No. of Deaths, 1941.
Under 1 year .. ..	4.7	—
1-10 years .. ..	1.4	—
11-20 .. ..	1.1	1
21-30 .. ..	3.4	4
31-40 .. ..	5.2	4
41-50 .. ..	4.1	5
51-60 .. ..	2.5	4
Over 60 years .. ..	1.9	1
Total .. ..	24.3	19
Rate per 1,000 population .. ..	0.30	0.19



**DYSENTERY.**

\* Only a limited number of cases of dysentery occur during the year and, concerning these, there is no absolute certainty that the infection was acquired within the City's limits. With a proper water-borne system of sewerage disposal and a good and pure water supply this disease should claim very few victims.

**Deaths from the Dysenteries, 1918-41.**

Period.						Deaths.	Death Rates.
Year 1918	...	...	...	...	...	43	0.63
Yearly Averages :							
1919-23	...	...	...	...	...	38.2	0.58
1924-28	...	...	...	...	...	32	0.49
1929-33	...	...	...	...	...	14.8	0.21
1934-38	...	...	...	...	...	5.4	0.07
Average 1919-38	...	...	...	...	...	22.6	0.34
Year 1939	...	...	...	...	...	2	0.02
1940	...	...	...	...	...	9	0.10
1941	...	...	...	...	...	11	0.11

**DIARRHOEA AND ENTERITIS.****Deaths from Diarrhoea and Enteritis, 1918-41.**

Period.						Deaths.	Death Rates.
Year 1918	...	...	...	...	...	193	2.84
Yearly Averages :							
1919-23	...	...	...	...	...	143.6	2.18
1924-28	...	...	...	...	...	72.8	1.12
1929-33	...	...	...	...	...	52.8	0.76
1934-38	...	...	...	...	...	40	0.52
Average 1919-38	...	...	...	...	...	77.3	1.15
Year 1939	...	...	...	...	...	45	0.50
1940	...	...	...	...	...	73	0.79
1941	...	...	...	...	...	*104	1.07

\*Of the 104 deaths, 93, or 89.42 per cent. occurred in the age-group 0-5 years.

**Diarrhoea and Enteritis—Deaths in Sub-districts.**

Sub-district.						No. of deaths.	
City Proper	...	...	...	...	...	18	
St. Clair	...	...	...	...	...	—	
East Dry River	...	...	...	...	...	48	
Belmont	...	...	...	...	...	22	
Woodbrook	...	...	...	...	...	2	
St. James	...	...	...	...	...	14	
Total	...	...	...	...	...	104	



## OTHER PRINCIPAL CAUSES OF DEATH.

The two most important groups of diseases that come up for consideration under this heading are cardiac and vascular diseases, and cancer and other malignant diseases, the former having been responsible for 175 victims and the latter for 69, in the year under report.

## CARDIAC AND VASCULAR DISEASES.

The heart, valves, arteries and veins are vulnerable to a variety of diseases, of which the commonest and undoubtedly the most frequent cause, in the list hereunder detailed, is syphilis. Next in importance are such diseases as malaria, diabetes, chronic alcoholism, chronic nephritis, etc.

It is becoming more and more apparent that there is, at the moment, the greatest need for the thorough and efficient treatment of syphilis in its earliest stages, if these dread and invariably fatal complications are to be obviated and some means must be found to ensure, if necessary by compulsory legislation, that everyone who contracts venereal disease receives a full and adequate course of treatment.

Thus, and thus only, will these highly dangerous and infective cases be eliminated as a possible source of further spread of the disease.

## Deaths from Cardiac and Vascular Diseases in Age - Groups.

Forms.	0-20 years.	21-40 years.	41-60 years.	Over 60 years.	Total.
<i>Diseases of Arteries and Valves :</i>					
Aneurism ... ..	...	10	7	6	23
Arterio-Sclerosis and Atheroma ... ..	...	...	3	18	21
Coronary Thrombosis ... ..	...	...	6	6	12
Mitral and Aortic Incompetence ... ..	...	4	14	10	28
Other Diseases of Arteries and Valves ... ..	...	4	3	2	9
<i>Diseases of the Heart :</i>					
Aneurism of Ventricle ... ..	...	...	...	1	1
Auricular Fibrillation ... ..	1	1	...	5	7
Fatty Degeneration ... ..	...	...	1	1	2
Endocarditis ... ..	2	...	2	...	4
Myocardial Degeneration ... ..	...	2	6	18	26
Myocarditis ... ..	...	1	12	11	24
Other Cardiac Diseases ... ..	3	5	4	6	18
Total ... ..	6	27	58	84	175

## CANCER AND OTHER MALIGNANT DISEASES.

Of the 69 deaths certified in this group of diseases, 47 were in females and 22 in males. As regards the site, the genital tract was the most frequently attacked in the female and the alimentary tract in the male.

The disease still remains as deep a mystery as it has always been, and no light is thrown on the aetiology by an examination and comparison of these returns. Surgery in the early stages still remains the sheet-anchor in the treatment of these cases and, in the absence of any definite ideas as to causation no preventive measure can be of any avail.

## Cancer and Other Malignant Diseases—Forms, Sites and Deaths.

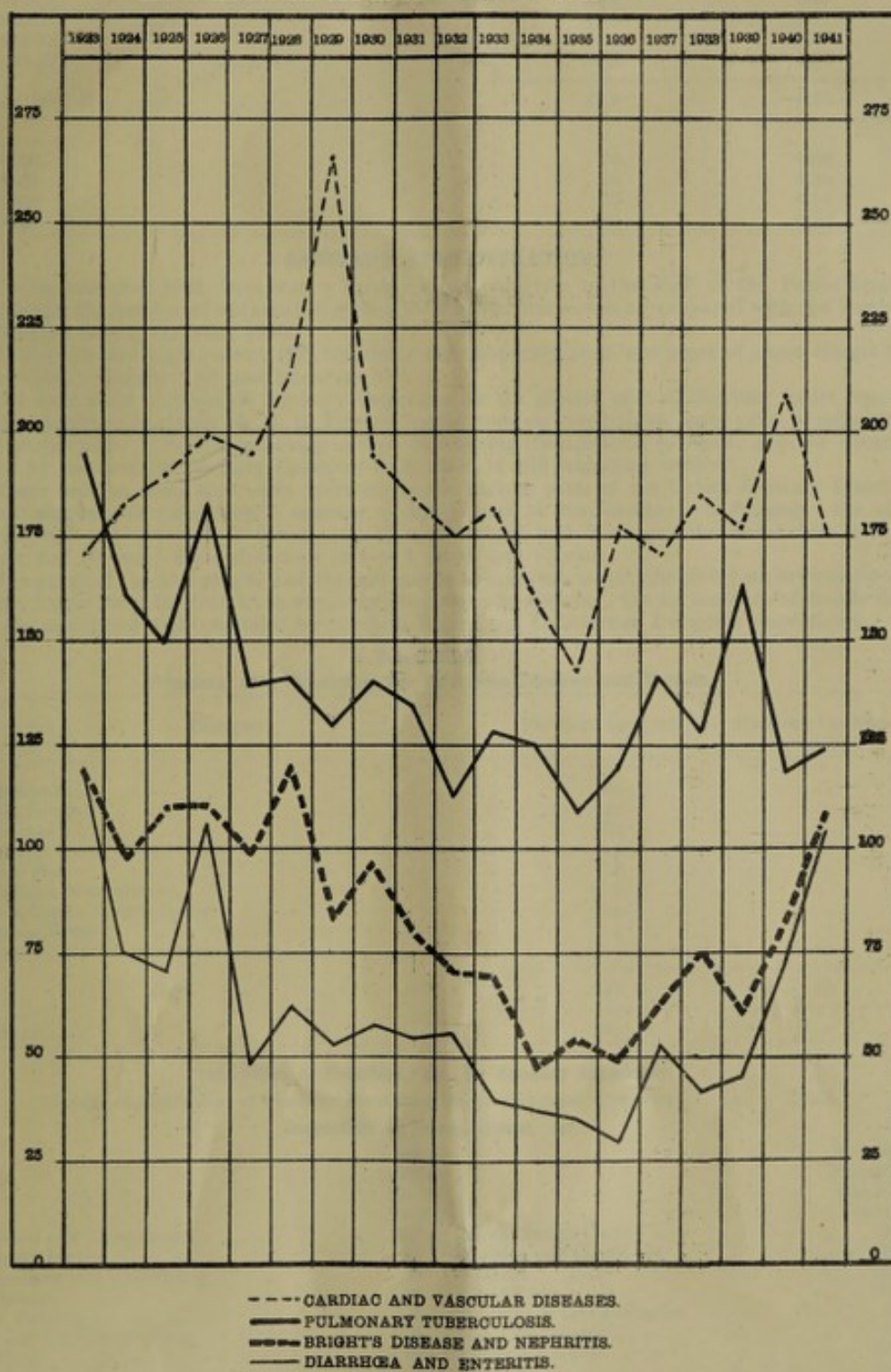
Forms and Sites.	DEATHS.	
	Males.	Females.
<i>Carcinoma :</i>		
Face, Jaw, Mouth ... ..	2	1
Larynx, Lung ... ..	1	1
Oesophagus, Stomach, Pylorus, Liver, Omentum, Colon, Rectum ... ..	17	8
Breast ... ..	...	9
Uterus, Bladder, Vagina ... ..	...	27
Site not stated ... ..	...	1
<i>Epithelioma :</i>		
Face ... ..	1	...
<i>Undefined Malignant Neoplasms :</i>		
Vertebra ... ..	1	...
Total ... ..	22	47

Of the 69 deaths from Cancer and other Malignant Diseases, 59, or 85.51 per cent., were above the age of 40.

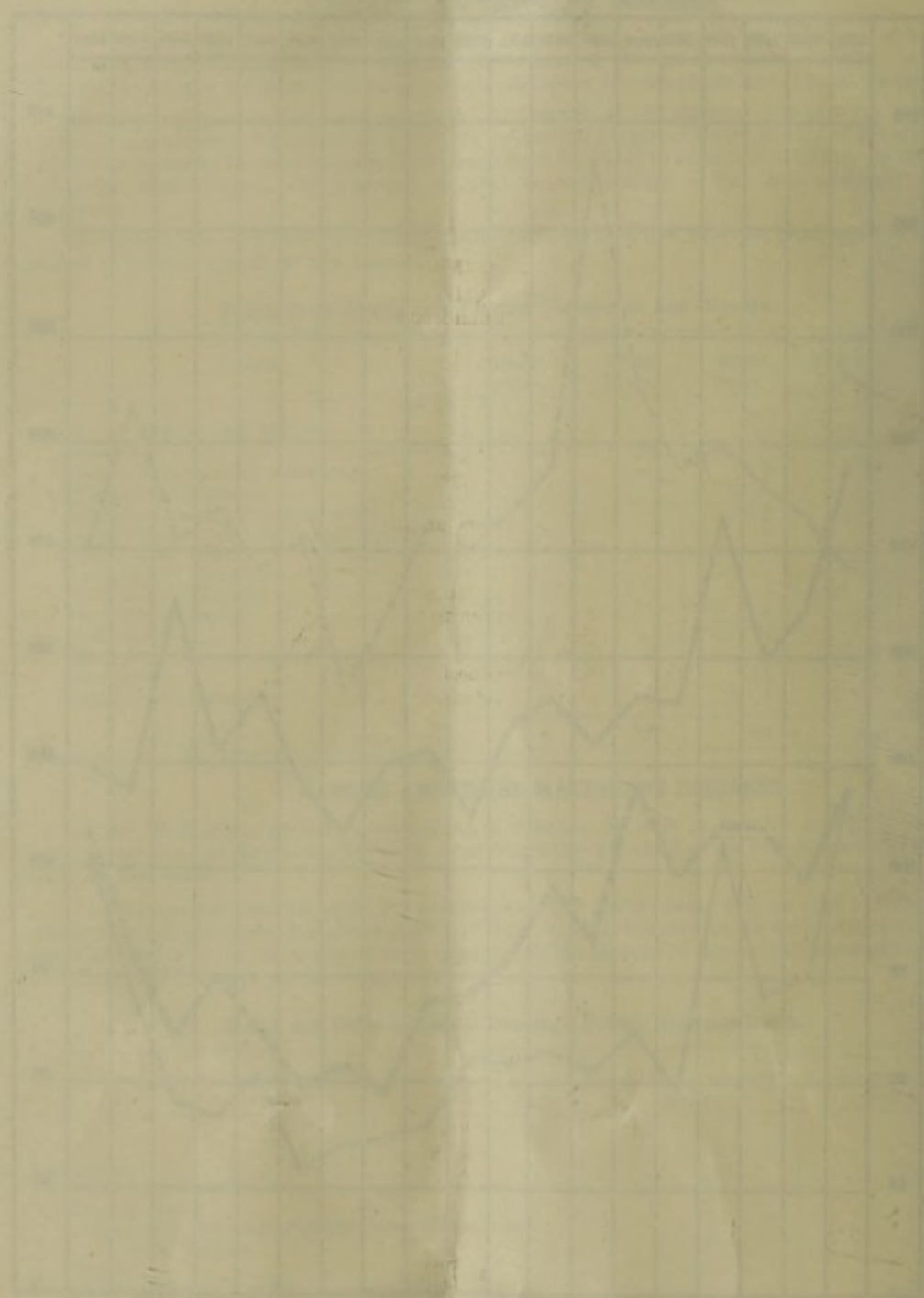


Chart E  
Port-of-Spain

Deaths from PULMONARY TUBERCULOSIS, CARDIAC and  
VASCULAR DISEASES, BRIGHT'S DISEASE and NEPHRITIS,  
and DIARRHŒA and ENTERITIS, 1923-1941.







## Deaths from Cancer and other Malignant Diseases, 1918-41.

Period.	Deaths.	Rate per 1,000 pop.
Yearly Averages:		
1918-22 ... ..	44.4	0.67
1923-27 ... ..	45.6	0.71
1928-32 ... ..	44.6	0.65
1933-37 ... ..	56.8	0.76
Average 1918-37 ... ..	47.9	0.70
Year 1938 ... ..	70	0.83
1939 ... ..	76	0.84
1940 ... ..	78	0.85
1941 ... ..	69	0.71

## SANITARY ADMINISTRATION.

During the year 1941 there was a further slight reduction in the staff of the Public Health Department, the number of workers being then one hundred and eleven as compared with one hundred and thirteen during the year 1940.

Of this number eighty-seven (87) constitute the temporary staff which are of three categories: drivers (15), "specials" (6) and labourers (66).

We were short of three (3) Sanitary Inspectors for the greater part of the year under report: the Chief Sanitary Inspector Mr. J. E. Ferreira having gone on long holiday leave prior to retirement in November; Mr. J. W. Parris having retired on reaching the age-limit in April; and the vacancy created by the death of Sanitary Inspector F. A. Howard still remaining unfilled.

There were as usual four units operating in the various parts of the Urban Sanitary District: the anti-plague unit comprising 1 overseer, 6 drivers and 24 men divided into 6 gangs; the anti-mosquito unit of 1 overseer, 7 drivers and 15 men divided into 7 gangs; the anti-rabies unit of 1 driver and 10 men; the disinfection unit of 1 driver and 17 men.

The gangs of the anti-plague and the anti-mosquito units are under the direct supervision of the Sanitary Inspector of the District in which they happen to be working; the anti-rabies and disinfection units are supervised and controlled by the Anti-Rabies and Disinfection Inspector respectively.

## Disinfection.

## Premises, etc., disinfected for Infectious Diseases and Vermin.

Diseases.	Premises sprayed.	Railway Coaches sprayed.
Tuberculosis ... ..	80	...
Enteric Fever ... ..	42	...
Pneumonia ... ..	69	...
Diphtheria ... ..	25	...
Chicken Pox ... ..	3	...
Ophthalmia Neonatorum ... ..	4	...
Acute Anterior Poliomyelitis ... ..	14	...
Puerperal Fever ... ..	5	...
Leprosy ... ..	...	13
Total ... ..	242	13
Vermin ... ..	365	...

## Inspection of Premises, &amp;c., by Sanitary Inspectors.

Average Monthly No. of Visits to Dwellings, Shops and other Premises ... 7,548

## Inspection of Stores, Shops, &amp;c.

	Average Monthly No. of Visits.		Average Monthly No. of Visits.
Provision and Meat Shops ... ..	207	Sweet Drink Carts ... ..	18
Provision Stores ... ..	13	Dairies and Cowsheds ... ..	95
Restaurants and Cookshops ... ..	28	Stables ... ..	23
Bakehouses ... ..	38	Goat Pens ... ..	69
Bread Depots ... ..	8	Aerated Water Factories ... ..	9
Cake and Ice Cream Shops ... ..	176	Soap Factories ... ..	6
Fry Shops ... ..	18	Other Factories ... ..	33
Hotels ... ..	4	Schools ... ..	25
Markets ... ..	10	Common Lodging Houses ... ..	—
Spirit Shops ... ..	25	Barber Shops ... ..	45
Ice Cream Carts and Pails ... ..	44	Dyeworks ... ..	4
Cake Trays and Baskets ... ..	60	Laundries ... ..	34
Provision Trays and Baskets ... ..	127	Garages ... ..	103
Bread Carts and Baskets ... ..	35	Tanneries ... ..	11
Fresh Fish Trays ... ..	100	Public Urinals ... ..	6
Oyster Vendors' Baskets ... ..	3	Boats ... ..	11
Plantain Carts ... ..	7		



## Results of Notices and Verbal Directions.

	Con- structed or provided.	Repaired.	Cleansed.	Painted.	Elimi- nated.	Lime washed.
Yard pavements ... ..	18	83	—	—	—	—
Depressions in yards ... ..	—	—	—	—	249	—
Yards ... ..	—	—	4,916	—	—	—
Drains, sinks, gullies, washing troughs, &c. ... ..	246	422	5,153	—	—	—
Lavatories, sewer basins, urinals, bath rooms, &c. ... ..	80	11	1,507	—	—	—
Privies ... ..	216	823	—	—	—	1,129
Cesspits ... ..	216	160	1,378	—	—	—
Manure Heaps ... ..	—	—	—	—	424	—
Rat Holes ... ..	—	—	—	—	67	—
Tree Shade, Overgrowths of bush Dustbins ... ..	1,629	447	1,036	—	846	—
Dustbin covers ... ..	621	—	—	—	—	—
Shops, Parlours, Restaurants, Bakehouses, Hotels, &c. ... ..	—	87	2,507	339	—	397
Aerated Water Factories ... ..	—	—	40	—	—	15
Bread Carts ... ..	—	—	—	22	—	—
Barracks, Common Lodging Houses Garages, Kitchens ... ..	—	23	36	11	—	14
Cowsheds, Stables ... ..	—	55	—	—	—	41
Close-boarding, Ventilation of Houses ... ..	2	123	148	—	—	97
	3	—	—	—	—	—

## Reports to the Water and Sewerage Department.

<i>Reports.</i>	<i>Total.</i>
Leaks, defective taps, chokes &c. .. ..	1,088

## Anti-Rabies Measures.

## TRAPPING, &amp;c., OF BATS.

No. of locations inspected for roosts of Bats .. ..	37,518
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## Bats Caught.

Artibeus .. ..	378
Desmodus .. ..	—
Hemiderma .. ..	285
Molossus .. ..	24
Saccopteryx .. ..	21
	708

## Building Plans, &amp;c.

Reports made by the Public Health Department were as follows :—	<i>No.</i>
On plans, &c., for reconstruction or reconditioning of buildings .. ..	296
On applications for leases of land in Woodbrook .. ..	59
On premises in which building operations were in progress .. ..	108

## Prosecutions.

<i>Offences.</i>	<i>No. of Cases.</i>	<i>Total Fines, &amp;c.</i>
Failing to comply with nuisance notices .. ..	3	\$17.40
Failing to provide proper dustbins .. ..	1	Reprimanded
	1	\$2.40
	3	Reprimanded

## Financial.

	1940	1941
	\$ c.	\$ c.
Revenue collected by Public Health Department .. ..	703.76	696.59
Expenditure .. ..	65,557.25	64,224.33

### Changes in the Staff.

The following changes took place in the Staff of the Public Health Department during the year under report :—

#### 1. Resignations :

Mr. J. E. Ferreira, Chief Sanitary Inspector, as from 24th November, 1941, after 25 years' service.

Mr. J. W. Parris, Sanitary Inspector, as from 2nd June, 1941, after 24½ years' service.

Mr. W. Lamont, Sanitary Inspector, as from 1st October, 1941, after 3 years' service.

### Leave of Absence.

Officers.	Vacation Leave. No. of Days.	Sick Leave. No. of Days.
Alkins, G. .. .. .	21	—
Assing, C. C. .. .. .	42	—
Babb, F. .. .. .	126	—
Boxill, E. .. .. .	—	10
De Four, H. .. .. .	21	7
Forde, O. E. .. .. .	42	—
Guppy, N. E. .. .. .	—	10
Hinkson, M. .. .. .	28	20
Howard, J. R. .. .. .	21	—
Lamont, W. .. .. .	21	21
Parris, J. E. .. .. .	21	40
Parris, J. W. .. .. .	42	—
Pierre, G. .. .. .	21	—
Rivers, F. B. .. .. .	28	14
Seon, F. E. .. .. .	28	—
Wilson, A. .. .. .	21	—
Wilson, I. .. .. .	84	—
Wood, J. A. .. .. .	42	10

### Acknowledgments.

The Public Health Department sustained two serious losses during the year under review by the retirement of Mr. J. E. Ferreira, cert. R.SAN.I., Chief Sanitary Inspector and Mr. J. W. Parris, Sanitary Inspector, after 25 years long and meritorious service.

These two Inspectors belonged to the old regime of Sanitary Inspectors—men who were pioneers in the field of public health at a time when the field was for the most part unexplored and largely unploughed; essentially practical men who did much rough spade-work for the love of it and did it extremely well. Those of us who have come afterwards have reason to revere the memory of these men—doctors as well as sanitary inspectors—and whilst acknowledging the great service these two Sanitary Inspectors rendered and whilst realising that they are now enjoying a well deserved rest, it is with regret that I record their retirement. The Chief Sanitary Inspector, Mr. J. E. Ferreira, I met in office when I came to the Department and I have the honour to acknowledge his sterling worth, his sound advice, and his great insight in and broad outlook on, all sanitary matters. A straight-forward and sincere man he gave his opinion without fear or favour.

One of our youngest Sanitary Inspectors, Mr. W. Lamont, left us to join the Ministry. We wish him the best of good luck.

All members of the Staff, permanent as well as temporary, performed satisfactorily during 1941 under the able and inspiring guidance of Mr. T. M. Mitchell, cert. R.SAN.I., Chief Clerk and Mr. O. E. Forde, cert. R. SAN.I., Acting Chief Sanitary Inspector.

I desire to record my appreciation of, and thanks for, the co-operation they so wholeheartedly vouchsafed me, without which the work of the Department would have been a nullity.

I recommend their valuable services to the favourable notice of the Local Authority.



