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

ANNUAL REPORT

OF THE

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

FOR THE YEAR

1939

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

TRINIDAD:
PRINTED BY THE GOVERNMENT PRINTER,
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Local Authority in the Urban Sanitary District of the City of Port-of-Spain.

1938-39.

The City Council.

HIS WORSHIP THE MAYOR (ALDERMAN THE HONOURABLE ARTHUR ANDREW CIPRIANI, J.P.)

Deputy-Mayor.

COUNCILLOR LEO ALEXANDER PUJADAS.

Aldermen.

A. P. T. AMBARD.
GASTON JOHNSTON, K.C.
H. A. DE FREITAS.
MURCHISON RIGSBY.

Councillors.

N. K. ABLACK.
DR. T. P. ACHONG.
G. CABRAL.
A. GOODING.
A. GOMES.
V. D. GORMANDY.
MISS AUDREY JEFFERS, M.B.E.
C. M. LASTIQUE.
G. J. MCCARTHY.
A. RICHARDS.
G. L. THOMAS.
L. B. THOMAS.
V. R. VIDALE.
L. WALCOTT.

Annual Report of the Public Health Department of the City of Port-of-Spain, 1939.

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

2nd October, 1940.

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, 1939.

No untoward circumstance of any importance served to disturb the state of the public health during the year under report and 1939 may justly be said to be one of the healthiest that the City has experienced.

It is true that in the early months of the year a number of cases of a dengue-like fever made their appearance in the urban sanitary district as well as in other parts of the Colony and caused some anxiety as to their ultimate outcome, but the incidence soon declined and no after effects, except the memory of an unpleasant episode, seemed to result.

What was the exact nature of this fever no one seems to know for certain nor did the investigations undertaken throw any definite light on the subject but it would seem that the clinical manifestations fitted in best with that of endemic dengue as described by Rogers, Deeks, Van der Scheer, Beermann, and others.

On the assumption—and it must be admitted that the assumption was purely empirical—that mosquitoes of the genus aëdes were the possible vectors of the virus of this disease, the campaign designed to get rid of the breeding places of mosquitoes in general and of aëdes aegypti in particular was intensified, a course which necessitated the appointment of an overseer to supervise and co-ordinate the work of all the anti-mosquito gangs.

The drive continues, special attention being paid to the St. James Area, where the opportunity afforded by the works of drainage and road construction, now in active progress, is being seized to eliminate the numerous breeding places of mosquitoes which are a feature of that district.

The estimated mean population of the City was 20,375, the natural increase being 1,236 souls.

The population was distributed as follows: City Proper 32,559, St. Clair 1,505, East Dry River 19,343, Belmont 15,258, Woodbrook 11,283, St. James 10,427.

The birth rate was 30.45 per 1,000 and the death rate 16.77 per 1,000 population, figures which compare favourably with the average rate for the preceding ten years—29.42 and 16.98 per 1,000 population.

Though the birth rate has remained practically stationary for the last ten years the death rate has shown a very satisfactory decline—a reduction of one-third having taken place in the last decennium.

The infantile mortality rate was 87.94, somewhat above the figure of 78.73 for 1938 but well below the average figure of 102.73 for the last ten years; the maternal mortality rate worked out at 5.09, as against 6.95 for 1938 and an average figure of 6.44 for the quinquennium 1934-1938.

Two hundred and fifty-nine deaths were certified to the notifiable infectious diseases of which Pulmonary Tuberculosis claimed 167 and Pneumonia 59 victims —a rate of 1.85 and .65 per 1,000 population, respectively.

The bowel filth diseases were responsible for 62 deaths : enteric fever 15, dysentery 2, diarrhoea and enteritis 45. The enteric fever rate was .17 per 1,000 population which is what it has been, on the average, for the last ten years.

Malaria was the immediate cause of death in 19 cases and syphilis in 26 cases, which compares not unfavourably with 28 and 24 8 respectively, the average number of deaths from these causes during the last ten years.

As regards the chronic system diseases it is satisfactory to note that there has been, on the whole, if anything, a slight decline in the mortality attributable to these diseases though the death rate has again increased in the case of cancer and other malignant diseases—.84 per 1,000—and also in diseases of the nervous system (including cerebral haemorrhage)—1.59 per 1,000 population.

Reference must be made to the visit of the Royal Commission to the West Indies under the Chairmanship of Lord Moyne.

The Commission appointed by Royal Warrant, "to investigate social and economic conditions in Barbados, British Guiana, British Honduras, Jamaica, the Leeward Islands, Trinidad and Tobago, and the Windward Islands and matters connected therewith and to make recommendations" consisted of nine members—Mr. Morgan Jones, M.P., having unfortunately been stricken with what proved to be his last illness, in the neighbouring Colony of British Guiana, whence he had to be sent back to England. They arrived in the Colony towards the end of February and took particular interest in the state of the public health of the Colony. Individual members were shown around the urban sanitary district and the housing and general health of the members of the working classes were given a very close scrutiny.

The Municipality, in keeping with its charge to promote the health and welfare of the inhabitants of the City of Port-of-Spain, made representations to the Royal Commission for extended powers which, if granted, would bring it in line with municipalities of equal population in the United Kingdom. Additional duties and responsibilities would then devolve upon the Local Authority which would signify a wider and more efficient control of the various disease-processes and insanitary conditions existing within its limits.

In the list of major recommendations issued, so far, by the Royal Commission at the request of the Secretary of State for the Colonies, this important matter has not been touched upon, but we look forward with eagerness and confident hope to the publication of the full report of the Royal Commission.

In conclusion I offer my sincere and heartfelt thanks to His Worship the Mayor, Alderman and Councillors for the unfailing support and the ready encouragement they gave during the year under report to the efforts of the Public Health Department in attaining and maintaining the present very satisfactory state of the public health of the City.

I have the honour to be,

Sir,

Your obedient Servant

RODERICK MARCANO,
Medical Officer of Health.

SANITARY CIRCUMSTANCES.

Water.

No change either in the sources or in the methods of filtration or sterilisation of the water supply occurred during the year under report and the results of bacteriological examination show that a very high standard of purity was maintained.

Bacteriological Examination of Water Supply.

No. of daily samples examined.	No. of samples with B. coli present.	Percentage of samples with B. coli present.	No. of samples with B. coli absent.	Percentage of samples with B. coli absent.
365	1	0.27	364	99.73

Bacteriological Examination of Water Supply.

Weekly Samples giving Positive Results.

Date of Sample.	Where Derived.	Result of Examination.	Remarks.
December, 15...	St. Ann's Reservoir ...	B. coli present in 100 and 1 c.c. ...	After filtration.
15...	St. Ann's River ...	B. coli present in 100 and 1 c.c. ...	Before filtration.
27...	St. Clair	B. coli present in 100 and 1 c.c. ...	Before filtration.

Our thanks are again due to Government for the excellent service rendered to the Municipality in this respect by Dr. J. L. Pawan, Senior Pathologist.

Monthly Rainfall gauged at Two Stations in Port-of-Spain with Averages for the years 1939 and 1938.

Month.	Year 1939.			Year 1938.		
	Stations.		Average Rainfall.	Stations.		Average Rainfall.
	St. Clair.	Police Headquarters.		St. Clair.	Police Headquarters.	
January	1.08	1.27	1.17	3.50	2.26	2.88
February	2.36	1.25	1.81	2.63	0.52	1.58
March	0.94	0.38	0.66	3.95	1.80	2.87
April	1.86	0.65	1.25	6.47	3.06	4.77
May	2.35	1.33	1.84	6.79	6.07	6.43
June	5.39	3.02	4.21	5.87	3.85	4.86
July	7.54	4.38	5.96	9.65	7.24	8.44
August	8.41	4.17	6.29	10.47	7.84	9.16
September	8.44	6.58	7.51	11.61	6.16	8.88
October	9.91	6.90	8.41	7.49	3.82	5.66
November	3.20	1.99	2.59	10.32	8.11	9.21
December	4.89	2.94	3.92	11.73	6.10	8.92
Total	56.37	34.86	45.62	90.48	56.83	73.66

Comparison of Seasonal Rainfall, Infectious Diseases—Notifications and Deaths—and Deaths at Different Ages for 1939 and 1938.

Rainfall, Notifications and Deaths.	Year 1939.				Year 1938.			
	Dry Season Jan.-May.	Monthly Average	Wet Season June-Dec.	Monthly Average.	Dry Season Jan.-May.	Monthly Average	Wet Season June-Dec.	Monthly Average.
Rainfall in inches ...	6.73	1.34	38.89	5.56	18.53	3.71	55.13	7.87
Infectious Diseases :								
Notifications ...	198	39.6	329	47.0	236	47.2	248	35.4
Deaths	117	23.4	142	20.3	78	15.6	147	21.0
Deaths under 1 year	95	19.0	147	21.0	93	18.6	111	15.8
Deaths at ages 1-5 ...	23	4.6	33	4.7	25	5.0	44	6.2
Deaths at all ages ...	663	132.6	853	121.9	458	91.6	952	136.0

Sewage Disposal.

No new area was sewered during the year 1939 but the number of premises in Woodbrook which have now established the necessary connections with the sewerage system of that district increased considerably and it is a fact that privy cesspits and cesspools in that district, once very numerous, are now very few and far between.

In the unsewered parts of the City septic tanks with soakaway pits are gradually taking the place of the old privy cesspits, a change that is always recommended by the Department whenever an opportunity presents itself.

Cesspits sprayed with Crude and Distillate Oils (Free particularly for Infectious Disease).

Disease.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Enteric Fever, &c	4,062	4,312	4,974	3,995	4,647	4,227	3,772	3,408	3,380	3,796	3,908	3,332	47,813

SANITARY INSPECTION OF THE DISTRICT.

BUSINESS PREMISES.

Dairies and Milk Shops.

The outstanding feature under this heading is a progressive increase in the number of dairyman's licences issued to milk shops, milk bars and refreshment parlours. At the same time the number issued to cowkeepers and other purveyors of milk was also greater than the corresponding figure for last year.

There is general agreement that more and more fresh milk is finding its way into the City from the outlying districts and is being consumed as such in the various milk shops, milk bars and refreshment parlours of the City.

I have already referred to the great need that exists for a large pasteurising plant where the bulk of this milk, which is a source of great potential danger to the inhabitants, can be rendered absolutely safe for human consumption.

DAIRIES AND MILK SHOPS.

Sub-District.	*Cowshed Licences Issued.*
City Proper (sewered)	3
East Dry River (unsewered)	1
Belmont (unsewered)	4
Woodbrook (partly sewered)	9
St. James (unsewered)	16
Total	33

DAIRYMAN'S LICENCES.

Dairyman's Licences issued to cowkeepers and other purveyors of milk	37
Do. do. do. milk shops, milk bars, and refreshment parlours	33
Total	70

MILK VENDOR'S LICENCES AND BADGES.

City and Outdistricts.	*Milk Vendor's Licences.*	*Badges.*
Port-of-Spain	70	66
Out-districts :		
San Juan and Santa Cruz	80	101
Diego Martin	11	13
Maraval and Dibé	10	14
St. Ann's and Cascade	3	6
Long Circular Road	2	3
Four Roads	2	3
Laventille	2	2
St. Joseph	1	1
Total	181	209

TUBERCULIN TESTING OF DAIRY COWS.

	City.	*Out-districts.*	*Total.*
No. of Cows Tuberculin Tested with Negative Reaction	135	637	772

PREVALENCE OF RATS AND MOSQUITOES.

Anti-Rat Measures.

The destruction of Rats and Mice is an important part of the work of the Local Authority, for rats are known to be closely associated with bubonic plague, with spirochaetal jaundice and with rat bite fever and other diseases in man.

Destruction of Rats and Mice.

Rats and Mice Destroyed.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total.
Rats caught by Trappers	805	693	863	726	881	832	937	976	838	888	867	540	9,846
Rats bought	96	97	93	111	99	86	162	179	105	134	92	45	1,299
Total Rats destroyed	901	790	956	837	980	918	1,099	1155	943	1022	959	585	11,145
Mice caught and destroyed ...	310	258	354	268	342	286	335	395	323	307	358	269	3,805

Examination of Rats by Government Bacteriologist.

Examination of Rats.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total.
Rats examined for Plague	891	767	951	820	970	907	1,078	1099	929	977	944	583	10,916
Rats found infected with Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Immature Rats not examined	10	23	5	17	10	11	21	56	14	45	15	2	229

Anti-Mosquito Measures.

As I have mentioned at the beginning of this report, mosquitoes and their breeding places came in for special attention during the year by reason of the occurrence of a dengue-like fever which, in all probability, was conveyed by mosquitoes of the genus Aëdes.

Complaints of mosquito nuisance were no more numerous than usual, the largest number coming, as to be expected, from the St. James Area during the rainy season. Control over the breeding places of mosquitoes is becoming more and more a matter of the first importance and with the facilities of easy transport and rapid conveyance which are being afforded on a larger and larger scale by aircraft, the greatest vigilance is called for.

Inspection of Eaves Gutters, &c.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total Entire City.	Total St. James only.
Number of inspections and re-inspections of premises	3,849	3,576	5,296	3,589	3,596	3,556	3,508	3,461	3,514	2,998	3,214	2,654	42,811	1,729
Occasions found in good order ...	3,691	3,496	5,131	3,512	3,415	3,298	3,296	3,237	3,384	2,780	3,039	2,545	40,824	491
Defective Eaves Gutters	158	80	165	77	181	258	212	224	130	218	175	109	1,987	238
Defective Eaves Gutters containing water	38	17	5	7	14	61	62	58	30	88	44	46	470	6
Defective Eaves Gutters containing water with larvae	65	20	13	15	6	22	36	37	33	89	22	21	379	24
Occasions on whch mosquito larvae were found in tubs antiformicas, tincans, &c	304	193	155	162	103	162	234	317	330	377	357	384	3,078	229

Larval Index.

	City excluding St. James.	St. James. only.	Total.
No. of Inspections (Sanitary Inspectors and Laddermen) ...	174,167	29,643	203,810
No. of occasions Larvae were found on premises (Sanitary Inspectors and Laddermen)	3,204	253	3,457
Larval Index	1.84	0.85	1.70

Premises used for Human Habitation.

I am able to record, and I do so with the greatest satisfaction and gratitude, that, at the time of writing, the problem of providing alternative accommodation for members of the working classes is receiving the very earnest attention of the Planning and Housing Commission and houses are in the process of being erected on the Morvant Estate as originally planned, and on an area of land in the St. James district, to the north and east of the House of Refuge.

This work is, at the moment, being pushed rapidly ahead and the fears that I gave expression to last year that the outbreak of hostilities might seriously interfere with the building programme have not, I am happy to state, materialised.

Thirty houses, of the two room with gallery type, with conveniences under the same roof, some detached, others semi-detached, are now ready for occupation and it is proposed to erect ninety such in St. James.

These houses, when completed, will furnish a very necessary and long overdue relief to the housing situation in the City which has been growing more and more acute and has reached the point where a further reduction of the available housing accommodation, no matter how bad and insanitary it may be, cannot be insisted upon by this Department.

It is true that the figures detailed in the table below show that a good deal of insanitary property has actually been got rid of during the year under report, but during the latter part of the year the rate was quite definitely slower and it was the owners of very dilapidated and insanitary property only, who were called upon to put their "houses in order" and every facility in the way of the granting of long extensions of time, of the holding up of reminder and final notices, &c., &c., was being given those on whom such notices had already been served.

When, on the completion of these houses, the necessary transfer of population from the slum areas has taken place, it is the intention of the Planning and Housing Commission, working in conjunction with the City Council, to deal as a whole with certain ear-marked areas which, by reason of their size and general dilapidation as well as the smallness and irregularity of the lots, cannot very well be dealt with under the Public Health Ordinance, Cap. 98.

In the meantime building and reconstruction proceed apace in spite of the war and wherever one goes, be it Woodbrook or Belmont, East Dry River or St. James, new buildings, dwelling houses as well as business places, can be seen in ever increasing numbers.

It is true that at the moment the rental charged for these new places is nearly always very high and very often exorbitant, but the writer is firmly of the opinion that, as soon as a sufficiency of houses at a rental that is economic for the working man is available, the rental now demanded by landlords and private owners must inevitably fall to a figure that is satisfactory to both sides.

Housing.

	Resulting from Service of Nuisance Notices.	Voluntarily on Owners' part.	Total.
Barracks and other Premises reconstructed or reconditioned	209	275	484
Barracks demolished and Sites left vacant ...	16	4	20
Barracks vacated	19	5	24
Total	244	284	528

FOOD.

The health of a community is so closely related to the nature, quality and amount of its food supply that it is no exaggeration to say that it is the most important single problem confronting a public health officer. To secure good, clean, pure and wholesome food perpetual vigilance is needed and this is all the more desirable where there is a diverse mixture of races with different food habits such as obtains in the City of Port-of-Spain. A tour of the various Chinese, Indian and Creole hotels, restaurants, cookshops, parlours &c., in the down town area of the City is an experience worth having and illustrates very forcibly the literal truth of the saying "One man's meat is another man's poison."

The Department is actively engaged in securing clean, pure, fresh, wholesome and palatable food, but again wishes to stress the importance of the educative aspect of the problem. Seeing that the knowledge possessed by the medical profession as regards a balanced diet, the diseases associated with deficient diets, the dangerous germs that carelessly handled, inefficiently preserved food may harbour, is only comparatively recent, it is not surprising to find the food selling and food consuming general public entirely ignorant of the elements of this important subject, and it is only by a campaign of education, beginning in the schools and extending to adults in their societies, clubs, meeting places &c., that a real and true foundation can be laid.

I have already, in a previous report, alluded to the fact that a large number of itinerant vendors are so poor that they cannot purchase the requirements essential to keeping food clean and to protecting it from dirt, the dust of streets, and the ubiquitous housefly. A properly covered tray, some clean clothes and an apron are very often far beyond the reach of their pockets. In such cases as these the various charitable organisations of the City, and particularly the Bruce Stephens Trust, render valuable service by supplying the necessary money to purchase requirements, and the writer wishes to record his gratitude for the improvement in the food supply thus effected.

SALE OF FOODSTUFFS BYE-LAWS.

Registration of Shops and other Places where Food is Sold.

Shops and Refreshment Parlours	64
Cookshops and Parlours	6
Shops and Groceries	164
Parlours and Restaurants	202
Spirit Shops	5
Vegetable and Fruit Shops	42
Ice Cream and Tea Shops	18
Confectionery and Honey Shops	7
Milk Bars	5
Bakehouses and Bread Shops	48
Aerated Water Factories	6
Hotels	8
Fry Shops	9
Cocoa and Coffee Factories	5
Ice Depots	1
Meat Shops	1
	591

Registration of Vendors.

Bread and Cakes	159
Confectionery	21
Cooked Food including Fries, Souse &c.	43
Meat, Fish and Cheese	96
Ice Cream and Palets	69
Sweet Drinks	41
Vegetables, Greens and Fruit	238
Miscellaneous	80
Total	747
No. of Badges issued to itinerant vendors	503
No. of Oyster Vendors licensed under Sale of Oysters Bye-laws	7

Foodstuffs seized and destroyed under Part X (a) of the Public Health Ordinance, Cap 98.

Bananas	21	Onions	22 pounds
Beef	30 pounds	Oxpluck	1 do.
Bread	21 loaves	Plantains	1,351
Cakes	22	Roast Beef	6 tins
Cheese	17 pounds	Sardines	188 tins
Corned Beef	11 tins	Sausage	28 tins
Fish	50 pounds	Spinach	3 bundles
Herrings	3 tins	Tomatoes	1 pounds
Ice Cream Cones	10	Tomato Paste	9 tins

Unsound Foodstuffs voluntarily surrendered by Shopkeepers to the Public Health Department for destruction.

Sausage	1 tins 26, barrels	Grapes	18 boxes

VITAL STATISTICS OF THE DISTRICT.

Comparative Summary of Vital Statistics.

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

	1921	1931	1937	1938	1939
Area of City in Acres (pastures and open spaces included)	1,733	1,733	2,039	2,372	2,540
Estimated Mean Population	61,336	70,462	77,044	86,698	90,375
Density of Population (persons per acre)	34.2	39.3	37.7	37.4	35.58
Total Live Births	1,687	1,956	2,273	2,591	2,752
Birth Rate	27.28	27.76	29.50	30.69	30.45
Still Births Registered	154	139	197	171	190
Still Birth Rate (per 1,000 Live Births registered)	91.3	71.1	86.7	66.0	69.0
Marriages registered	534	622	737	892	988
Marriage Rate	8.64	8.33	9.57	10.56	10.93
Total Deaths	1,659	1,223	1,169	1,410	1,516
Death Rate	26.83	17.36	15.17	16.70	16.77
Natural Increase of Population	28	733	1,104	1,181	1,236
Deaths under one year	287	222	237	204	242
Infant Mortality Rate : Deaths under one year per 1,000 births registered	170.12	113.50	104.26	78.73	87.94
Death Rates :					
Notifiable Infectious Diseases	6.21	3.14	3.36	2.66	2.87
Pulmonary Tuberculosis	2.49	1.90	1.84	1.52	1.85
Tuberculosis (other forms)	.26	.10	.26	.09	.17
Enteric Fever	1.25	.16	.09	.19	.17
Pneumonia (all forms)	1.97	.92	1.10	.83	.65
Bronchitis	1.36	.97	.32	.56	.59
Diphtheria	.02	.03	.05	.04	.02
Malaria	.89	.54	.27	.37	.21
Syphilis	.21	.26	.23	.34	.29
Diarrhoea and Enteritis	1.91	.78	.69	.50	.50
Influenza	.26	.06	.04	.06	.03
Ankylostomiasis	.15	.03	.03	.08	.02
Bright's Disease and Nephritis	2.09	1.14	.82	.89	.67
Diseases of the Heart and Blood Vessels	2.65	2.60	2.22	2.23	1.97
Diseases of the Nervous System including Cerebral Haemorrhage	1.70	1.15	1.31	1.41	1.59
Cancer and other Malignant Diseases	.63	.64	.88	.83	.84

Comparative Summary of Vital Statistics

Port-of-Spain.	1929. Population 67,356		1930. Population 68,703		1931. Population 70,462		1932. Population 71,666		1933. Population 72,005		1934. Population 73,671	
	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.
Total Births	1,895	28.13	1,935	28.16	1,956	27.76	2,021	28.44	2,167	30.10	2,185	29.90
Total Deaths	1,503	22.31	1,308	19.04	1,223	17.36	1,125	15.83	1,304	18.11	1,228	16.81
Marriages	670	9.95	610	8.88	622	8.83	660	9.29	658	9.14	635	8.69
Natural increase or decrease	+392	....	+627	....	+733	....	+896	....	+863	....	+967	....
Deaths of Infants under 1 year	250	*131.93	233	*120.41	222	*113.50	207	*102.42	264	*121.83	243	*111.21
Deaths from Notifiable Infectious Diseases	222	3.30	229	3.33	221	3.14	182	2.56	236	3.28	264	3.61
Do. Enteric Fever	13	0.19	16	0.23	11	0.16	4	0.06	10	0.14	25	0.34
Do. Pulmonary Tuberculosis	129	1.92	141	2.05	134	1.90	112	1.58	129	1.79	125	1.71
Do. Tuberculosis (other forms)	24	0.36	14	0.20	7	0.10	10	0.14	21	0.29	10	0.14
Do. Pneumonia (all forms)	56	0.83	55	0.80	65	0.92	55	0.77	76	1.06	99	1.35
Do. Diphtheria	....	....	1	0.01	2	0.03	....	....	....	....	5	0.07
Do. Encephalitis Lethargica	....	....	1	0.01	....	....	1	0.01	....	....	....	....
Do. Acute Poliomyelitis	....	....	1	0.01	2	0.03	....	....	....	....	....	....
Do. Malaria	38	0.56	40	0.58	38	0.54	36	0.51	15	0.21	26	0.36
Do. Dysentery	23	0.34	11	0.16	18	0.26	12	0.17	10	0.14	5	0.07
Do. Ankylostomiasis	4	0.06	1	0.01	2	0.03	1	0.01	1	0.01	1	0.01
Do. Syphilis	36	0.53	30	0.44	18	0.26	26	0.37	22	0.31	27	0.37
Do. Influenza	8	0.12	9	0.13	4	0.06	3	0.04	9	0.12	2	0.03
Do. Diarrhœa and Enteritis	53	0.79	58	0.84	55	0.78	56	0.79	42	0.58	40	0.55
Do. Bronchitis	77	1.14	67	0.98	68	0.97	51	0.72	51	0.71	45	0.62
Do. Cancer and other Malignant Diseases	53	0.79	33	0.48	45	0.64	44	0.62	57	0.79	52	0.71
Do. Cardiac and Vascular Diseases	267	3.96	194	2.82	183	2.60	175	2.46	182	2.53	160	2.19
Do. Bright's Disease and Nephritis	82	1.22	94	1.37	80	1.14	71	1.00	69	0.96	48	0.66
Do. Diseases of the Nervous System including Cerebral Haemorrhage	136	2.02	99	1.44	81	1.15	82	1.15	107	1.49	87	1.19
Still Births	158	†83.4	138	†71.3	139	†71.1	160	†79.2	200	†92.3	163	†74.6

*Infant Mortality Rate—Per 1,000 Live Births.

for the years 1929 to 1939.

1935. Population 74,301		1936. Population 75,680		1937. Population 77,044		1938 ‡Population 88,698.		1939. Population 90,375		Average for preceding 10 years 1929-1938.	
Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.
2,319	31.21	2,295	30.33	2,273	29.50	2,591	30.69	2,752	30.45	2,136.7	29.42
1,109	14.93	1,024	13.53	1,169	15.17	1,410	16.70	1,516	16.77	1,240.3	16.98
659	8.87	659	8.71	737	9.57	892	10.56	988	10.93	680.2	9.25
+1210	....	+1271	....	+1104	....	+1181	....	+1238	....	+ 923.4	....
181	*78.05	149	*64.92	237	*104.26	204	78.73	242	*87.94	219.0	102.73
213	2.87	231	3.05	259	3.36	225	2.66	259	2.87	228.2	3.12
19	0.26	6	0.08	7	0.09	16	0.19	15	0.17	12.7	0.17
109	1.47	119	1.57	142	1.84	128	1.52	167	1.85	126.8	1.74
7	0.09	5	0.07	20	0.26	8	0.09	15	0.17	12.6	0.17
76	1.02	97	1.28	85	1.10	70	0.83	59	0.65	73.4	1.00
2	0.03	4	0.05	4	0.05	3	0.04	2	0.02	2.1	0.03
....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	1	0.01	....	....	....	....	....	....
22	0.30	13	0.17	21	0.27	31	0.37	19	0.21	28.0	0.39
4	0.05	5	0.07	7	0.09	6	0.07	2	0.02	10.1	0.14
2	0.03	2	0.03	2	0.03	7	0.08	2	0.02	2.3	0.03
26	0.35	16	0.21	18	0.23	29	0.34	26	0.29	24.8	0.33
4	0.05	3	0.04	3	0.04	5	0.06	3	0.03	5.0	0.07
35	0.47	30	0.40	53	0.69	42	0.50	45	0.50	46.4	0.64
50	0.67	31	0.41	25	0.32	47	0.56	53	0.59	51.2	0.71
48	0.65	59	0.78	68	0.88	70	0.83	76	0.84	52.9	0.72
143	1.92	178	2.35	171	2.22	186	2.23	178	1.97	193.9	2.53
55	0.74	49	0.65	63	0.82	75	0.89	61	0.67	68.6	0.95
95	1.28	76	1.00	101	1.31	119	1.41	144	1.59	98.3	1.34
151	†65.1	170	†74.1	197	†86.7	171	†66.0	190	†69.0	164.7	†76.4

† Still-birth Rate—Per 1,000 Live Births.

‡ St. James district with a population of 10,233 was included in the City from 1st June, 1938.

Births and Birth Rates.

Deaths and Death Rates.

During the year under report 1,407 males and 1,345 females were born and 801 males and 715 females died.

The St. James Area still remains the district with the highest mortality rate due, of course, to the fact that here is situated the House of Refuge wherein 304 deaths took place during the year. If these 304 deaths are excluded from the 430 certified as occurring in this sub-district the rate works out at 12.95 per 1,000 population which compares favourably with 14.53 for the City Proper and the East Dry River district and 13.83 for the Belmont district.

Monthly Births and Birth Rates according to Sex.

Month.	Males.	Females.	Both Sexes.	Birth Rate per 1,000 population.
January	116	123	239	31.21
February	102	97	199	28.78
March	139	113	252	32.91
April	111	100	211	28.48
May	108	107	215	28.08
June	99	102	201	27.13
July	110	113	223	29.12
August	104	106	210	27.43
September	96	132	228	30.78
October	141	128	269	35.13
November	150	115	265	35.77
December	131	109	240	31.34
Total	1,407	1,345	2,752	30.45

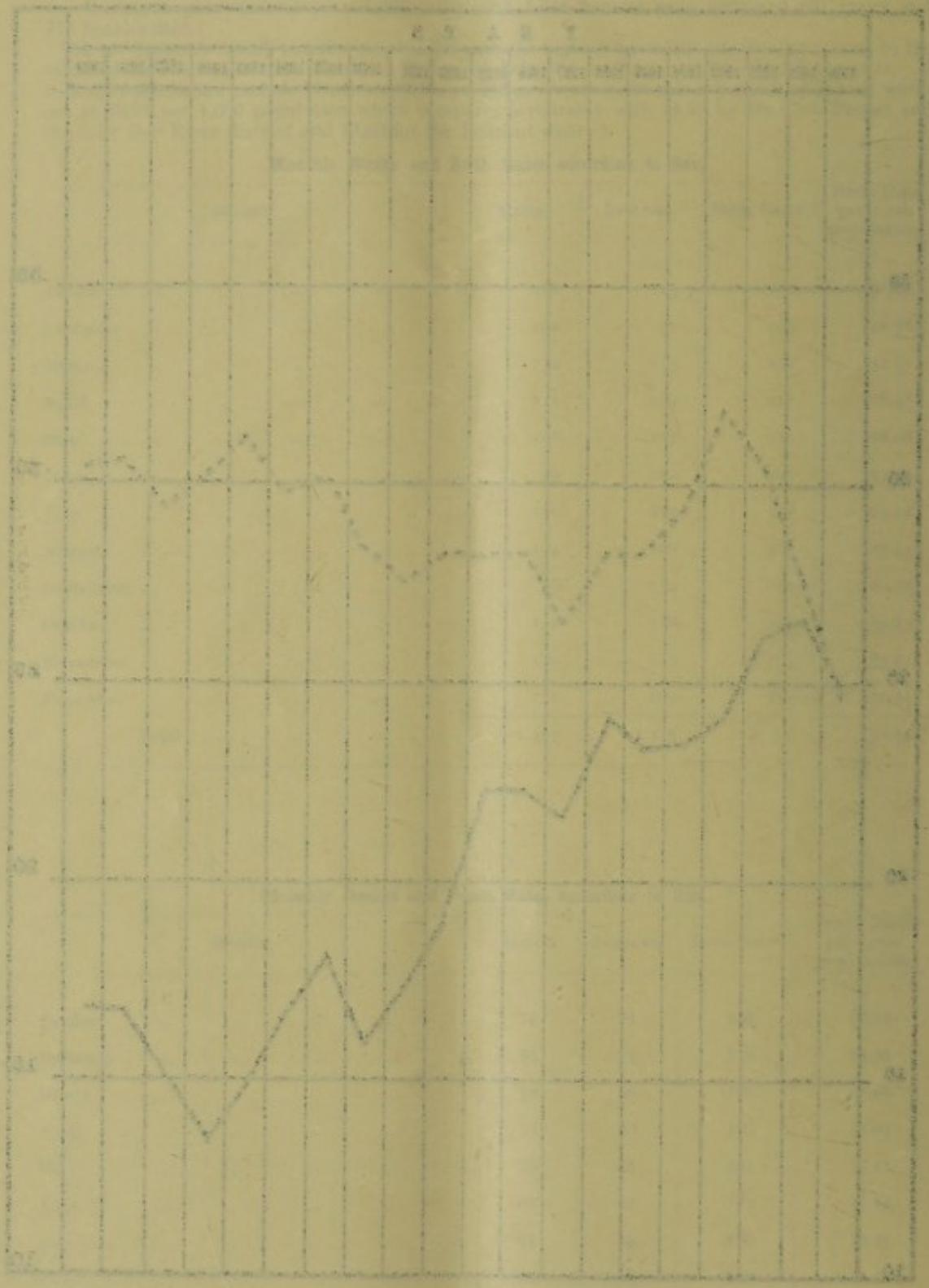
Monthly Deaths and Death Rates according to Sex.

Month.	Males.	Females.	Both Sexes.	Death Rate per 1,000 population.
January	74	71	145	18.94
February	56	72	128	18.51
March	73	53	126	16.46
April	71	52	123	16.61
May	76	65	141	18.41
June	65	62	127	17.14
July	61	55	116	15.15
August	62	46	108	14.10
September	56	48	104	14.04
October	52	57	109	14.24
November	69	63	132	17.82
December	86	71	157	20.50
Total	801	715	1,516	16.77

Chart A

Port-of-Spain

BIRTH-RATES and DEATH-RATES per 1,000 Population, 1920-1939.



Deaths and Death Rates in various Sub-districts of the City for 1939.

Sub-District.	Population.	Deaths. Place of Occurrence: Home, &c.	Colonial Hospital.	Royal Gaol.	House of Refuge.	Total Deaths in Sub-district.	Rate per 1,000 population.
City Proper	32,559	209	258	6	...	473	14.53
St. Clair	1,505	4	1	...	...	5	3.32
East Dry River ...	19,343	142	139	...	...	281	14.53
Belmont	15,258	132	79	...	...	211	13.83
Woodbrook	11,283	80	36	...	...	116	10.28
St. James	10,427	85	41	...	304	430	41.24*
Total	90,375	652	554	6	304	1,516	16.77

* *Vide* following table : "Comparison of Deaths and Death Rates for 1939".

Comparison of Deaths and Death Rates for the year 1939.

	No. of Deaths.	Death Rate per 1,000 population.
(1) City (St. James excluded)	1,086	13.58
(2) City, including St. James	1,516	16.77
(3) City, as in (2), but omitting House of Refuge	1,212	13.52
(4) St. James (House of Refuge excluded)	126	12.95

YEAR 1939.

Classification of Deaths from All Causes.

General Diseases.

	No. of Deaths.
(*a*) Notifiable Infectious Diseases	259
(*b*) Non-notifiable Infectious Diseases	55
Other Diseases.	
(*a*) General Diseases (not included above)	108
(*b*) Diseases of the Central Nervous System and Organs of Special Sense	144
(*c*) Diseases of the Circulatory System	178
(*d*) Diseasess of the Respiratory System	83
(*e*) Disease of the Digestive System	109
(*f*) Non-Venereal Diseases of the Genito Urinary System	127
(*g*) Diseases of the Puerperal State other than Puerperal Fever	11
(*h*) Diseases of Early Infancy	143
(*i*) Old Age	237
(*j*) Affections produced by External Causes	24
(*k*) Other Causes of Death	38
Total	1,516

Year 1939.—Monthly Classification of Deaths from All Causes.

Causes of Death.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	To
I.—General Diseases.													
(a) *Notifiable Infectious Diseases.*													
Enteric Fever	1	..	..	1	1	5	..	3	..	2	1	1	
Diphtheria	..	..	..	..	..	1	..	..	..	..	..	1	
Membranous Croup	..	..	..	..	..	..	..	..	..	..	..	..	
Pulmonary Tuberculosis	17	17	16	13	11	10	14	16	13	1	18	16	
Tuberculosis (other forms)	..	2	4	..	1	2	1	1	..	2	1	1	
Pneumonia and Broncho-Pneumonia	4	5	5	7	12	5	5	2	4	2	6	2	
Chicken Pox	..	..	..	..	..	..	..	..	..	..	..	..	
Ophthalmia Neonatorum	..	..	..	..	..	..	..	..	..	..	..	1	
Plague	..	..	..	..	..	..	..	..	..	..	..	..	
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	
Yellow Fever	..	..	..	..	..	..	..	..	..	..	..	..	
Encephalitis Lethargica	..	..	..	..	..	..	..	..	..	..	..	..	
Acute Poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	..	
Acute Ascending Myelitis	..	..	..	..	..	..	..	..	..	..	..	..	
Cerebro-Spinal Fever	..	..	..	..	..	..	..	..	..	..	..	..	
(b) *Non-Notifiable Infectious Diseases.*													
Malaria	3	..	..	2	3	3	2	..	..	4	..	2	
Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	
Influenza	2	1	..	..	..	..	..	..	..	..	..	..	
Dysentery	1	..	..	..	..	..	..	..	..	..	..	1	
Ankylostomiasis	..	..	..	..	..	..	2	..	..	..	..	..	
Syphilis	1	..	6	2	1	5	..	2	3	4	2	..	
Other Venereal Diseases	..	..	..	..	..	..	..	..	..	..	..	..	
Puerperal Fever	..	1	..	1	..	..	..	.	..	..	..	1	
II.—Other Diseases.													
(a) *General Diseases not included above.*													
Cancer and other Malignant Diseases	9	7	7	5	9	5	6	6	9	4	2	7	
Beri-Beri	..	..	..	..	..	..	..	..	..	..	..	..	
Leprosy *	..	.	..	..	..	..	..	..	..	..	..	..	
Other General Diseases	4	4	1	4	3	5	2	1	4	..	2	2	
(b) *Diseases of the Nervous System and Organs of Special Sense.*													
Simple Meningitis	..	..	..	..	..	..	2	..	1	..	1	..	
Cerebral Haemorrhage	5	3	3	9	9	4	9	1	4	3	6	6	
Apoplexy	..	..	..	..	..	..	..	1	1	2	..	..	
Convulsions of Children under 5 years	..	..	..	1	..	1	..	1	1	..	1	1	
Tabes Dorsalis	1	1	..	..	..	..	..	..	..	..	..	..	
General Paralysis of the Insane	..	..	..	..	..	1	..	..	..	..	.	..	
Other diseases of the Nervous System	10	3	9	6	7	5	2	7	5	5	3	3	
(c) *Diseases of the Circulatory System.*													
Cardiac and Vascular Diseases	16	15	15	18	19	13	16	9	11	13	14	19	
(d) *Diseases of the Respiratory System.*													
Bronchitis	3	6	8	5	1	7	3	3	6	5	2	4	
Other diseases of the Respiratory System	6	4	3	4	2	2	1	2	..	1	2	3	
(e) *Diseases of the Digestive System.*													
Diarrhoea and Enteritis	8	4	4	5	1	1	3	4	2	5	2	6	
Cirrhosis of Liver	2	..	2	2	..	2	3	..	..	..	1	1	
Other diseases of the Digestive System	6	4	3	4	4	3	4	5	4	1	6	7	
(f) *Non-Venereal Diseases of the Genito-Urinary System.*													
Bright's Disease	..	..	..	..	.	..	..	..	..	..	..	..	
Nephritis	8	5	5	2	9	4	4	5	7	4	3	5	
Other Non-Venereal Diseases	7	5	5	3	9	9	6	5	3	2	4	8	
(g) *Diseases of the Puerperal State.* (Other than Puerperal Fever) :													
Puerperal Eclampsia	1	..	..	1	..	..	..	..	..	2	..	..	
Puerperal Haemorrhage	..	..	...	..	..	1	..	..	..	..	..	..	
Other Puerperal Diseases	..	1	1	..	2	..	1	..	..	1	..	..	
(h) *Diseases of Early Infancy*	5	15	11	6	19	12	4	17	11	10	14	19	
(i) *Old Age*	20	18	11	19	11	14	23	14	12	27	37	31	
(j) *Affections produced by External Causes*													
Burns and Scalds	..	..	..	..	..	..	..	1	..	..	..	..	
Accidents and Injuries	3	4	2	1	2	3	..	..	2	..	2	4	
(k) *Other Causes of Death*	2	3	5	2	5	4	3	2	1	4	2	5	
Total	145	128	126	123	141	127	116	108	104	109	132	157	1

* Notifiable under the Lepers Ordinance, Cap. 100.

House of Refuge (St. James)—Causes of Death— 1939.

Causes of Death.	No. of Deaths.	Percentage of Total Mortality from All Causes.
l Age	179	58.88
eases of the Nervous System including Cerebral Haemorrhage	31	10.20
diac and Vascular Diseases	17	5.59
ious Causes	13	4.27
neral Diseases	12	3.95
eases of the Genito-Urinary System	11	3.62
ncer and other Malignant Diseases	10	3.29
philis	9	2.96
eases of the Digestive System	9	2.96
eases of the Respiratory System	6	1.97
ngenital Debility	3	0.99
pes Dorsalis	2	0.66
laria	1	0.33
Inutrition	1	0.33
Total	304	100.00

Classification of Deaths from All Causes according to Sex at different Age Periods.

Period.	Males.	Females.	Both Sexes.	Percentage of Total Mortality at All Ages.
der 1 year	140	102	242	15.96
5 years	32	24	56	3.69
10 do.	3	8	11	0.73
15 do.	7	10	17	1.12
20 do.	18	29	47	3.10
25 do.	30	26	56	3.69
30 do.	28	26	54	3.56
35 do.	45	24	69	4.55
40 do.	31	38	69	4.55
45 do.	51	35	86	5.67
50 do.	47	35	82	5.42
55 do.	44	36	80	5.28
60 do.	61	47	108	7.13
er 60 years	264	275	539	35.55
Total	801	715	1,516	...

Comparison of Deaths at different Age Periods for 12 years, 1928-39.

Year.	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.
1928	1,476	238	16.12	100	6.78	111	7.52	392	26.56
1929	1,503	250	16.63	96	6.32	100	6.65	420	27.94
1930	1,308	233	17.81	67	5.12	103	7.88	322	24.62
1931	1,223	222	18.15	75	6.13	80	6.54	287	23.47
1932	1,125	207	18.40	67	5.96	77	6.84	258	22.93
1933	1,304	264	20.25	68	5.22	72	5.52	332	25.46
1934	1,228	243	19.79	79	6.43	88	7.17	290	23.62
1935	1,109	181	16.32	51	4.60	79	7.12	292	26.33
1936	1,024	149	14.55	58	5.66	93	9.08	250	24.41
1937	1,169	237	20.27	53	4.53	105	8.98	279	23.87
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

Still Births and Still Birth Rates.

Month.	*No. of Still Births*	*Still Birth Rate per 100 of Live Births.*
January	18	7.53
February	11	5.53
March	23	9.13
April	10	4.76
May	12	5.58
June	19	9.45
July	13	5.83
August	19	9.05
September	17	7.46
October	15	5.58
November	16	6.04
December	17	7.08
	190	6.90

INFANT MORTALITY.

The infant mortality rate furnishes a very valuable index of the state of the public health and of the general level of social welfare obtaining in any community and this, because there are a variety of factors which all play a part in producing a low infantile mortality rate. For instance a poor state of general sanitation, overcrowding, bad housing conditions, malnutrition, general poverty as well as inefficient and insufficient ante-natal, intra-natal and post-natal care will all affect adversely the life of mother and child.

It is customary, therefore, to devote special attention to the infant mortality as well as to the maternal mortality rate, with a view to discovering in what direction there must be a concentration of effort by those concerned, if a further reduction of these rates is to be obtained.

It is true that a very commendable reduction of the infantile mortality rate has taken place since 1917 when the Local Authority was first constituted and when, as a result, the compilation of fairly accurate statistics was made possible, and for the last five years a rate below the hundred mark has been achieved. When one considers that in 1917 the rate was 232.77 per 1,000 births the great progress that has been made in twenty years is apparent.

One hundred and twenty-two out of the 242 infants under one year, whose deaths were recorded, did not live beyond one month; in other words, the neo-natal mortality was a little more than one-half the total infantile mortality. The significance of this is that, half the number of those infants who die in the first year are so crippled by the hazards of ante-natal and intra-natal life that they never live to face the dangers of post-natal life. What is needed most urgently is more widespread ante-natal care of expectant mothers, a more ready availability of skilled help during childbirth on the part of both doctor and nurse, and a general raising of economic standards with a wider educational campaign as to the value of good and sound nutrition to father, mother and child.

Infant Mortality.

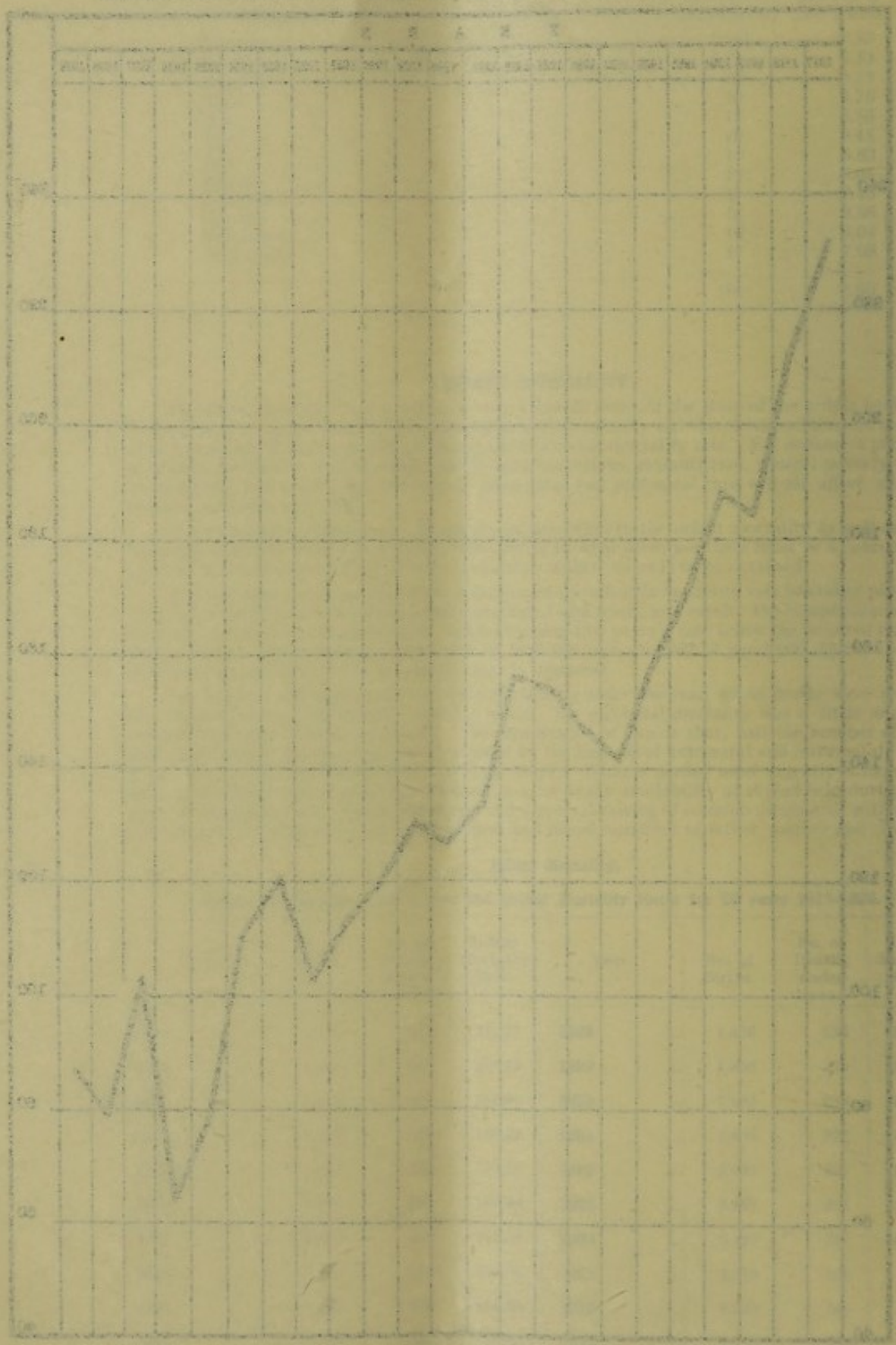
Births and Deaths under 1 year and Infant Mortality Rates for 23 years 1917-1939.

Year.	No. of Births.	No. of Deaths under 1 year.	Infant Mortality Rate.	Year.	No. of Births.	No. of Deaths under 1 year.	Infant Mortality Rate.
1917 ...	1,770	412	232.77	1928 ...	1,868	238	127.41
1918 ...	1,625	347	213.54	1929 ...	1,895	250	131.93
1919 ...	1,590	294	184.91	1930 ...	1,935	233	120.41
1920 ...	1,716	323	188.23	1931 ...	1,956	222	113.50
1921 ...	1,687	287	170.12	1932 ...	2,021	207	102.42
1922 ...	1,881	297	157.89	1933 ...	2,167	264	121.83
1923 ...	2,013	285	141.58	1934 ...	2,185	243	111.21
1924 ...	1,890	278	147.09	1935 ...	2,319	181	78.05
1925 ...	1,820	282	154.95	1936 ...	2,295	149	64.92
1926 ...	1,833	287	156.57	1937 ...	2,273	237	104.26
1927 ...	1,753	236	134.63	1938 ...	2,591	204	78.73
				1939 ...	2,752	242	87.94

Chart B

Port-of-Spain

INFANT MORTALITY RATES per 1,000 Live Births, 1917-1939.



Causes of Deaths of Infants under 1 year for 1939 and 1938 contrasted.

Causes of Death.	1939.			1938.		
	M	F.	Both Sexes.	M	F.	Both Sexes.
Abscess of Kidneys	...	...	...	1	...	1
Acute Indigestion	...	...	...	...	1	1
Anaemia (Sickle Cell)	...	...	...	...	1	1
Ascariasis	1	2	3	...	...	...
Asphyxia (mucus in air passages)	...	...	...	1	...	1
Asphyxia Neonatorum	6	1	7	5	2	7
Atelectasis	3	2	5	...	3	3
Avitaminosis	...	1	1	...	...	...
Bronchitis	15	10	25	7	6	13
Cerebral Anaemia	...	...	...	1	...	1
Cerebral Haemorrhage	3	2	5	3	2	5
Cirrhosis of Liver	...	1	1	...	...	...
Colic	...	1	1	1	...	1
Congenital Debility	18	8	26	8	10	18
Congenital Heart Disease	...	2	2	...	...	...
Congenital Malformation of Heart	...	1	1	...	...	...
Congenital Pyloric Stenosis	1	...	1	...	...	...
Congenital Syphilis	...	...	...	...	4	4
Convulsions	2	2	4	1	...	1
Cystic Hygroma	...	...	...	1	...	1
Diarrhoea	4	...	4	3	1	4
Enteritis	4	1	5	1	...	1
Entero-Colitis	...	1	1	...	2	2
Gastro-Enteritis	12	11	23	7	7	14
Gastro-Intestinal Haemorrhage	...	...	...	1	...	1
Haemorrhagic Disease of New Born	2	...	2	...	...	...
Haemorrhagic Enteritis	...	...	...	1	2	3
Hepatitis	...	...	...	1	...	1
Icterus Neonatorum	2	1	3	...	...	...
Infantile Atrophy	1	2	3	2	...	2
Infected Adenoids, Asphyxia	...	...	...	1	...	1
Intra-Thoracic Haemorrhage	...	1	1	...	...	...
Intussusception	...	...	...	1	1	2
Laryngeal Obstruction	1	...	1	...	...	...
Malaria	...	2	2	...	...	...
Malnutrition	3	10	13	2	3	5
Marasmus	8	6	14	6	10	16
Meningitis	1	...	1	3	...	3
Meningo-Myelocele	...	...	...	1	...	1
Miliary Tuberculosis	...	1	1	...	...	...
Morbus Vasculosus Neonatorum	...	...	...	...	1	1
Neo-natal Death	4	1	5	2	4	6
Neo-natal Haemorrhage	1	...	1	1	1	2
Nephritis	...	...	...	1	...	1
Ophthalmia Neonatorum	1	...	1	...	...	...
Peritonitis	...	...	...	...	1	1
Pleurisy	...	...	...	1	...	1
Pneumonia	9	8	17	8	6	14
Prematurity	27	18	45	26	24	50
Pulmonary Congestion	2	2	4	4	1	5
Pyaemia, Septic Arthritis	...	...	...	1	...	1
Pyloric Spasm	...	...	...	...	1	1
Retention of Urine	...	...	...	...	1	1
Sepsis of New Born	1	...	1	...	...	...
Septicaemia	...	...	...	1	...	1
Spina Bifida	1	1	2	1	...	1
Tetanus Neonatorum	...	...	...	...	1	1
Toxaemia	1	1	2	1	...	1
Tuberculous Meningitis	2	...	2	...	...	...
Umbilical Haemorrhage	3	2	5	1	1	2
Undefined	1	...	1	...	...	...
Total	140	102	242	107	97	204

Grouping of Causes of Deaths of Infants under 1 year.

Group.	Causes of Deaths.	No. of Deaths.	Percentage of Total Infant Mortality.
I	Diseases and conditions commonly attributed to **ante-natal causes,** including : atelectasis, atrophy, congenital debility, congenital heart disease, congenital malformation of heart, icterus, malnutrition, marasmus, prematurity, spina bifida	114	47.11
II	Diseases of the Alimentary System	36	14.87
III	Diseases of the Respiratory System	47	19.42
IV	Tuberculosis (all forms)	3	1.24
V	Malaria	2	0.83
VI	Fourteen other causes of death, mostly **intra-natal,** including : ascariasis, asphyxia neonatorum, avitaminosis, cerebral haemorrhage, convulsions, intra-thoracic haemorrhage, meningitis, neo-natal death, neo-natal haemorrhage, ophthalmia neonatorum, sepsis of new born, toxaemia, umbilical haemorrhage and undefined	40	16.53
	Total	242	100.00

Duration of Life of Infants dying under one year of age.

Duration of Life.	1939. Males.	Females	Both Sexes.	Percentage of total deaths under 1 year	1938. Males.	Females	Both Sexes.	Percentage of total deaths under 1 year.
Under 1 day	11	3	14	5.78	15	10	25	12.25
1 day and under 1st week ..	46	26	72	29.75	32	21	53	25.98
1st week do. 2nd week ..	8	10	18	7.44	6	6	12	5.88
2nd week do. 3rd week ..	5	1	6	2.48	7	13	20	9.80
3rd week do. 4th week ..	8	4	12	4.96	3	4	7	3.43
Total under 1 month	78	44	122	50.41	63	54	117	57.35
1 month to 2 months	14	10	24	9.92	12	7	19	9.31
Over 2 to 3 do.	5	9	14	5.78	6	5	11	5.39
,, 3 to 4 do.	4	3	7	2.89	..	4	4	1.96
,, 4 to 5 do.	1	7	8	3.31	4	5	9	4.41
,, 5 to 6 do.	12	7	19	7.85	4	3	7	3.43
,, 6 to 7 do.	6	4	10	4.13	3	2	5	2.45
,, 7 to 8 do.	8	4	12	4.96	5	4	9	4.41
,, 8 to 9 do.	5	4	9	3.72	5	3	8	3.92
,, 9 to 10 do.	3	7	10	4.13	2	7	9	4.41
,, 10 to 11 do.	4	3	7	2.90	2	3	5	2.45
,, 11 months and under 1 year..	..	..	..	..	1	..	1	0.49
Total	140	102	242	..	107	97	204	..

Infant Mortality under one month for the years, 1930-39.

Year.	No. of Deaths under 1 month.	Percentage of Total Deaths under 1 year.
1930	92	39.48
1931	79	35.58
1932	75	36.23
1933	106	40.15
1934	101	41.56
1935	91	50.28
1936	61	40.94
1937	110	46.41
1938	117	57.35
1939	122	50.41

Causes of Death of the pre-School Child.

Fifty-six children between the ages of 1-5 died during the year under report. In six (10.71%) of these death was attributed to what are commonly looked upon as ante-natal causes—causes which have their origin in disease or accident in the father or mother and which have an adverse effect on the development and health of the child.

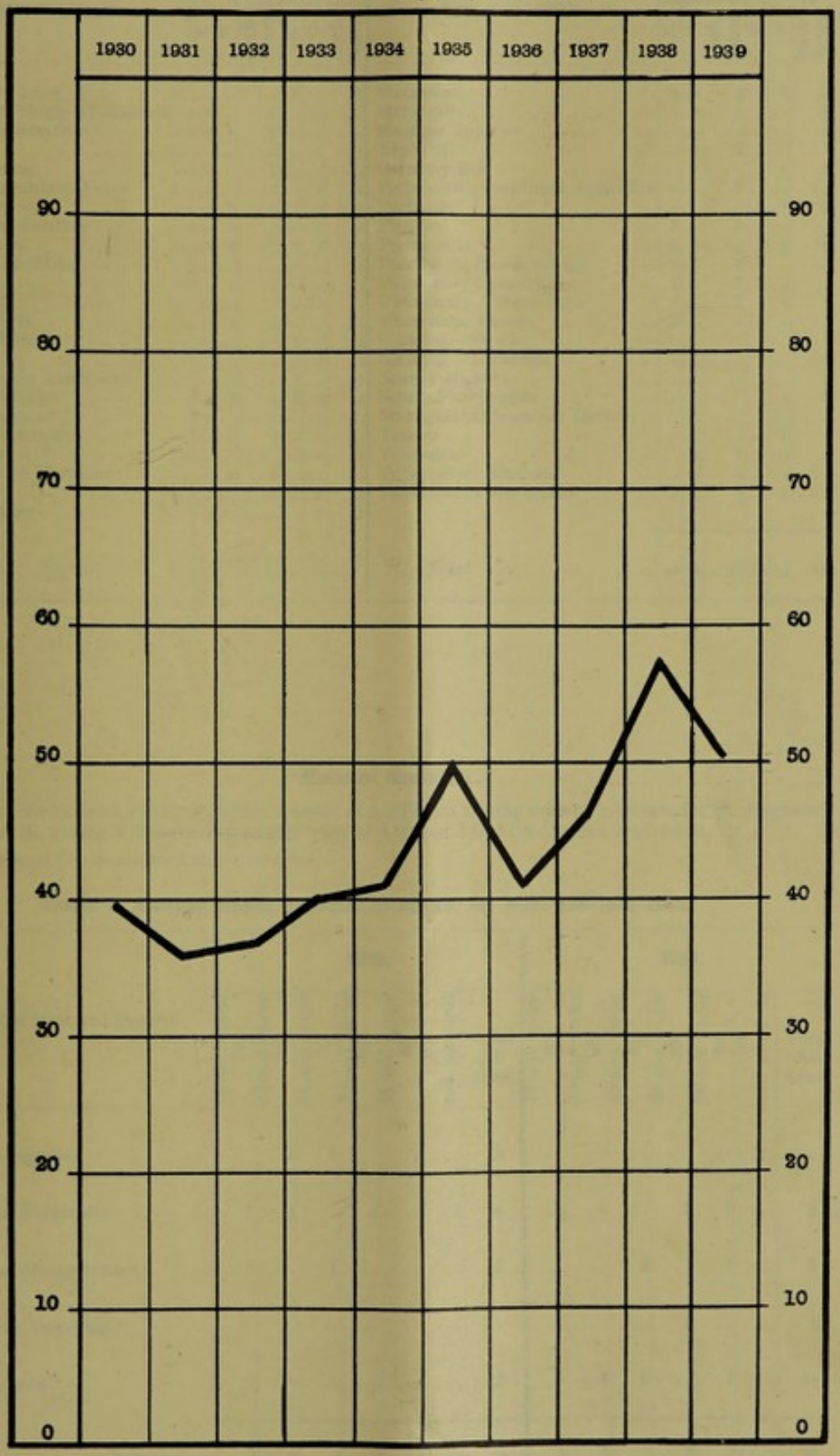
Grouping of Causes of Deaths of Children 1 to 5.

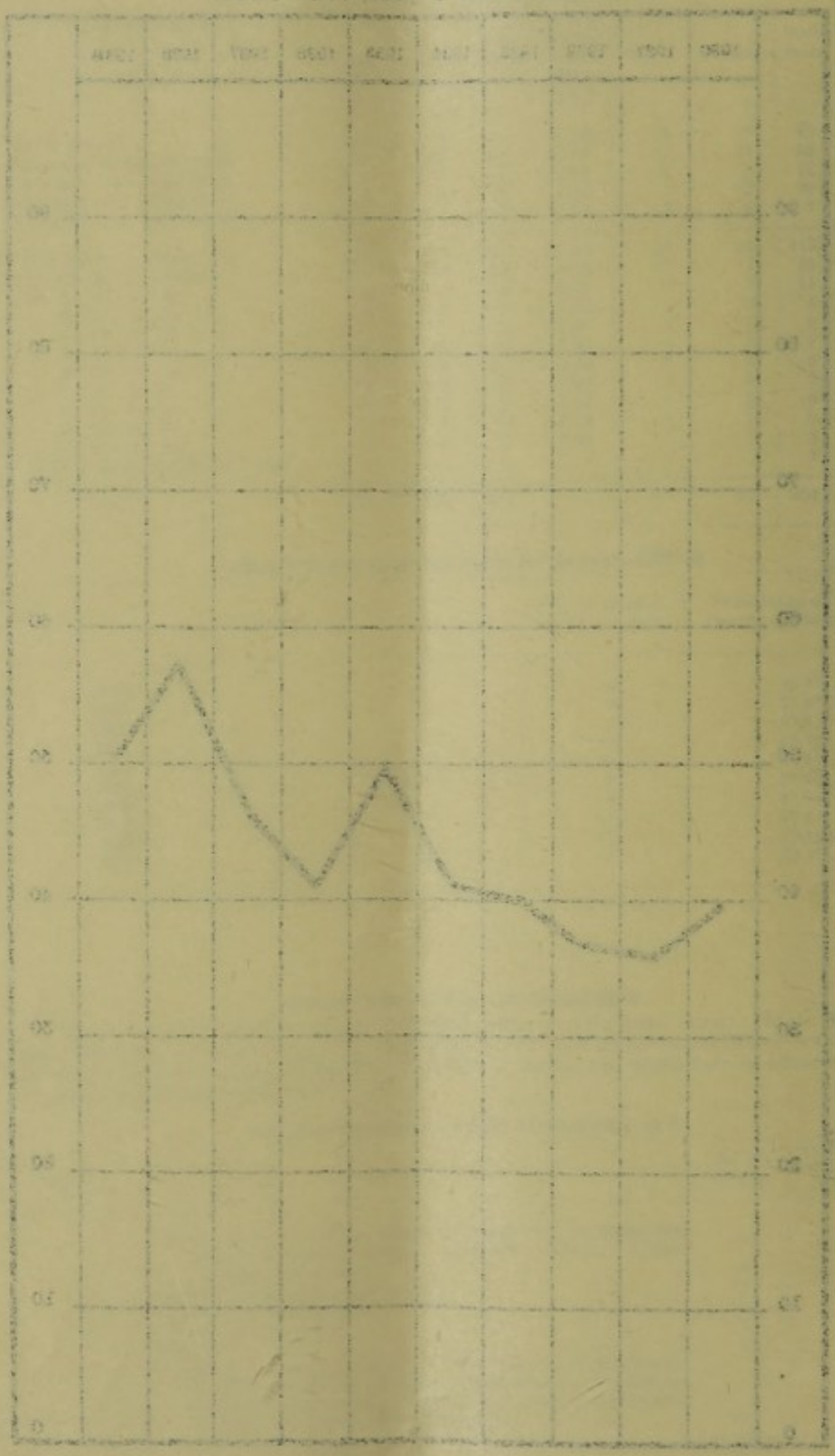
Group.	Causes of Deaths.	No. of Deaths.	Percentage of Total Mortality at ages 1-5.
I	Diseases and conditions commonly attributed to **ante-natal causes,** including atrophy, congenital debility, hydrocephalus, marasmus	6	10.71
II	Diseases of the Alimentary System	5	8.93
III	Diseases of the Respiratory System	22	39.28
IV	Tuberculosis (all forms)	8	14.29
V	Malaria	1	1.79
VI	Eleven other causes of death, including abscess of thigh with toxaemia, acute rheumatism, avitaminosis, convulsions, diptheria, endocarditis, ingestion of kerosine, meningitis, nephritis, rheumatic fever, toxaemia	14	25.00
	Total	56	100.00

Chart C

Port-of-Spain

Percentage of ANTE-NATAL GROUP to TOTAL DEATHS of Infants under 1 year, 1930-1939.





Causes of Deaths of Children at Ages 1 to 5 for years 1939 and 1938.

Causes of Death.	1939.			1938.			Causes of Death.	1939.			1938.		
	M	F.	Both Sexes.	M	F.	Both Sexes.		M	F.	Both Sexes.	M	F	Both Sexes.
Abscess of Lung	...	...	...	1	...	1	Marasmus	2	1	3	3	1	4
Abscess of Thigh—Toxaemia	1	...	1	...	...	...	Meningitis	...	1	1	5	...	5
Acute Rheumatism	1	...	1	...	...	...	Multiple Injuries	..	...	...	1	..	1
Anaemia	...	...	...	1	...	1	Nephritis	...	1	1	1	...	1
Avitaminosis	1	...	1	...	...	...	Osteomyelitis	...	...	...	...	1	1
Bilious Remittent Fever	...	...	...	...	1	1	Peritonitis—Ruptured Appendix	1	...	1	..	...	...
Bronchitis	4	2	6	1	2	3	Pertussis	...	...	...	...	1	1
Congenital Debility	1	...	1	...	2	2	Pleurisy	1	...	1	...	...	...
Convulsions	1	2	3	1	2	3	Pneumonia	9	4	13	8	7	15
Diabetes Mellitus	...	...	...	1	...	1	Post Nasal Haemorrhage ...	1	...	1	...	...	...
Diarrhoea	...	1	1	...	...	...	Pulmonary Congestion ...	1	...	1	1	3	4
Diphtheria	2	...	2	2	..	2	Pulmonary Tuberculosis ...	1	...	1	1	1	2
Endocarditis	...	1	1	...	..	...	Rheumatic Fever	1	...	1	...	...	...
Enteric Fever	...	...	...	1	1	2	Scalding—Shock	...	...	..	1	...	1
Enteritis	...	...	..	...	2	2	Scalding—Toxaemia	...	...	...	1	...	1
Fever (origin unknown) ...	...	...	...	1	..	1	Scurvy-Rickets	...	...	...	1	...	1
Gastro-Enteritis	2	1	3	2	2	4	Septic Pharyngitis	..	...	...	...	1	1
Hydrocephalus	1	..	1	...	...	...	Strangulated Inguinal Hernia ..	..	...	...	1	...	1
Infantile Atrophy	...	1	1	...	...	...	Tetany ...	...	...	...	...	1	1
Influenza	..	...	...	...	1	1	Toxaemia	...	1	1	1	...	1
Ingestion of Kerosine	1	...	1	...	...	...	Tuberculous Enteritis ...	...	2	2	...	...	...
Malaria	1	...	1	...	2	2	Tuberculous Meningitis ...	2	3	5	...	1	1
Malnutrition	...	...	...	...	1	1							
							Total	32	24	56	35	34	69

Maternal Mortality.

Fourteen mothers lost their lives as a result of conditions arising from or associated with pregnancy or childbirth, giving a maternal mortality rate of 5.09 per 1,000 live births registered.

Puerperal Sepsis claimed three victims.

Causes of Maternal Deaths according to age for the years 1939 and 1938.

Causes of Maternal Deaths.	1939.							1938.						
	15 and under 20	20 and under 25	25 and under 30	30 and under 35	35 and under 40	40 and upwards	Total All ages.	15 and under 20	20 and under 25	25 and under 30	30 and under 35	35 and under 40	40 and upwards	Total All ages.
Puerperal Sepsis	..	1	1	..	1	..	3	..	..	..	..	..	..	..
Puerperal Eclampsia	1	1	..	1	..	1	4	..	1	..	1	1	..	3
Puerperal Haemorrhage ..	1	..	1	..	..	..	2	..	..	2	..	1	..	3
Pernicious Vomiting	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Other Causes	2	..	..	3	..	..	5	1	4	5	..	1	..	11
Total ..	4	2	2	4	1	1	14	1	5	7	2	3	..	18

Comparison of Birth, Death, Infant and Maternal Mortality Rates in Port-of-Spain for Quinquennium 1934-38 and yearly averages for that period with corresponding rates for 1939.

Year.	Birth-rate.	Death-rate.	Infant Mortality rate.	Maternal Mortality.					
				No. of Deaths.	Rate per 1,000 live births registered.					
					Sepsis.	Eclampsia.	Haemorrhage.	Pernicious Vomiting.	Other Causes.	Total.
1934 ..	29.90	16.81	111.21	18	1.83	1.37	1.37	0.46	3.20	8.24
1935 ..	31.21	14.93	78.05	16	0.86	2.16	0.43	0.43	3.02	6.94
1936 ..	30.33	13.53	64.92	12	1.31	1.31	0.44	..	2.18	5.23
1937 ..	29.50	15.17	104.26	11	0.44	1.76	..	0.44	2.20	4.84
1938 ..	30.69	16.70	78.73	18	..	1.16	1.16	0.39	4.25	6.95
Yearly Average for quinquennium 1934-1938 ..	30.33	15.43	87.43	15	0.89	1.55	0.68	0.34	2.97	6 44
Year 1939 ..	30.45	16.77	87.94	14	1.09	1.45	0.73	..	1.82	5.09

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES.

The notifiable infectious diseases were the same as enumerated in last year's report. No change in number or in kind took place during the year 1939.

Five hundred and twenty-seven notifications of these diseases were received during the year and deaths certified to them amounted to 259. This represents an increase of 43 notifications and 34 deaths over the corresponding figure for the year 1938 due to a large extent, to a mild epidemic of diphtheria which prevailed throughout the year in the former case, and to a larger number of deaths from Pulmonary Tuberculosis in the latter.

Of the 259 deaths which were certified 168 took place in the Colonial Hospital showing that hospital facilities for isolation and current disinfection of infectious diseases were made use of in 64.9 per cent. of cases. As is to be expected the East Dry River district again furnished the largest number of notifications and deaths from these diseases, comparatively speaking.

Distribution of Cases and Deaths from Notifiable Infectious Diseases.

Population,	City Proper. 32,559		St. Clair 1,505		East Dry River 19,343		Belmont 15,258		Woodbrook 11,283		St. James 10,427	
Diseases.	Cases notified.	Deaths	Cases notified.	Deaths	Cases notified.	Deaths	Cases notified.	Deaths	Cases notified.	Deaths	Cases notified.	Deaths
Diphtheria ...	12	1	...	...	12	1	24	...	10	...	3	...
Enteric Fever ...	15	1	1	...	23	3	19	9	3	1	14	1
Pulmonary Tuberculosis ...	78	72	...	1	51	42	23	26	10	12	13	14
Tuberculosis (Other forms) ...	5	6	...	...	4	3	2	4	...	...	2	2
Pneumonia (All forms) ...	23	17	...	...	41	18	24	12	10	6	9	6
Ophthalmia Neonatorum ..	6	...	...	...	11	1	4	...	...	...	2	...
Chicken Pox ...	9	...	...	...	5	...	40	...	12	...	6	...
Acute Poliomyelitis	...	...	...	...	...	...	1	...	...	...	...	...
Total ...	148	97	1	1	147	68	137	51	45	19	49	23
Rate per 1,000 population in each sub-district	4.55	2.98	0.66	0.66	7.60	3.52	8.98	3.34	3.99	1.68	4.70	2.21

Deaths in Hospital from Notifiable Infectious Diseases.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diphtheria	....	....	....	....	...	1	....	....	....	...	....	1	2
Enteric Fever	1	....	....	1	1	5	....	2	....	2	1	1	14
Pulmonary Tuberculosis	10	11	14	10	5	8	10	9	8	2	9	11	107
Tuberculosis (other forms)	....	2	3	....	1	1	1	1	...	2	....	1	12
Pneumonia (all forms)	2	3	4	5	6	2	2	1	2	1	3	1	32
Ophthalmia Neonatorum	...	...	...	....	...	...	...	...	...	...	...	1	1
Total	13	16	21	16	13	17	13	13	10	7	13	16	168

Comparison of Notifications for decennium 1929-38 and 1939.

Notifiable Diseases.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	Yearly average for decennium 1929–1938.	1939.
Diphtheria ..	24	29	31	61	11	38	17	22	30	16	27.9	61
Enteric Fever	35	55	47	20	28	85	76	32	47	59	48.4	75
Pulmonary Tuberculosis	142	124	137	130	135	181	148	143	131	134	140.5	175
Tuberculosis (other forms)	17	14	10	16	22	20	9	10	8	6	13.2	13
Pneumonia ..	70	83	71	71	135	208	165	193	125	101	122.2	107
Ophthalmia Neonatorum	35	29	22	18	40	32	24	24	32	24	28.0	23
Chicken Pox ..	73	29	30	34	39	201	77	48	84	142	75.7	72
Encephalitis Lethargica ..	1	..	..	1	..	..	..	..	1	..	0.3	..
Acute Poliomyelitis	..	..	5	..	3	..	..	3	10	2	2.3	1
Total ..	397	363	353	351	413	765	516	475	468	484	458.5	527

Monthly Notifications of Infectious Diseases.

Diseases	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November.	December.	Total.
Diphtheria	6	3	3	1	1	2	4	4	4	10	9	14	61
Enteric Fever	2	17	5	4	5	13	10	5	2	5	4	3	75
Pulmonary Tuberculosis	15	18	16	9	15	10	19	17	10	25	14	7	175
Tuberculosis (other forms) ..	..	2	3	..	..	1	1	..	2	1	1	2	13
Pneumonia (All forms)	6	3	5	15	10	5	10	15	18	7	9	4	107
Ophthalmia Neonatorum	..	1	4	2	3	1	1	1	4	2	1	3	23
Chicken Pox	..	1	7	7	8	10	3	12	8	2	1	13	72
Acute Poliomyelitis	..	..	..	1	..	..	..	..	..	..	..	..	1
Total	29	45	43	39	42	42	48	54	48	52	39	46	527

Comparison of Deaths from Notifiable Infectious Diseases for Decennium 1929-38 and 1939.

Diseases.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	Yearly average for decennium 1929-38.	1939.
Diphtheria	....	1	2	....	....	5	2	4	4	3	2.1	2
Enteric Fever	13	16	11	4	10	25	19	6	7	16	12.7	15
Pulmonary Tuberculosis	129	141	134	112	129	125	109	119	142	128	126.8	167
Tuberculosis (Other forms)	24	14	7	10	21	10	7	5	20	8	12.6	15
Pneumonia	56	55	65	55	76	99	76	97	85	70	73.4	59
Ophthalmia Neonatorum	...	...	...	...	...	...	...	...	...	...	...	1
Encephalitis Lethargica	....	1	....	1	....	....	....	....	....	....	0.2	....
Acute Poliomyelitis	....	1	2	....	....	....	....	....	1	....	0.4	....
Total	222	229	221	182	236	264	213	231	259	225	228.2	259

Monthly Deaths from Notifiable Infectious Diseases.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diphtheria....	....	....	....	....	....	1	....	....	....	....	....	1	2
Enteric Fever	1	....	....	1	1	5	....	3	....	2	1	1	15
Pulmonary Tuberculosis	17	17	16	13	11	10	14	16	13	6	18	16	167
Tuberculosis (other forms)	...	2	4	....	1	2	1	1	...	2	1	1	15
Pneumonia (all forms)	4	5	5	7	12	5	5	2	4	2	6	2	59
Ophthalmia Neonatorum	....	....	....	....	....	....	....	...	...	...	....	1	1
Total	22	24	25	21	25	23	20	22	17	1	26	22	259

Comparison of Deaths in Hospital and Deaths at Home from Notifiable Infectious Diseases.

Diseases.	Died at Home.	Died at Hospital.	Total Deaths.	Percentage of cases isolated in Hospital before death.	Corresponding percentage for the year 1938.
Diphtheria	...	2	2	100.00	100.00
Enteric Fever	1	14	15	93.33	87.50
Pulmonary Tuberculosis	60	107	167	64.07	68.75
Tuberculosis (other forms)	3	12	15	80.00	75.00
Pneumonia	27	32	59	54.24	57.14
Ophthalmia Neonatorum	...	1	1	100.00	...
Total	91	168	259	64.86	67.11

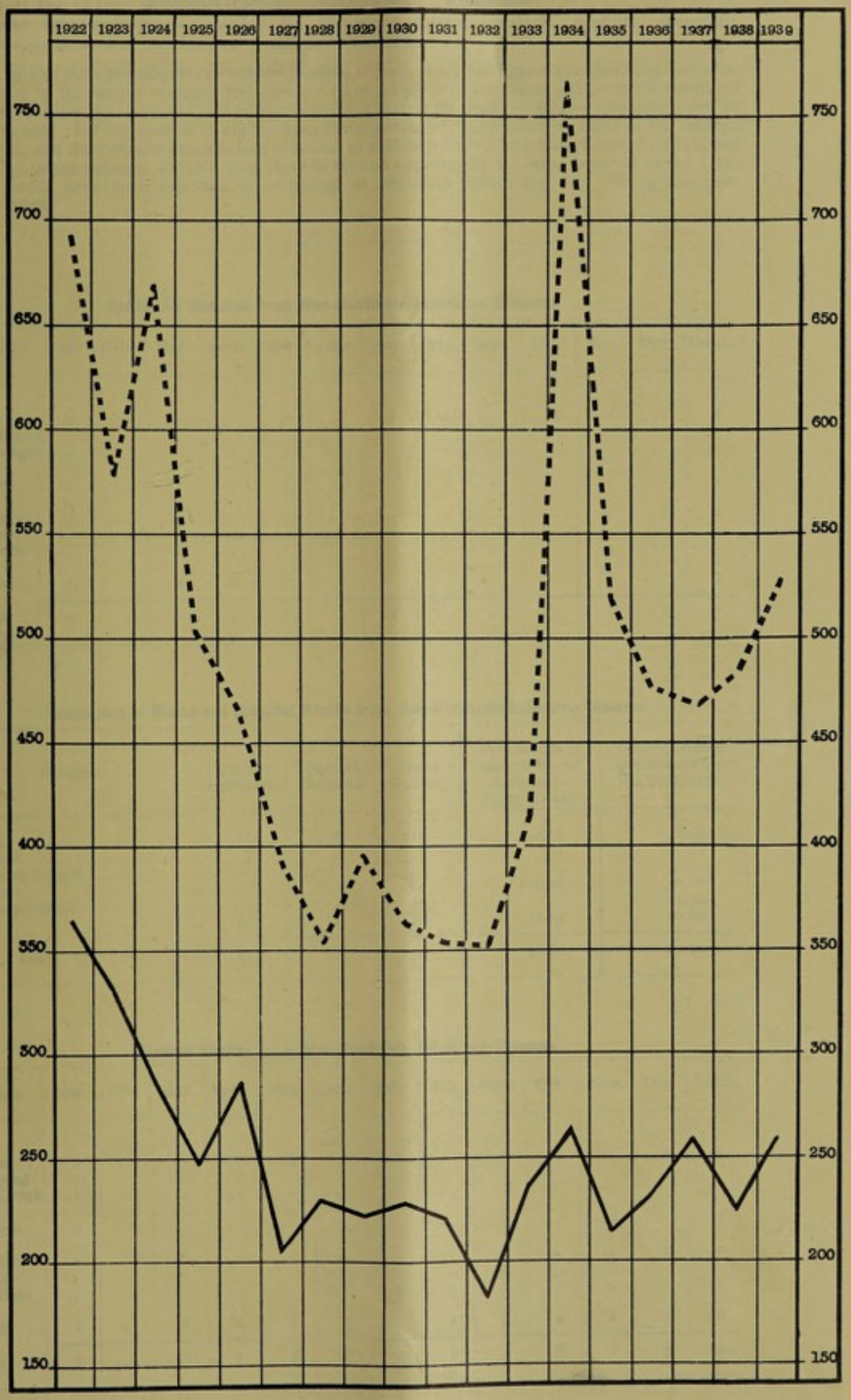
Deaths of Non-Residents at Colonial Hospital from Notifiable Infectious Diseases, &c.

Notifiable Infectious Diseases, &c.	*No. of Deaths.*
Enteric Fever	14
Pulmonary Tuberculosis	72
Tuberculosis (Other forms)	5
Pneumonia	32
Acute Poliomyelitis	1
All other Causes	371
Total....	495

Chart D

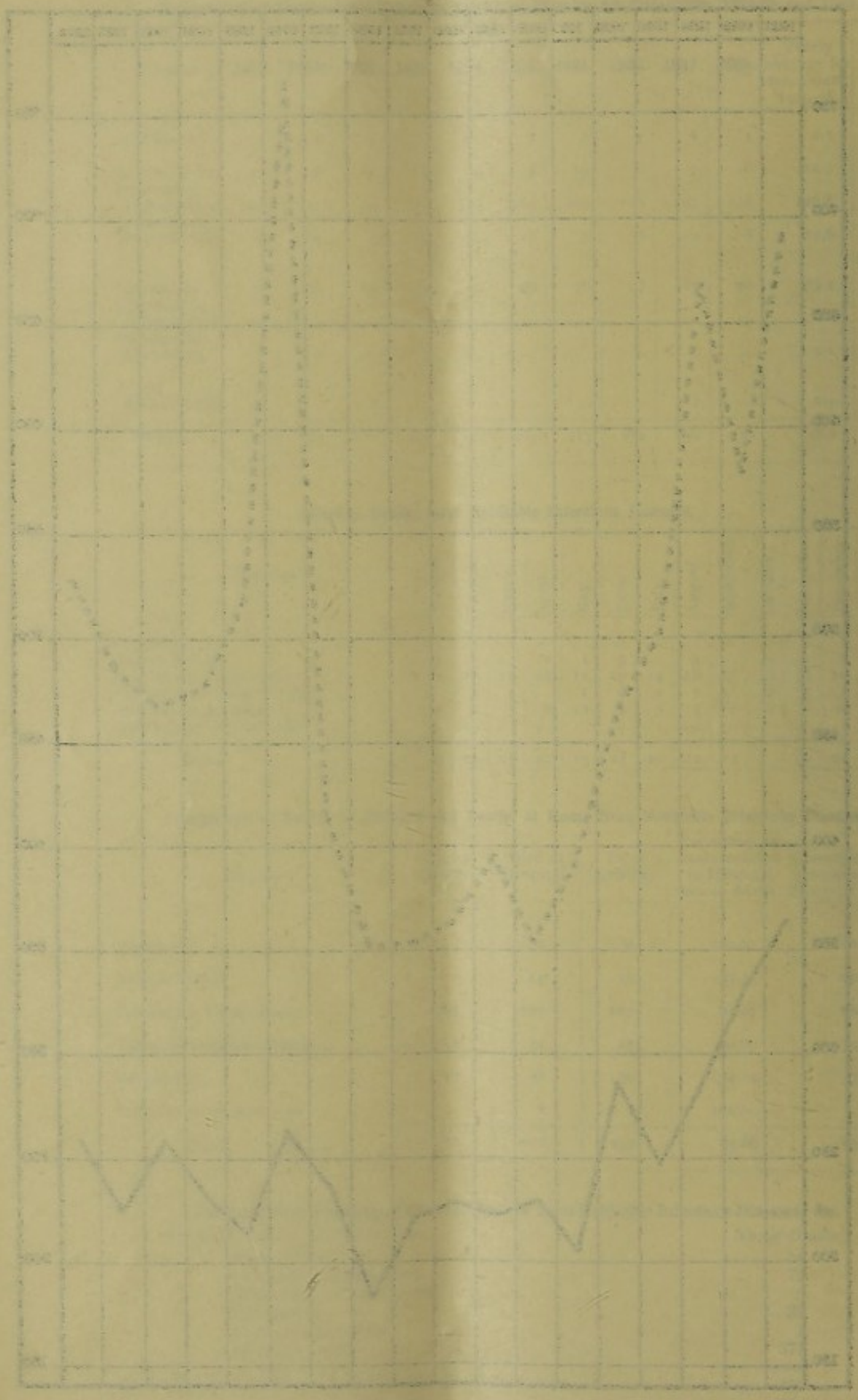
Port-of-Spain

INFECTIOUS DISEASES—Notifications and Deaths, 1922-1939.



NOTIFICATIONS.

DEATHS.



NON-NOTIFIABLE INFECTIOUS DISEASES.

Under this heading are included the important diseases—malaria, syphilis, dysentery, ankylostomiasis, as well as whooping cough and influenza.

An idea of their prevalence can only be guessed at, as no accurate figures are available, and even in the case of the deaths recorded the question of usual place of residence and probable source of infection confuses the issue and makes any important deduction from the figures available open to serious doubt. For instance, it is known from investigation of every death certified in the returns to malaria, and from careful examination of actual as well as potential breeding places of mosquitoes within the urban sanitary district, that there is limited opportunity for being infected in the City, yet 19 deaths have been recorded as occurring at addresses within the City during the year under review.

Deaths in Hospital from Non-Notifiable Infectious Diseases.

Diseases.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Malaria ..	2	..	..	..	2	..	1	..	..	3	..	..	8
Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery	1	..	..	..	..	..	..	..	..	..	..	1	2
Ankylos-tomiasis	..	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis ..	1	..	3	2	..	1	..	..	..	..	..	..	7
Total ..	4	..	3	2	2	1	1	..	..	3	..	1	17

Comparison of Home and Hospital Deaths from Non-Notifiable Infectious Diseases.

Diseases.	Died at Home &c.	Died at Hospital.	Total Deaths.	Percentage of cases isolated in Hospital before death.	Corresponding percentage for the year 1938.
Malaria	11	8	19	42.11	41.94
Influenza	3	..	3	..	..
Whooping Cough	...	..	...	..	..
Dysentery	..	2	2	100.00	50.00
Ankylostomiasis	2	..	2	...	14.29
Syphilis	19	7	26	37.14	20.69
Total	35	17	52	32.69	29.11

Monthly Deaths from Non-Notifiable Infectious Diseases.

Diseases.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Malaria ..	3	..	..	2	3	3	2	..	..	4	..	2	19
Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza ..	2	1	..	..	..	..	..	..	..	..	..	..	3
Dysentery	1	..	..	..	..	..	..	..	..	..	..	1	2
Ankylos-tomiasis	..	..	..	..	..	..	2	..	..	..	..	..	2
Syphilis ..	1	..	6	2	1	5	..	2	3	4	2	..	26
Total ..	7	1	6	4	4	8	4	2	3	8	2	3	52

TUBERCULOSIS.

Pulmonary Tuberculosis.

The problem of tuberculosis continues to be a very pressing one and, indeed, is a cause of great anxiety to workers in the field. And rightly so. Is it not third highest in the list of deaths from all causes? Is it not a fact that the disease as seen here runs a very virulent course? How many cases of Pulmonary Tuberculosis survive beyond a two-year period from the time that the diagnosis is first established? Surely not more than a dozen in any one year.

It is impossible to preserve a quiet mind when one knows that, in this Colony, the unfortunate victim of Pulmonary Tuberculosis is practically doomed. The knowledge that the clinician is so severely handicapped and has such a hopeless task before him throws a greater burden of responsibility on the public health officer. He also does his best but keeps clamouring for more efficient weapons, greater facilities and for a fuller, wider and more closely co-ordinated scheme for dealing with the problem as a whole.

There is nothing further that I can usefully add to what has already been said on this subject in my two previous reports except this, that it is true to say that, were it not for the outbreak of hostilities, the efforts of the Sanatorium Committee would undoubtedly have already fructified in the building of a sanatorium-hospital. The site has actually been chosen and the general layout has been decided upon. All that remains to be done is the drawing up of plans and the commencement of the building programme.

In the meantime, however, the same general measures of prevention and control which have already been detailed and which must have, in large measure, contributed to the steady slow decline of the disease throughout the past twenty years, continue.

Pulmonary Tuberculosis in Port-of-Spain, 1939—Age Distribution of Notifications and Deaths according to Sex.

Age Periods.	Notifications.			Deaths.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Under 1 year	..	..	..	..	..	..
1- 5 years	..	..	..	1	..	1
6-10 do.	..	1	1	..	1	1
11-15 do.	3	1	4	1	3	4
16-20 do.	8	13	21	5	12	17
21-25 do.	13	9	22	9	11	20
26-30 do.	15	12	27	9	11	20
31-35 do.	17	9	26	20	6	26
36-40 do.	9	16	25	10	14	24
41-45 do.	6	8	14	7	6	13
46-50 do.	9	3	12	6	6	12
51-55 do.	3	2	5	5	4	9
56-60 do.	5	1	6	6	1	7
Over 60 years	8	4	12	6	7	13
Total ..	96	79	175	85	82	167

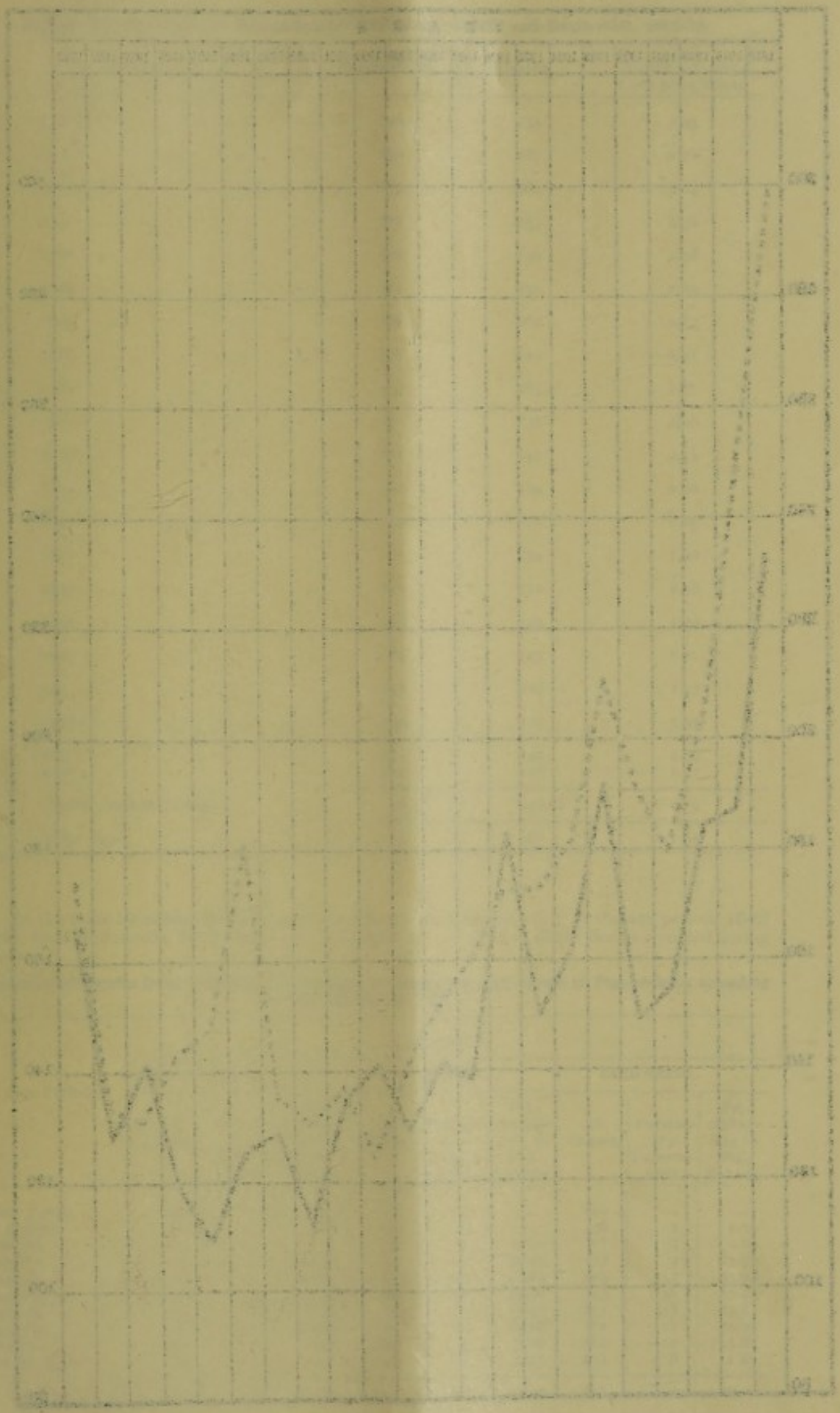
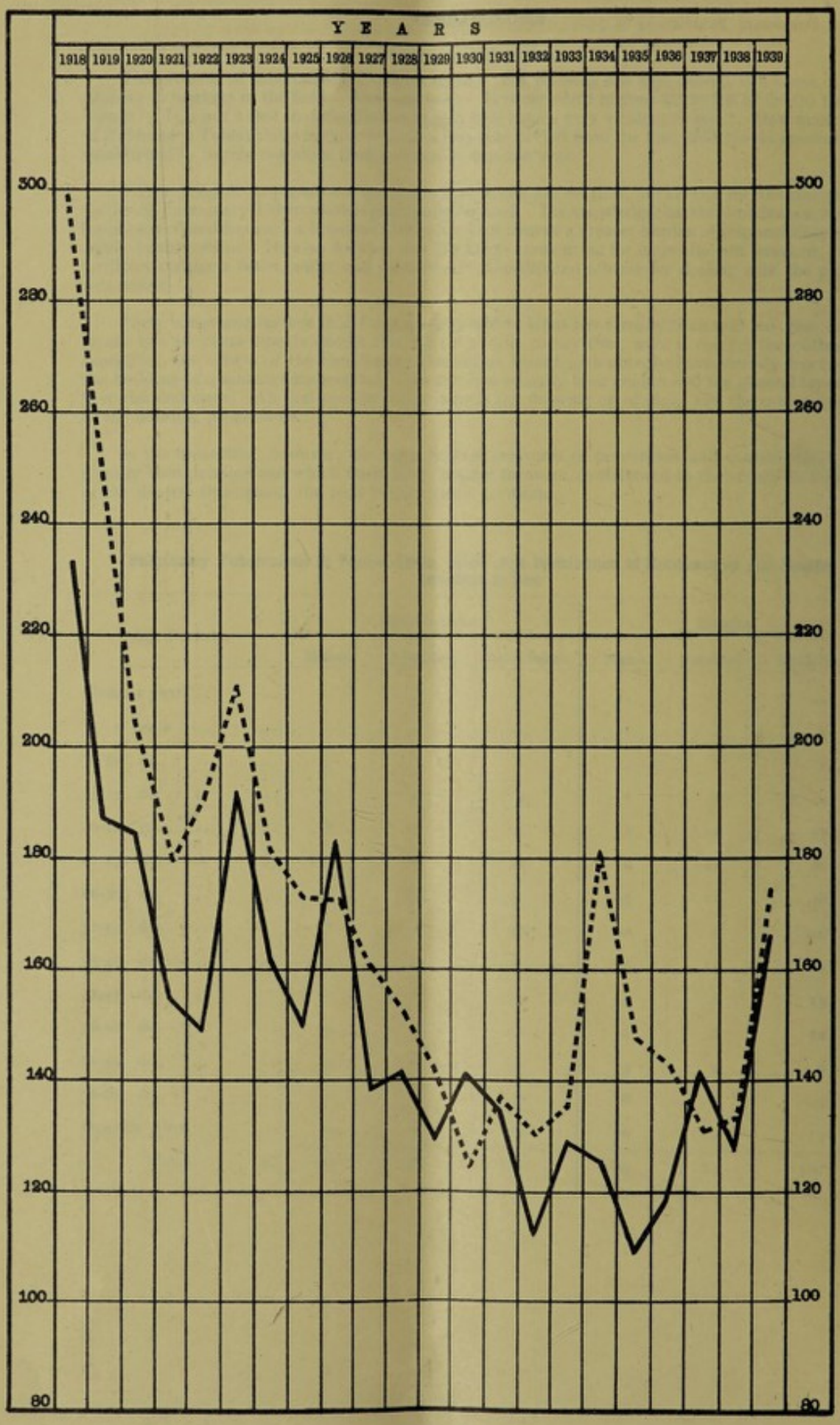


Chart E

Port-of-Spain

PULMONARY TUBERCULOSIS—Notifications and Deaths, 1918-1939.



Pulmonary Tuberculosis in Port-of-Spain—Notifications, Deaths and Death rates, 1918-39.

Year.	Notifications.	Deaths.	Death rate per 1,000 population.
1918	299	233	3.43
1919	250	187	2.71
1920	205	184	2.64
1921	179	154	2.49
1922	190	149	2.38
1923	211	192	3.04
1924	181	162	2.53
1925	173	149	2.31
1926	172	183	2.81
1927	160	138	2.10
1928	152	141	2.13
1929	142	129	1.92
1930	124	141	2.05
1931	137	134	1.90
1932	130	112	1.58
1933	135	129	1.79
1934	181	125	1.71
1935	148	109	1.47
1936	143	119	1.57
1937	131	142	1.84
1938	134	128	1.52
Yearly average 1918-38	170.33	149.52	2.19
Year 1939	175	167	1.85

In the table hereunder listed an important fact is brought out viz.; at the age periods 16-25 26-35, 36-45, Pulmonary Tuberculosis was responsible for one-third of all the deaths recorded during the year.

Proportion of Deaths from Pulmonary Tuberculosis to Deaths from All Causes in Port-of-Spain according to Age and Sex in 1939.

Age Periods.	Deaths.								
	Males.			Females.			Both Sexes.		
	All Causes.	Pulmonary Tuberculosis.	Percentage due to Pul. Tub'sis.	All Causes.	Pulmonary Tuberculosis.	Percentage due to Pul. Tub'sis.	All Causes.	Pulmonary Tuberculosis.	Percentage due to Pul. Tub'sis.
Under 1 year ...	140	...	...	102	...	...	242	...	...
1- 5 years ...	32	1	3.13	24	...	...	56	1	1.79
6 to do. ...	3	...	...	8	1	12.50	11	1	9.09
11-15 do. ...	7	1	14.29	10	3	30.00	17	4	23.53
16-25 do. ...	48	14	29.17	55	23	41.82	103	37	35.92
26-35 do. ...	73	29	39.73	50	17	34.00	123	46	37.40
36-45 do. ...	82	17	20.73	73	20	27.40	155	37	23.87
46-55 do. ...	91	11	12.09	71	10	14.08	162	21	12.96
56-65 do. ...	112	9	8.04	100	3	3.00	212	12	5.66
Over 65 years ...	213	3	1.41	222	5	2.25	435	8	1.83
Total... ...	801	85	10.61	715	82	11.47	1,516	167	11.02

Pulmonary Tuberculosis in Port-of-Spain—Deaths by Age and Sex in 1918 and 1939 contrasted.

Age Periods.	1918.			1939.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
0-5 years	2	6	8	1	...	1
6-10 do.	2	3	5	....	1	1
11-15 do.	3	6	9	1	3	4
16-20 do.	10	16	26	5	12	17
21-25 do.	13	17	30	9	11	20
26-30 do.	21	22	43	9	11	20
31-35 do.	11	16	27	20	6	26
36-40 do.	17	17	34	10	14	24
41-45 do.	10	11	21	7	6	13
46-50 do.	6	7	13	6	6	12
51-55 do.	....	3	3	5	4	9
56-60 do.	5	....	5	6	1	7
Over 60 years	2	7	9	6	7	13
Total	102	131	233	85	82	167

Deaths and Death-rates from Pulmonary Tuberculosis in the Colony from 1917 to 1939.

Year.	No. of Deaths.	Death-rate per 10,000 population.	Year.	No. of Deaths.	Death-rate per 10,000 population.
1917	475	12.6	1928	425	10.7
1918	519	13.6	1929	420	10.4
1919	474	12.3	1930	395	9.6
1920	499	12.8	1931	385	9.3
1921	473	12.8	1932	357	8.5
1922	420	11.2	1933	412	9.7
1923	470	12.4	1934	406	9.4
1924	480	12.6	1935	382	8.7
1925	440	11.4	1936	420	9.4
1926	500	12.9	1937	409	9.0
1927	474	12.1	1938	381	8.3
			1939	466	9.9

Non-Pulmonary Tuberculosis.

This form of Tuberculosis is essentially a disease of young children as the tabulated statement clearly shows. It attacks the glands, bones, joints, intestines, peritoneum and meninges and in some forms, particularly Tuberculous Meningitis and Miliary Tuberculosis, is a very fatal disease.

The preponderance of deaths over notifications in the returns is due to the fact that often it is only on the post-mortem table that the real nature of the disease is discovered.

Non-Pulmonary Tuberculosis in Port-of-Spain, 1939—Notifications and Deaths by Age and Sex.

Age Periods.	Notifications.			Deaths.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Under 1 year	...	1	1	2	1	3
1- 5 years	4	5	9	2	5	7
6-10 do.	...	...	...	1	...	1
11-15 do.	...	1	1	...	...	...
16-20 do.	1	...	1	1	...	1
21-25 do.	1	...	1	1	...	1
26-30 do.	...	...	...	...	...	...
31-35 do.	...	...	...	...	...	...
36-40 do.	...	...	...	1	...	1
41-45 do.	...	...	...	...	...	...
46-50 do.	...	...	...	...	...	...
51-55 do.	...	...	...	1	...	1
Total	6	7	13	9	6	15

Non-Pulmonary Tuberculosis—Forms notified and Deaths registered therefrom according to Age and Sex.

Ages.	Notifications.				Deaths.			
	Forms of the Disease.	Males.	Females.	Both Sexes.	Forms of the Disease.	Males	Females	Both Sexes.
Under 1 yr.	Miliary Tuberculosis ...	...	1	1	Miliary Tuberculosis ...	...	1	1
do.	... ...	...	...	...	Tuberculous Meningitis...	2	...	2
1- 5 years	Miliary Tuberculosis ...	...	1	1	... ...	...	...	...
do.	Tuberculous Enteritis ...	...	2	2	Tuberculous Enteritis ...	...	2	2
do.	Tuberculous Meningitis	4	2	6	Tuberculous Meningitis...	2	3	5
6-10 years	... ...	...	...	...	Tuberculosis of Intestines	1	...	1
11-15 do.	Tuberculous Meningitis	...	1	1	... ...	...	...	...
16-20 do.	Tuberculosis of Bones...	1	...	1	Tuberculosis of Bones ...	1	...	1
21-25 do.	Tuberculous Arthritis ..	1	...	1	Tuberculosis of Spine ...	1	....	1
36-40 do.	... ...	...	...	...	Tuberculous Peritonitis..	1	...	1
51-55 do.	... ...	...	...	...	Tuberculosis of Spine ...	1	...	1
	Total	6	7	13		9	6	15

Progress of Mortality from Pulmonary and Non-Pulmonary Tuberculosis for 15 years, 1925-1939.

Deaths from Pulmonary Tuberculosis.			Deaths from Non-Pulmonary Tuberculosis.		
Quinquennium 1925-29.	Quinquennium 1930-34.	Quinquennium 1935-39.	Quinquennium 1925-29.	Quinquennium 1930-34.	Quinquennium 1935-39.
1925 .. 149	1930 .. 141	1935 .. 109	1925 .. 13	1930 .. 14	1935 .. 7
1926 .. 183	1931 .. 134	1936 .. 119	1926 .. 14	1931 .. 7	1936 .. 5
1927 .. 138	1932 .. 112	1937 .. 142	1927 .. 7	1932 .. 10	1937 .. 20
1928 .. 141	1933 .. 129	1938 .. 128	1928 .. 19	1933 .. 21	1938 .. 8
1929 .. 129	1934 .. 125	1939 .. 167	1929 .. 24	1934 .. 10	1939 .. 15
Total .. 740	641	665	77	62	55
Yearly av. 148	128.2	133	15.4	12.4	11

ENTERIC FEVER.

Enteric fever did not during 1939 cause any undue anxiety to the Public Health Department In point of fact, the City has been, during the last fifteen (15) years, singularly free from any major incidence of this disease, due, undoubtedly, to those general as well as specific measures directed towards attaining a higher level of sanitation which the Local Authority is endeavouring to carry out and which can be summarised briefly as (*a*) the provision of a pure water supply (*b*) the efficient disinfection and proper disposal of infected excreta and (*c*) the protection of foodstuffs from contamination with dirt, dust, and flies.

Seventy-five (75) notifications were received from practitioners and fifteen (15) deaths certified to Enteric fever during the year under report, giving a death rate of 0.17 per 1,000 population. The cases belonged, for the most part, to the so called juvenile type: 53 out of the 75 notifications and 9 out of the 15 deaths were in persons under 20 years of age.

The East Dry River district again furnished the largest number of notifications for reasons which are too well known now to be repeated in this report. Here, particularly, there is urgent need for the installation of the sewerage system and for the strict enforcement of the bye-laws with respect to the Sale of Foodstuffs, so that contaminated and infected faeces may not readily find its way to the alimentary tract of the inhabitants of the area.

Enteric Fever.

Notifications, Deaths and Death-rates for the years 1918-1939.

Year.	Notifications.	Deaths.	Death-rates per 1,000 population.	Year.	Notifications.	Deaths.	Death-rates per 1,000 population.
1918 ..	495	104	1.52	1928 ..	54	14	0.21
1919 ..	330	76	1.10	1929 ..	35	13	0.19
1920 ..	401	90	1.29	1930 ..	55	16	0.23
1921 ..	287	77	1.25	1931 ..	47	11	0.16
1922 ..	226	53	0.84	1932 ..	20	4	0.06
1923 ..	265	43	0.68	1933 ..	28	10	0.14
1924 ..	370	49	0.76	1934 ..	85	25	0.34
1925 ..	168	20	0.31	1935 ..	76	19	0.26
1926 ..	125	26	0.39	1936 ..	32	6	0.08
1927 ..	95	17	0.26	1937 ..	47	7	0.09
				1938 ..	59	16	0.19
				1939	**75**	**15**	**0.17**

Enteric Fever, 1939—Age Distribution of Notifications and Deaths according to Sex.

Age Periods.	Notifications.			Deaths.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Under 1 year	...	...	...	...	...	...
1- 5 years	5	6	11	...	...	...
6-10 do.	8	14	22	1	2	3
11-15 do.	3	6	9	1	2	3
16-20 do.	8	3	11	2	1	3
21-25 do.	4	3	7	2	...	2
26-30 do.	2	4	6	...	1	1
31-35 do.	3	2	5	1	1	2
36-40 do.	2	...	2	...	...	...
41-45 do.	1	...	1	1	...	1
46-50 do.	...	...	...	...	...	...
51-55 do.	...	...	...	...	...	...
56-60 do.	...	...	...	...	...	...
Over 60 years	...	1	1	...	...	...
Total	36	39	75	8	7	15

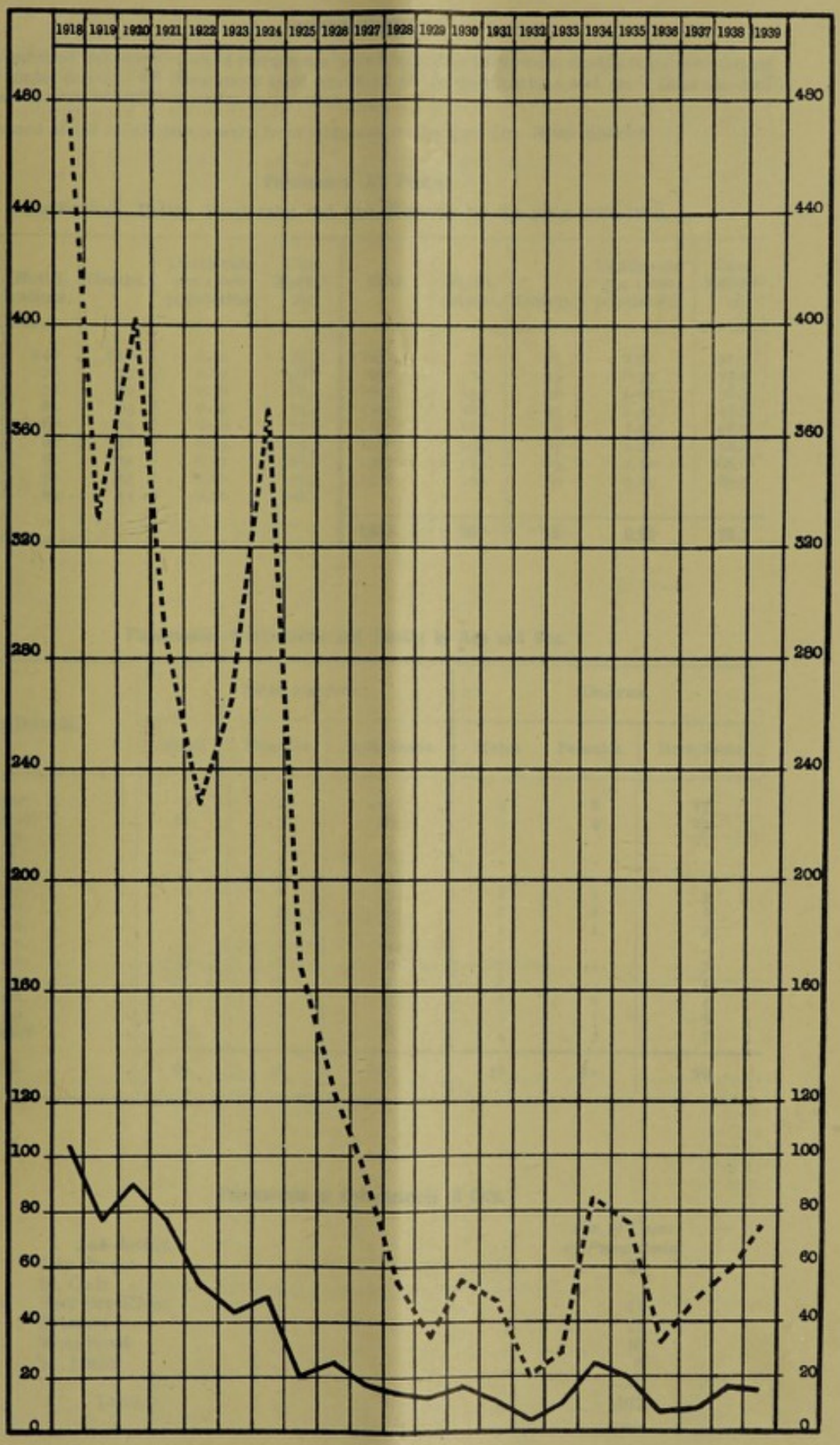
Enteric Fever in Sub-Districts of the City.

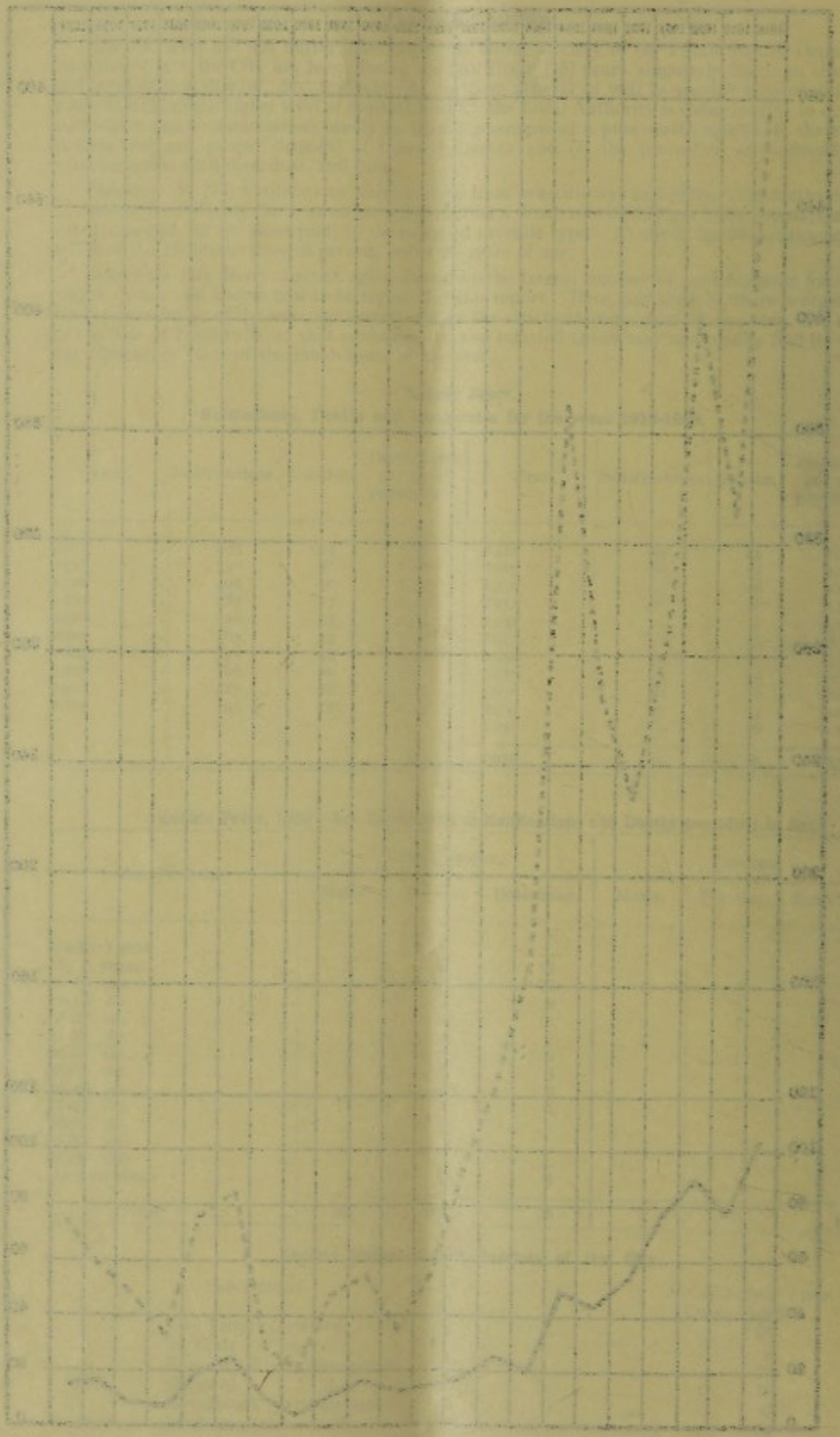
Sub-District.	*No. of Enteric Fever Cases Notified.*
City Proper (Sewered)	15
St. Clair do.	1
East Dry River (unsewered)	23
Belmont do.	19
Woodbrook (partially sewered)	3
St. James (unsewered)	14
Total	75

Chart F

Port-of-Spain

ENTERIC FEVER—Notifications and Deaths, 1918-1939.





PNEUMONIA.

One hundred and seven cases of pneumonia were notified and fifty-nine deaths registered during the year under report. Of these more than one-third of the notifications and more than one-half of the deaths were in children under five years of age.

Forty-one of the notifications were from addresses in the East Dry River district.

Pneumonia (All Forms).

Notifications, Deaths, Death-rates and Case Mortality for the years 1922-1939.

Year.	Notifications.	Deaths.	Death-rate per 1,000 population.	Case Mortality.	Year.	Notifications.	Deaths.	Death-rate per 1,000 population.	Case Mortality.
1922 ..	240	140	2.24	58.3	1931 ..	71	65	0.92	91.5
1923 ..	76	75	1.19	98.6	1932 ..	71	55	0.77	77.4
1924 ..	72	50	0.78	69.4	1933 ..	135	76	1.06	56.3
1925 ..	85	63	0.98	74.1	1934 ..	208	99	1.35	47.5
1926 ..	86	62	0.95	72.0	1935 ..	165	76	1.02	46.0
1927 ..	65	41	0.63	63.0	1936 ..	193	97	1.28	50.2
1928 ..	60	51	0.77	85.0	1937 ..	125	85	1.10	68.0
1929 ..	70	55	0.82	71.4	1938 ..	101	70	0.83	69.3
1930 ..	83	55	0.80	66.2					
					1939	**107**	**59**	**0.65**	**55.1**

Pneumonia—Notifications and Deaths by Age and Sex.

Age Periods.	Notifications.			Deaths.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Under 1 year	2	9	11	9	8	17
1 to 5 years	21	7	28	9	4	13
6 to 10 do.	5	2	7	..	..	..
11 to 15 do.	4	4	8	..	..	..
16 to 20 do.	4	3	7	..	..	..
21 to 25 do.	4	1	5	2	1	3
26 to 30 do.	4	5	9	1	1	2
31 to 35 do.	1	1	2	1	1	2
36 to 40 do.	3	1	4	..	..	..
41 to 45 do.	7	2	9	7	..	7
46 to 50 do.	2	2	4	1	..	1
51 to 55 do.	3	1	4	2	2	4
56 to 60 do.	..	1	1	2	1	3
Over 60 years	6	2	8	4	3	7
Total	66	41	107	38	21	59

Pneumonia in Sub-districts of City.

Sub-district.	*No. of Cases of Pneumonia.*
City Proper	23
St. Clair	....
East Dry River	41
Belmont	24
Woodbrook	10
St. James	9
Total	107

DIPHTHERIA.

Diphtheria was rather more prevalent than usual during 1939, sixty-one notifications being received at the Public Health Department. There were two deaths. These cases were nearly all of a mild type and occurred for the most part at the Belmont Orphanage, where an undetected convalescent carrier succeeded in transmitting the infection to 14 other small children between the ages of 1-5 and 6-10 years.

Diphtheria.

Notifications, Deaths and Death-rates for the years 1917-39.

Year.	Notifications.	Deaths.	Death-rates.	Year.	Notifications.	Deaths.	Death-rates.
1917	9	4	0.06	1928	19	3	0.05
1918	17	..	..	1929	24	..	..
1919	9	1	0.01	1930	29	1	0.01
1920	6	1	0.01	1931	31	2	0.03
1921	18	1	0.02	1932	61	..	..
1922	8	2	0.03	1933	11	..	..
1923	10	3	0.05	1934	38	5	0.07
1924	27	2	0.03	1935	17	2	0.03
1925	25	2	0.03	1936	22	4	0.05
1926	4	1	0.02	1937	30	4	0.05
1927	16	2	0.03	1938	16	3	0.04
				1939	**61**	**2**	**0.02**

Diphtheria, 1939—Notifications and Deaths by Age and Sex.

Age Periods.	Notifications.			Deaths.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Under 1 year	...	...	...	...	...	...
1- 5 years	14	11	25	2	...	2
6-10 do.	18	5	23	...	...	...
11-15 do.	2	1	3	...	...	...
16-20 do.	...	3	3	...	...	...
21-25 do.	...	1	1	...	...	...
26-30 do.	...	1	1	...	...	...
31-35 do.	2	1	3	...	...	...
36-40 do.	...	...	...	...	...	...
41-45 do.	1	...	1	...	...	...
46-50 do.	...	1	1	...	...	...
Total	37	24	61	2	...	2

CHICKEN POX.

Chicken Pox in Port-of-Spain.

Notifications by Age and Sex for the year 1939.

Age Periods.	Males.	Females.	Both Sexes.	Age Periods.	Males.	Females.	Both Sexes.
Under 1 year ..	3	1	4	31 to 35 years ..	1	1	2
1 to 5 years ..	6	11	17	36 to 40 do. ..	3	1	4
6 to 10 do. ..	8	13	21	41 to 45 do. ..	1	..	1
11 to 15 do. ..	8	2	10	46 to 50 do. ..	1	..	1
16 to 20 do. ..	2	1	3	51 to 55 do. ..	..	..	..
21 to 25 do. ..	4	2	6	56 to 60 do. ..	..	1	1
26 to 30 do. ..	..	2	2				
				Total ..	37	35	72

ACUTE ANTERIOR POLIOMYELITIS.

Notifications of Acute Anterior Poliomyelitis, 1927-39.

Year.	No. of Cases.	Year.	No. of Cases.	Year.	No. of Cases.
1927 ...	...	1931 ...	...	1935 ...	...
1928 ...	...	1932 ...	3	1936 ...	3
1929 ...	...	1933 ...	...	1937 ...	10
1930 ...	5	1934 ...	...	1938 ...	2
				1939	1

NON-NOTIFIABLE INFECTIOUS DISEASES.

MALARIA.

It cannot be said that malaria is a public health problem of any magnitude within the limits of the City. Whatever little there is, is derived from infested areas on the confines and there can be no doubt that malaria-carrying mosquitoes are to be found on the outskirts during the wet season particularly. The large majority of the cases, however, which gave an address within the urban sanitary district are either cases which have contracted the disease while away in malarious areas on holiday or business, or are really country cases which have been transferred to the City for treatment. A close investigation into the history of all the recorded deaths, which is a routine activity of the Public Health Department, proves this quite definitely.

Deaths from Malaria by Age and Sex.

Age Periods.	Males.	Females.	Both Sexes.	Age Periods.	Males.	Females.	Both Sexes.
Under 1 year	....	2	2	36-40 years	1	1	2
1-5 years	1	....	1	41-45 do.	....	1	1
6-10 do.	....	1	1	46-50 do.	1	....	1
11-15 do.	....	....	....	51-55 do.	....	....	....
16-20 do.	1	1	2	56-60 do.	1	1	2
21-25 do.	1	....	1	Over 60 years	2	....	2
26-30 do.	1	....	1				
31-35 do.	1	2	3				
				Total	10	9	19

Malaria—Local Distribution of Deaths.

Sub-districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
City Proper	....	....	....	1	....	....	1	....	....	3	....	....	5
St. Clair	....	....	....	....	....	....	....	....	....	....	....	....	....
East Dry River	2	....	....	1	2	3	1	....	....	....	....	1	10
Belmont	1	....	....	....	1	....	....	....	....	1	....	1	4
Woodbrook	....	....	....	....	....	....	....	....	....	....	....	....	....
St. James	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	3	....	....	2	3	3	2	....	....	4	....	2	19

SYPHILIS.

Syphilis, on the other hand, is a matter of grave concern to the Department, because in its various manifestations and in the widespread debilitating effects that it exerts on the general system as a whole, it has an influence on every aspect of the public health.

No new development in regard to the preventive aspect of this disease took place during the year and the position is substantially the same as was detailed in my report for the year 1938.

Deaths and Death-rates from Syphilis during the quinquennium, 1934-38, and the year 1939, with percentages of decline or increase at different Ages.

Ages.	Annual Average Deaths, 1934-38.	Deaths, 1939.	Percentage of decline of Deaths in 1939 on average for 1934-38.	Percentage increase of Deaths in 1939 on average for 1934-38.	Annual Average Death-rates per 1,000 population for 1934-1938.	Death-rates per 1,000 population for 1939.	Percentage decline of Death-rates in 1939 on average for 1934-38.	Percentage increase of Death-rates in 1939 on average for 1934-38.
Under 1 year ..	5.0	..	100.00	..	0.07	..	100.00	..
1- 2 years ..	0.6	..	100.00	..	0.008	..	100.00	..
3- 5 do. ..	0.4	..	100.00	..	0.005	..	100.00	..
6-10 do. ..	0.4	..	100.00	..	0.005	..	100.00	..
11-20 do. ..	1.2	2	..	66.67	0.02	0.02	..	..
21-30 do. ..	3.6	3	16.67	..	0.05	0.03	66.67	..
31-40 do. ..	3.8	6	..	57.89	0.05	0.07	..	14.29
41-50 do. ..	4.2	6	..	42.86	0.05	0.07	..	14.29
51-60 do. ..	2.4	3	..	25.00	0.03	0.03	..	..
Over 60 years ..	1.6	6	..	275.00	0.02	0.07	..	71.43
Total ..	23.2	26	..	12.07	0.30	0.29	3.45	..

DYSENTERY.

Deaths from the Dysenteries for 22 years 1918-1939.

Year.	Deaths.	Death-rates.	Year.	Deaths.	Death-rates.	Year.	Deaths.	Death-rates.
1918 ..	43	0.63	1925 ..	31	0.48	1932 ..	12	0.17
1919 ..	48	0.70	1926 ..	31	0.47	1933 ..	10	0.14
1920 ..	63	0.90	1927 ..	27	0.41	1934 ..	5	0.07
1921 ..	31	0.50	1928 ..	29	0.44	1935 ..	4	0.05
1922 ..	24	0.38	1929 ..	23	0.34	1936 ..	5	0.07
1923 ..	25	0.40	1930 ..	11	0.16	1937 ..	7	0.09
1924 ..	42	0.66	1931 ..	18	0.26	1938 ..	6	0.07
Yearly average	39.4	0.60	Yearly average	24.3	0.37	Yearly average	7	0.09
						1939	**2**	**0.02**

The 2 deaths from Dysentery occurred in the 51-55 years age group.

DIARRHOEA AND ENTERITIS.

The table hereunder listed is of some importance because Diarrhoea and Enteritis is essentially a disease of the infant and young child. In fact, during 1939 it constituted 13.22 per cent. of the total infantile mortality.

There is some reason to believe that the large majority of these cases derive their infection from some article of food, particularly milk, which has been contaminated in some way or other.

Diarrhoea and Enteritis—Deaths by Age and Sex.

Age Periods.	Males.	Females.	Both Sexes.	Age Periods.	Males.	Females.	Both Sexes.
Under 1 year	20	12	32	31 to 35 years ...	..	...	..
1 to 5 years ..	2	2	4	36 to 40 do. ...	1	..	1
6 to 10 do. ..	..	..	..	41 to 45 do. ..	..	..	..
11 to 15 do. ..	..	...	..	46 to 50 do. ...	1	..	1
16 to 20 do. ..	..	1	1	51 to 55 do. ..	1	..	1
21 to 25 do. ..	..	..	..	56 to 60 do. ..	1	..	1
26 to 30 do. ..	1	..	1	Over 60 years ..	1	2	3
				Total ..	28	17	45

Diarrhoea and Enteritis—Local Distribution of Deaths.

Sub-district.	Jan.	Feb.	Mar.	Apl.	May	Jun.	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total.
City Proper	..	1	1	3	...	1	...	3	1	1	1	1	13
St. Clair	...	...	...	...	...	...	...	...	...	...	...	...	...
East Dry River	2	2	2	...	...	...	2	....	....	4	....	1	13
Belmont	....	...	...	1	1	....	...	1	1	...	1	1	6
Woodbrook	2	....	...	1	...	...	....	...	...	...	...	...	3
St. James	4	1	1	....	...	...	1	...	....	...	...	3	10
Total	8	4	4	5	1	1	3	4	2	5	2	6	45

Deaths from Diarrhoea and Enteritis for 22 years, 1918-39.

Year.	Deaths.	Death-rates.	Year.	Deaths.	Death-rates.	Year.	Deaths.	Death-rates.
1918 ..	193	2.84	1925 ..	71	1.10	1932 ..	56	0.79
1919 ..	162	2.35	1926 ..	107	1.64	1933 ..	42	0.58
1920 ..	196	2.81	1927 ..	48	0.73	1934 ..	40	0.55
1921 ..	118	1.91	1928 ..	63	0.95	1935 ..	35	0.47
1922 ..	122	1.95	1929 ..	53	0.79	1936 ..	30	0.40
1923 ..	120	1.90	1930 ..	58	0.84	1937 ..	53	0.69
1924 ..	75	1.17	1931 ..	55	0.78	1938	42	0.50
Yearly average ..	140.8	2.13	Yearly average ..	65	0.98	Yearly average ..	42.6	0.57
						1939	**45**	**0.50**

OTHER PRINCIPAL CAUSES OF DEATH.

Cardiac and Vascular Diseases.

These diseases were responsible for 178 out of the 1,516 deaths certified and occupied second place in the list of principal causes of death. Myocarditis and myocardial degeneration—weakening of the heart muscle—claimed the highest number (58) of victims under this heading with arterio sclerosis—hardening of the arteries—next with 26 deaths.

Deaths registered from Cardiac and Vascular Diseases by Age and Sex in 1939.

Forms.	0-5 years.		6-10 years.		11-15 years.		16-20 years.		21-25 years.		26-30 years.		31-35 years.		36-40 years.		41-45 years.		46-50 years.		51-55 years.		56-60 years.		Over 60 yrs.		Total.		Both Sexes.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Aneurysm of Aorta ...	...	...	...	...	...	...	...	...	...	...	2	1	1	1	1	...	1	...	...	...	2	1	...	2	2	...	9	5	14
Aneurysm of Thoracic Aorta ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	1	2
Aneurysm of Abdominal Aorta ...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Aneurysm of Left Ventricle ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	1	2
Aneurysm	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	1	...	3	...	3
Aortic Incompetence	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	2	3	2	5
Aortic Regurgitation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Mesaortitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	1	1	2
Aortic and Mitral Incompetence...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	3	...	3	1	4
Mitral Incompetence	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	2	1	3
Mitral Stenosis	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	2	3
Cardio-Vascular Degeneration ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	2	1	3
Valvular Disease of Heart ...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	4	...	1	1	...	...	...	2	2	5	9	8	17
Auricular Fibrillation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
Myocardial Degeneration ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	1	1	2	1	1	3	8	3	13	11	24	
Myocarditis	...	...	...	...	...	...	...	...	...	2	2	...	2	...	2	1	3	...	4	2	1	...	3	3	5	4	22	12	34
Endocarditis	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	...	2	2	4
Pericarditis	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Cardiac Disease	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	2	2
Cardiac Asthma	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	1	2
Cardiac Syncope	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	...	...	...	1	...	...	1	5	2	9	3	12
Fatty Degeneration of Heart ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Angina Pectoris	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	1	2
Congenital Heart Disease ...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
Coronary Thrombosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	2	1	3
Arterio-Sclerosis	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	2	...	7	15	10	16	26
Coronary Disease	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
Atheroma of Coronary Aorta ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Atheroma of Aorta	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Hyperpiesia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
Total ...	...	3	...	...	1	...	...	1	...	2	7	2	7	2	7	5	11	5	9	6	7	3	10	12	42	36	101	77	178

Deaths from Cerebral Haemorrhage by Age and Sex.

Age Periods.	Males.	Fe-males.	Both Sexes.	Age Periods.	Males.	Fe-males.	Both Sexes.
Under 1 year	3	2	5	31-35 years	1	1	2
1-5 years	....	....	....	36-40 do.	2	1	3
6-10 do.	....	....	....	41-45 do.	3	2	5
11-15 do.	....	....	....	46-50 do.	1	4	5
16-20 do.	....	....	....	51-55 do.	4	2	6
21-25 do.	....	....	....	56-60 do.	2	5	7
26 30 do.	....	....	....	Over 60 years	18	15	33
				Total	34	32	66

BRONCHITIS.

Deaths from Bronchitis by Age and Sex.

Age Periods.	Males.	Fe-males.	Both Sexes.	Age Periods.	Males.	Fe-males.	Both Sexes.
Under 1 year	15	10	25	31-35 years	...	..	...
1- 5 years	4	2	6	36-40 do.	...	...	...
6-10 do.	..	..	...	41-45 do.	..	..	..
11-15 do.	..	..	..	46-50 do.	2	...	2
16-20 do.	..	..	..	51-55 do.	3	...	3
21-25 do.	1	...	1	56-60 do.	2	...	2
26-30 do.	..	...	...	Over 60 years ..	9	5	14
				Total	36	17	53

BRIGHT'S DISEASE AND NEPHRITIS.

Sixty-one deaths of which by far the largest number occurred in persons over 60 years of age, were certified to this disease during the year under report.

The type was predominantly Chronic Interstitial Nephritis.

Deaths from Nephritis by Age and Sex.

Age Periods.	Males.	Fe-males.	Both Sexes.	Age Periods.	Males.	Fe-males.	Both Sexes.
Under 1 year	...	...	...	31-35 years	2	1	3
1- 5 years	...	1	1	36-40 do.... ...	2	1	3
6-10 do.	1	...	1	41-45 do.... ...	4	1	5
11-15 do.	...	...	...	46-50 do.... ...	4	4	8
16-20 do.	1	...	1	51-55 do.... ...	3	3	6
21-25 do.	1	2	3	56-60 do.... ...	2	2	4
26-30 do.	...	3	3	Over 60 years ...	12	11	23
				Total	32	29	61

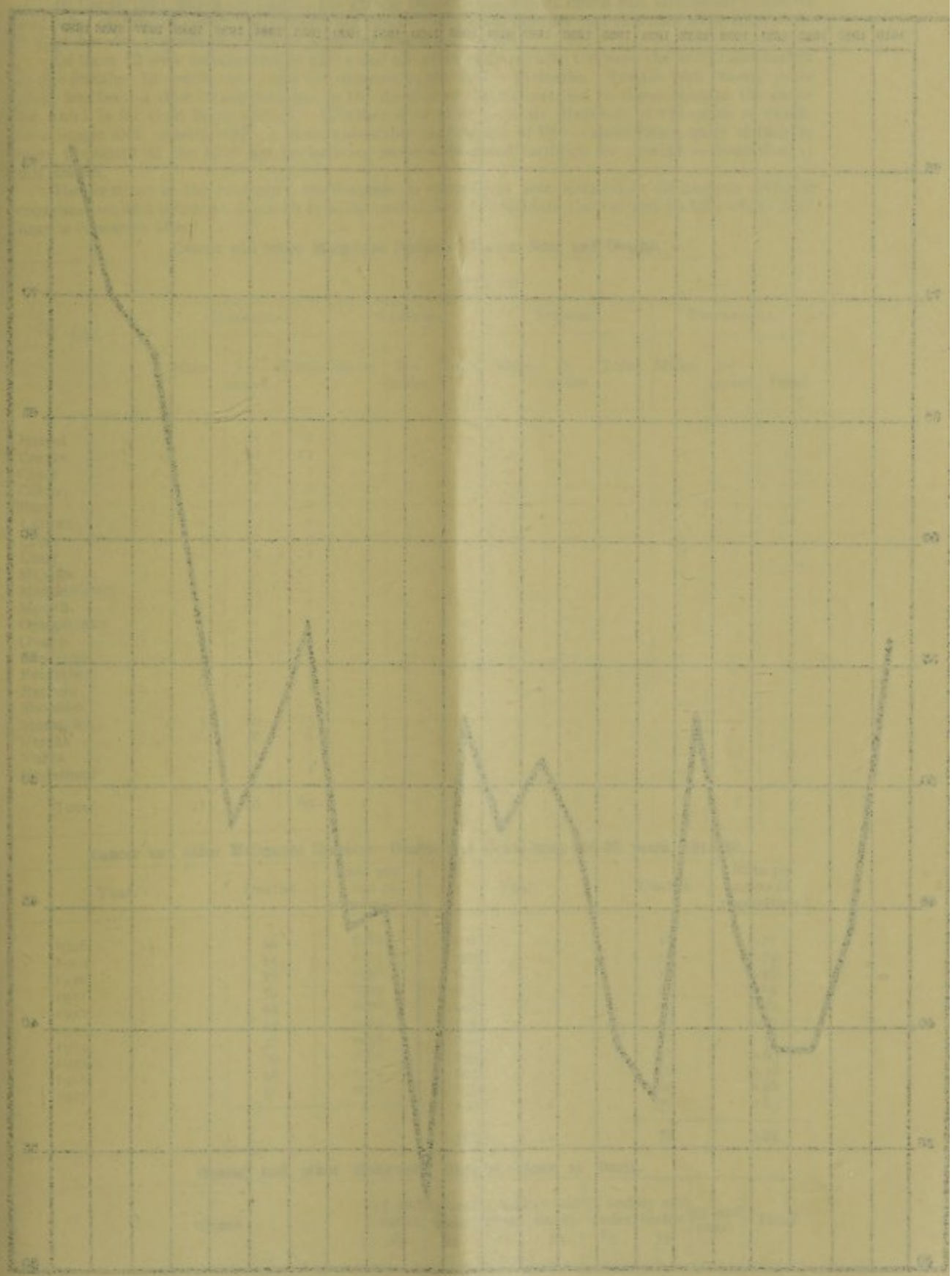
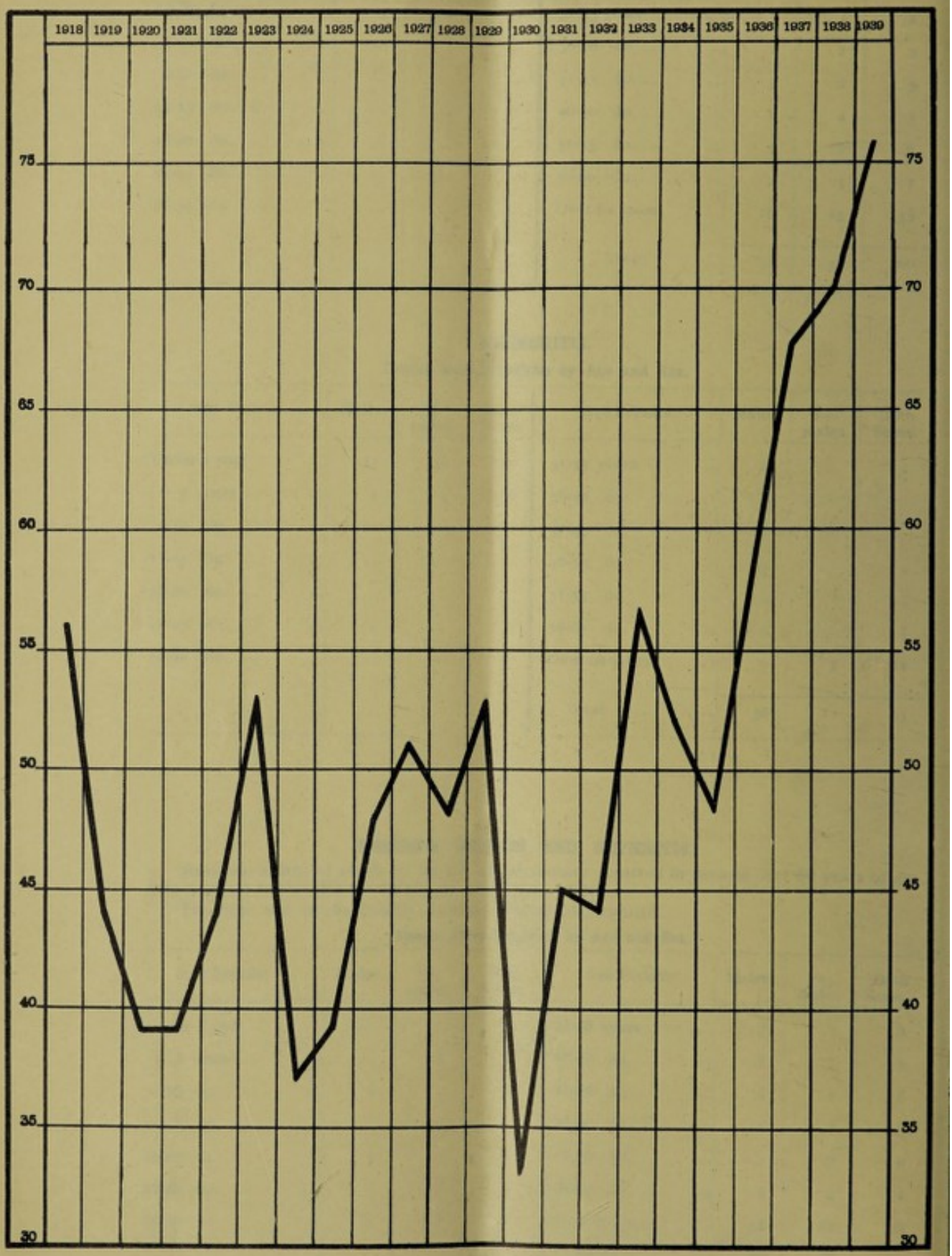


Chart C

Port-of-Spain

Deaths from CANCER and OTHER MALIGNANT DISEASES, 1918-1939.



CANCER AND OTHER MALIGNANT DISEASES.

In the returns which are sent to the Public Health Department death was attributed to cancer and other malignant diseases in seventy-six cases—the highest number ever recorded since 1918 when it first became possible to compile accurate statistics.

Of these 52 were females and 24 males and the principal sites affected were the breast and cervix in the female—12 deaths each, and the stomach in the male—15 deaths. For the past twenty years there has been a slow steady increase in the number of deaths certified to these diseases the cause for which is far from being certain. Whether it be more accurate diagnosis of the cause of death, or a longer and, consequently, a more vulnerable expectation of life—cancer being quite definitely more prevalent at the later age periods—or more widespread facilities for prompt certification, is not known.

The increase in the mortality attributable to cancer has been noticed in all modern civilised communities and intensive research is being undertaken to elucidate the various factors which may have a causative effect.

Cancer and other Malignant Diseases—Forms, Sites and Deaths.

Site.	Deaths.											
	Carcinoma.			Sarcoma.			Fibroma.			Undefined.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total
Breast	1	11	12	...	...	...	...	...	...	...	...	...
Cervix	...	12	12	...	...	...	...	...	...	...	...	...
Chest	...	1	1	...	...	...	...	...	...	...	...	...
Colon	1	1	2	...	...	...	...	...	...	...	...	...
Face	...	2	2	...	...	...	...	...	...	...	...	...
Larynx	1	...	1	...	...	...	...	...	...	...	...	...
Liver	4	1	5	...	...	...	...	...	...	...	...	...
Lung	...	1	1	...	...	...	...	...	...	1	...	1
Maxilla	...	...	...	1	...	1	...	...	...	...	...	...
Mediastinum ...	...	...	...	...	...	...	...	...	...	1	...	1
Mouth	1	...	1	...	...	...	...	...	...	...	...	...
Oesophagus ...	1	...	1	...	...	...		...	...	...	...	...
Ovary	...	...	...	...	...	...	...	...	...	...	1	1
Pancreas ...	1	1	2	...	...	...	...	...	...	...	...	...
Prostate... ...	3	...	3	...	...	...	...	...	...	...	...	...
Rectum	3	...	3	...	...	...	...	...	...	...	...	...
Shoulder ...	...	...	...	...	1	1	...	...	...	...	...	...
Stomach... ...	5	10	15	...	...	...	...	...	...	...	...	...
Uterus	...	6	6	...	...	...	...	2	2	...	...	...
Vulva	...	1	1	...	...	...	...	...	...	...	...	...
Undefined ...	...	1	1	...	...	...	...	...	...	...	...	...
Total ...	21	48	69	1	1	2	...	2	2	2	1	3

Cancer and other Malignant Diseases—Deaths and Death-rates for 22 years, 1918-39.

Year.	Deaths.	Rate per 1,000 of population.	Year.	Deaths.	Rate per 1,000 of population.
1918	56	0.82	1928	48	0.72
1919	44	0.64	1929	53	0.79
1920	39	0.56	1930	33	0.48
1921	39	0.63	1931	45	0.64
1922	44	0.70	1932	44	0.62
1923	53	0.84	1933	57	0.79
1924	37	0.58	1934	52	0.71
1925	39	0.60	1935	48	0.65
1926	48	0.74	1936	59	0.78
1927	51	0.78	1937	68	0.88
			1938	70	0.83
			1939	**76**	**0.84**

Cancer and other Malignant Diseases.—Ages at Death.

Sexes.	15 and under 25	25 and under 35	35 and under 45	45 and under 55	55 and under 65	65 and under 75	75 and over.	Total.
Males	..	1	3	4	8	6	2	24
Females	2	1	8	12	15	7	7	52
Total	2	2	11	16	23	13	9	76

SANITARY ADMINISTRATION.

The staff of the Public Health Department during 1939 consisted of a Medical Officer of Health, a Chief Sanitary Inspector, a Chief Clerk and twenty other sanitary inspectors; two clerical assistants, one permanent, the other temporary; two overseers and fifteen drivers; eight "specials" and seventy labourers.

Of the twenty sanitary inspectors, two are engaged in special indoor work, five in special outdoor work and the others are in charge of the thirteen sanitary districts into which the City is divided—one for each district.

One overseer, six drivers and twenty-five men constitute the anti-plague unit; one overseer, seven drivers, eight "specials" and fifteen men the anti-mosquito unit; one driver and eight men the disinfection unit and one driver and twelve men the anti-rabies unit.

The work of the different units is done by means of gangs which are under the immediate supervision of the Sanitary Inspector of the District in which they happen to be working, except in the case of the anti-rabies and the disinfection unit, which latter are under the direct control of two Sanitary Inspectors specially detailed for the purpose.

Disinfection.

Premises, &c., disinfected for Infectious Diseases and Vermin.

Diseases.	Premises sprayed.	Railway Coaches sprayed.	Cesspits oiled principally for Enteric Fever (free of charge.)
Tuberculosis	171	...	...
Enteric Fever	69	...	47,813
Pneumonia	88	...	...
Diphtheria	45	...	...
Leprosy	...	33	...
Chicken Pox	39	...	...
Ophthalmia Neonatorum	17	...	...
Total	429	33	47,813
Vermin	368	...	...

Limewashing.

Premises and Places limewashed.	*Total.*
Common Lodging Houses	2
Privies	724
Cowsheds	4
Bakehouses	44
Stables	23
Kitchens	95
Cookshops	36
Barracks	25
Aerated Water Factories	8
Restaurants	20
Retail Shops	79
Fry Shops	20
Parlours	90
Garages	8
Tanneries	5
Bath Rooms	13
Total....	1,196

Inspection of Premises &c., by Sanitary Inspectors.

Average Monthly No. of Visits to Dwellings, Shops and other Premises 13,417

Inspection of Stores, &c.

	Average Monthly No. of Visits		Average Monthly No. of Visits.
Provision and Meat Shops	186	Plantain Carts	4
Provision Stores	23	Sweet Drink Carts	20
Restaurants and Cookshops	36	Dairies and Cowsheds	64
Bakehouses	30	Stables	56
Bread Depots	10	Goat Pens	68
Cake and Ice Cream Shops	184	Aerated Water Factories	11
Fry Shops	13	Soap Factories	1
Hotels	5	Other Factories	17
Markets	5	Schools	26
Spirit Shops	27	Common Lodging Houses	5
Ice Cream Carts and Pails	38	Barber Shops	33
Cake Trays and Baskets	58	Dyeworks	8
Provision Trays and Baskets	55	Laundries	31
Bread Carts and Baskets	33	Garages	178
Fresh Fish Trays	61	Tanneries	5
Oyster Vendors' Baskets	8	Public Urinals	11
		Boats	8

Results of Notices and Verbal Directions.

Verbal directions and notices to remedy sanitary defects were complied with in 35,962 cases. Particulars of the work done are given in the table below.

Yards paved	55	Barracks repaired	38
Yard pavements repaired	112	Kitchens repaired	85
Yards filled in	222	Kitchens constructed	10
Yards cleaned	12,646	Houses ventilated	12
Drains constructed	189	Roofs close-boarded	11
Drains repaired	367	Retail shops painted	111
Drains cleaned	3,264	Parlours painted	69
Washing troughs cleaned	217	Spirit shops painted	33
Sinks constructed	140	Restaurants painted	21
Sinks repaired	27	Fry shops painted	10
Sinks cleaned	925	Hotels painted	1
Gullies cleaned	795	Barracks painted	42
Lavatories cleaned	71	Barber shops painted	1
Bath-rooms constructed	12	Concrete floors of retail shops repaired	37
Bath-rooms repaired	2	Concrete floors of parlours repaired ...	21
Washing platforms cleaned	332	Concrete floors of bakehouses repaired ...	15
Sewer basins installed	101	Concrete floors of cowsheds repaired ...	8
Sewer basins repaired	8	Concrete floors of stables repaired ...	18
Sewer basins cleaned	1,300	Retail shops cobwebbed	614
Flush tanks installed	92	Provision stores cobwebbed	105
Flush tanks repaired	60	Parlours cobwebbed	507
New privies built	329	Bakehouses cobwebbed	147
Privies repaired	566	Cookshops cobwebbed	112
Privies made fly-proof	456	Spirit shops cobwebbed	143
New cesspits constructed	208	Barracks cobwebbed	17
Cesspits repaired	280	Cowsheds cobwebbed	45
Cesspits emptied	2,254	Stables cobwebbed	49
Cesspits oiled (paid for)	460	Aerated Water Factories scrubbed ...	102
Urinals cleaned	231	Bakehouses scrubbed	156
Accumulations of manure removed ...	260	Retail shops scrubbed	562
Sanitary dustbins provided	1,744	Cookshops scrubbed	230
Dustbins repaired	274	Restaurants scrubbed	123
Dustbins cleaned and disinfected ...	1,284	Parlours scrubbed	620
Uncovered dustbins covered	653	Spirit shops scrubbed	163
Rat holes stopped	117	Hotels scrubbed	26
Trees cut down	207	Barber shops scrubbed	86
Trees trimmed	422	Cowsheds scrubbed	75
Premises cleared of bush	417	Stables scrubbed	122
Barracks and other premises reconstructed or reconditioned	209	Eaves gutters cleaned	48
Barracks demolished and sites left vacant	16	Eaves gutters repaired	1
Barracks vacated	19	Water receptacles screened	23
		Total	35,962

Reports to Water and Sewerage Department.

Reports.	*Total.*
Leaks, defective taps, chokes, &c.	467

Anti-Rabies Measures.

TRAPPING, &C., OF BATS.

No. of locations inspected for roosts of bats	36,735

BATS CAUGHT.

Artibeus	515
Desmodus	—
Hemiderma	8
Molossus	145
Saccopteryx	203
Total....	871

HEALTH WEEK.

The usual invitation of the Royal Sanitary Institute to carry out the annual observance of Health Week was extended to the Council, in its capacity as Local Authority for the City of Port-of-Spain, but by the time the Health Week Committee held its first meeting on the 7th September hostilities had broken out. The Committee, as a consequence, recommended that the Health Week Celebrations be postponed *sine die* and the recommendation was accepted by the Council on the 21st September at the meeting held on that date for the purpose of dealing with Public Health matters.

Prosecutions.

Offences.	No. of Complaints.	Results.	
		No. of Cases.	Total Fines.
Failing to comply with nuisance notices	16	8 8	$17.70 Reprimanded
Failing to provide proper dustbins	15	12 3	$13.80 Reprimanded
Exposing cakes for sale at a height less than 2 feet from ground	7	5 2	$8.40 Reprimanded
Failing to register under Sale of Foodstuffs Byelaws ...	16	16	$33.60
Selling foodstuffs with carrying badges	22	14 8	$11.70 Reprimanded
Selling Milk without carrying badges or being licensed ...	7	5 2	$6.00 Reprimanded
Total	83	60 23	$91.20 Reprimanded

Financial.

The revenue collected by the Public Health Department amounted to $551.20 as compared with $464.70 in the previous year.

EXPENDITURE.

	$ c.
Staff	27,765 00
Wages	28,372 40
Materials	4,448 61
Miscellaneous	3,016 66
Total	63,602 67

Changes in the Staff.

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

Appointments :

Appointment of Mr. G. H. Alkins as Clerical Assistant as from 1st March, 1939.

Mr. S. Barker, Overseer of Rat Gangs, placed on the fixed establishment with effect as from 1st September, 1939.

Leave of Absence.

Name.	*Office.*	*Vacation Leave.*	*Sick Leave.*
C. C. Assing	Sanitary Inspector	42 days	50 days
E. Boxill	do.	21 ,,	—
T. Christian	Messenger	21 ,,	—
H. De Four	Sanitary Inspector	21 ,,	—
M. Hinkson	do.	—	10 ,,
W. A. Lamont	do.	21 ,,	—
J. W. Parris	do.	42 ,,	—
F. B. Rivers	do.	—	65 ,,
W. R. Smith	Chief Clerk	92 ,,	—
J. A. Wood	Sanitary Inspector	56 ,,	—

Acknowledgments.

In conclusion I desire to place on record my grateful appreciation of the loyal co-operation and the unflagging devotion to duty of each and every member of the staff, directed and guided by the shining example of the Chief Sanitary Inspector, Mr. J. E. Ferreira, Cert. R.S.I. and the *ex* Chief Clerk, Mr. W. R. Smith, who is now enjoying a well earned retirement.

I commend to the favourable notice of the Local Authority the work of all the Sanitary Inspectors who, I am pleased to say, are becoming more and more alive to the great responsibility that rests upon their shoulders.